Outcome of the global consultation on

# CM.4 Gross and Net Measures
(Consenters only)

A total of 56 respondents contributed to this consultation, 40 of which consented to the publishing of their verbatim responses which are provided below. However, the below graphs reflect the answers of all 56 respondents.

Completely anonymous contributions were excluded.

1A. What methods are used in your country to measure stocks of fixed capital and the flow of consumption of fixed capital?
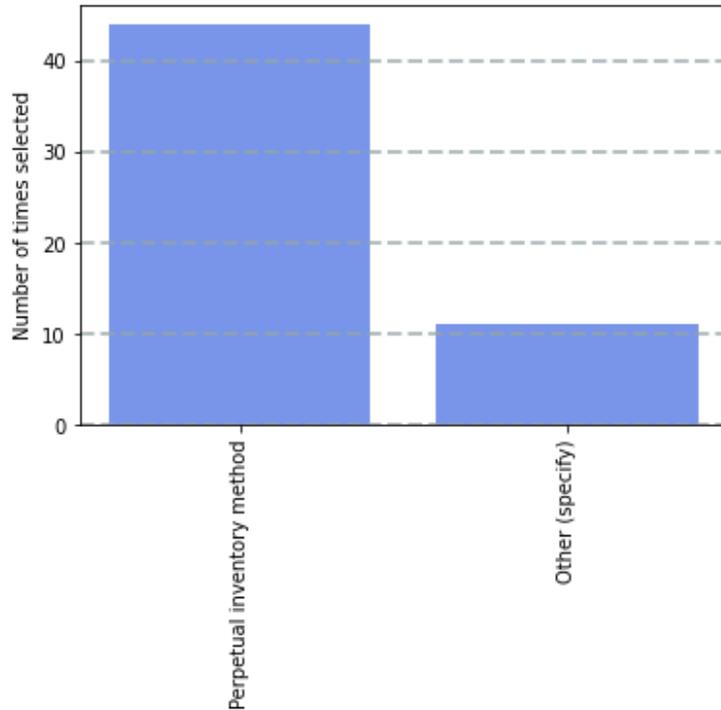
Country	Q1A. Other (specify)
Aruba	Rough estimates
Mongolia	Cost of fixed assets
North Macedonia	Data from national accounting system
Republic of Serbia	Based on PIM, an experimental estimation of consumption of fixed capital and stocks of fixed capital is available

Aruba (CBS): Not enough data

Belgium (National Bank of Belgium): Most suitable method used to calculate capital stocks and CFC for national accounts purposes.

Brasil (IBGE): Currently, we only calculate capital fixed consumption for the government using PIM.

Canada (Statistics Canada): The Canadian System of Macroeconomic Accounts estimates the value of stock and the flow of consumption of fixed capital using the perpetual inventory method (PIM) whereby investment flows are accumulated and depreciated over time, giving rise to a stock of assets. In particular, the PIM uses a time series of investment flows, asset lives and prices, and assumptions regarding methods of depreciation patterns when developing estimates of the net capital stock. The essence of the perpetual inventory method is to add investment estimates to the capital stock each year and to subtract depreciation. The PIM used is in line with that outlined in the Measuring Capital, 2009 manual.

The asset specific depreciation rate is calculated by dividing the declining balance rate by the service life. These asset specific components are based on a study using an extensive dataset from the Canadian Annual Capital and Repair Expenditures Survey (back to 1985). This survey asked respondents: the age of each asset that is sold or discarded, the value of original investment plus the capitalized improvements incurred over the life of the asset, and the expected length of life at the time of the initial investment. These variables were used within an econometric model to determine average depreciation rates.

Croatia (Croatian Bureau of Statistics): Data on the balance sheet of fixed assets exist in some administrative sources being expressed at the overall level, thus is not possible to carry out revaluation of assets (which is disadvantage). Accordingly, the model based on the PIM concept, GFCF flows and deflators is ideal for estimating CFC and capital stock.

Germany (Statistisches Bundesamt / Federal Statistical Office): Germany uses the probability density function of a gamma distribution as retirement function and combines it with straight-line depreciation.

Indonesia (Statistics Office of Indonesia): PIM is the best to calculate Capital Stocks (CS) and Consumption of Fixed Capital (COFC) due to the very wide scope and time constrains in the overall calculation of capital goods (fixed assets)

Italy (Istat): For all assets, except R&D and Weapons Systems, Italy combines a straight line depreciationprofile for each single asset with a truncated normal retirement profile. For R&D and WS the geometric depretiation model is used.

Lithuania (State Data Agency. Statistics Lithuania): Calculation of the capital stocks and CFC using the PIM allows to provide these data since 1995. The earlier time series were not

possible to produce due to unavailability of comparable data (changes in currency, break of data sources, and etc.). The straight-line method of depreciation is used (except for dwellings and roads, for which geometric depreciation is applied).

México (INEGI): We use the perpetual inventory method to comply with the international recommendations of the Capital Measurement Manual and because it is the most widely used method when censuses or surveys are unavailable.

Mongolia (National Statistical Office): GFCF is valued on the basis of the total cost of fixed assets acquired by producers (deducting what has been consumed and valuation) in the reporting period.

New Zealand (Statistics New Zealand): Annually only. Quarterly relies on changes in gross fixed capital formation and general relationship of capital stock to consumption of fixed capital.

North Macedonia (State statistical office): For some assets like dwellings, roads, railways, computer software and R&D, Perpetual inventory method is used
For the rest of the assets the data from national accounting system are used

Perú (INSTITUTO NACIONAL DE ESTADISTICA E INFORMATICA): En el Perú se calculan las variables en términos brutos para publicaciones, en los archivos de trabajo se consideran los stocks de capital fijo de los saldos iniciales y finales de depreciación y amortización lineales (datos contables) por cada tipo de activo fijo, y se deducen los conceptos de retiros y revaluación, el resultado se contrasta con la depreciación y amortización del período de gastos.

Qatar (Planning and Statistics Authority): We use PIM to measure the consumption of fixed capital for the General Government.

Republic of Serbia (Statistical Office of the Republic of Serbia): In regard to consumption of fixed assets, current calculations in SORS are based on:
• data on consumption of fixed capital obtained from annual financial statements (profit and loss accounts), for non-financial corporations, NPISHs and financial institutional units;
• data independently estimated as fixed percentage of government output, for general government sector. These estimations are based on the IMF recommendations, as well as on the experiences of other countries;
• data estimated using coefficients, for the unincorporated sector. The coefficients are obtained as ratios between CFC and GVA observed for the micro enterprises.
At this moment there are no sufficient resources for launching a comprehensive survey which would provide reliable data on value and vintage of capital goods.

Singapore (Singapore Department of Statistics): Gross and net capital stock estimates are compiled using the perpetual inventory method, assuming straight-line depreciation and simultaneous retirement.

Slovenia (Statistical Office of the Republic of Slovenia): For most assets linear PIM by activities and institutional sectors

South Africa (Soth African Reserve Bank): The South African Reserve Bank is responsible for measuring stocks of fixed capital and the flow of consumption of fixed capital. The GFCF data is compiled by the Statistical Office. This is done quarterly by asset type by industry using the geometric method for depreciation. The method allows for assets to depreciate at a rate that is considerable. An asset will in the early stages depreciate at a higher rate and later start to diminish slower. Unlike with the straight-line method where the asset depreciates with equal proportions throughout its life. The geometric method shows an age efficiency of the asset.

Sweden (Statistics Sweden, NSI): We use a transparent but simple model with geometric depreciation rates to calculate the net stock for the balance sheet and consumption of fixed assets including the estimate of value added for non-market producers.

United Kingdom (UK Statistics Authority): The U.K.'s National Accounts estimates use the PIM. Additionally, Natural Capital estimates which may need to be utilised for depletion are delivered in parallel systems.

Vietnam (General Statistics Office): The stock of fixed capital has not been calculated in our country. The consumption of fixed capital is compiled based on our surveys such as the Enterprise survey, Economic Census, Administrative and Religion Institutes Survey, Individual Business Establishment Survey, and Input-OutPut survey

Узбекистан (Агентство Статистики при Президенте Республики Узбекистан): В статистической отчетности по хозяйствующим субъектам потребление основного капитала включено в выпуск продукции по данным бухгалтерской отчетности по амортизации, по нерыночным производителям ПОК досчитывается условно.
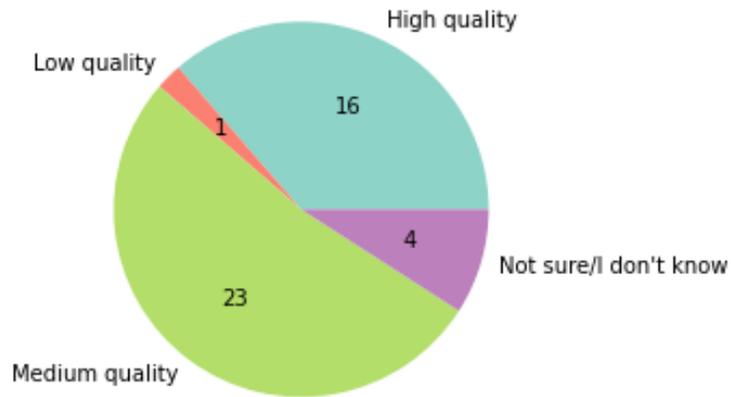
Australia (Australian Bureau of Statistics): High quality

Bangladesh (Bangladesh Bureau of Statistics): Medium quality

Belgium (National Bank of Belgium): Medium quality

Brasil (IBGE): Not sure/I don't know

Canada (Statistics Canada): High quality

Croatia (Croatian Bureau of Statistics): Not sure/I don't know

Estonia (Statistics Estonia): Medium quality

Finland (Statistics Finland): High quality

France (NSI): High quality

Germany (Statistisches Bundesamt / Federal Statistical Office): High quality

Indonesia (BPS): High quality

Indonesia (Statistics Office of Indonesia): Medium quality

Ireland (Central Statistics Office): Medium quality

Italy (Istat): High quality

Latvia (Central Statistical Bureau of Latvia): Medium quality

Lithuania (State Data Agency. Statistics Lithuania): Medium quality

Luxembourg (STATEC): Medium quality

Malaysia (Department of Statistics Malaysia): High quality

México (INEGI): High quality

Nepal (National Statistics Office): Medium quality

New Zealand (Statistics New Zealand): High quality

North Macedonia (State statistical office): Medium quality

Norway (Statistics Norway): Medium quality

Qatar (Planning and Statistics Authority): Medium quality

Russia (Federal State Statistical Service (Rosstat)): Medium quality

Singapore (Singapore Department of Statistics): Medium quality

Slovenia (Statistical Office of the Republic of Slovenia): Medium quality

South Africa (Soth African Reserve Bank): High quality

South Korea (Bank of Korea): High quality

**Sweden (Statistics Sweden, NSI):** Medium quality

The Netherlands (Statistics Netherlands (CBS)): Medium quality

Ukraine (State Statistics Service of Ukraine): Medium quality

United Kingdom (UK Statistics Authority): High quality

United States (Bureau of Economic Analysis): High quality

3A. What are the biggest challenges in your country to measure stocks of fixed capital and the flow of consumption of fixed capital?
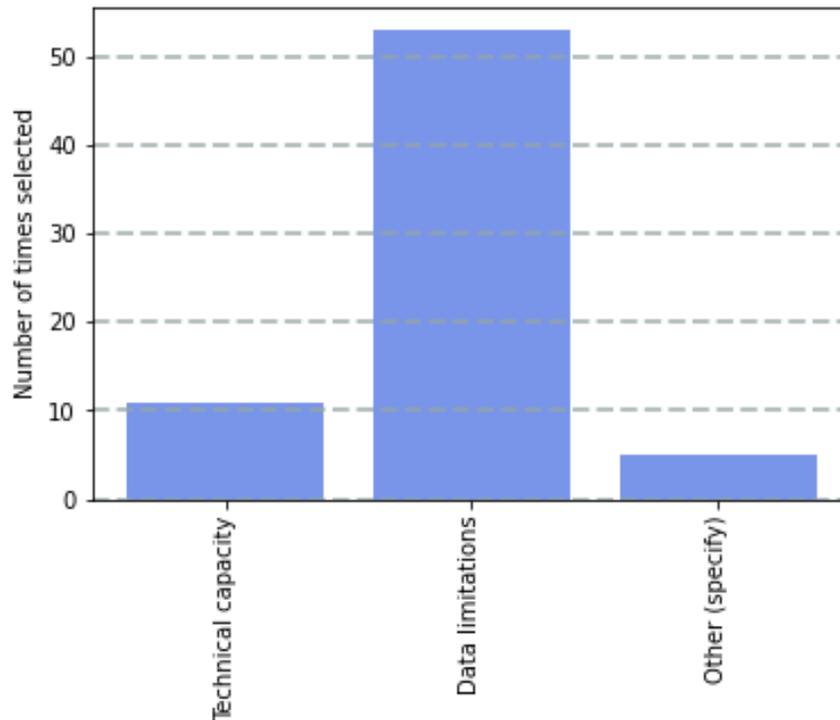
Q3B. Please elaborate your response

Australia (Australian Bureau of Statistics): The availability of data on service lives and prices are the most significant challenges impacting the quality of measures of consumption of fixed capital.

Belgium (National Bank of Belgium): '- Long time series of GFCF series are required to implement the PIM method (estimates of initial capital stocks). We have to extrapolate the (volume) GFCF series backwards.
- We do not have direct evidence for setting service life assumptions.
- Assumptions are made for the choices of the type of retirement and depreciation functions.

Brasil (IBGE): We have some challenges to compile CFC due to the lack of long time series for some assets, no research on asset lifetimes and lack of adequate price indices.

Canada (Statistics Canada): 1) Removing non-productive assets from the capital stock
a. Given the significant investments by some resource industries in fixed capital, it sometimes arises that this capital is abandoned (written off). However, one gross fixed capital information of a given period has e4ntered the PIM model there is no clear way to track specific investments and whether they leave the production boundary. While assumptions on average service lives build in a certain degree of fuzziness, this can still be an issue when value of write-offs is significant or concentrated in a particular region or

sector.

2) Sectoring the net stock (and gross fixed capital formation that feeds the PIM model)

a. Given the source of information that feed the PIM model, there are sometimes limitations in providing estimates of non-financial estimates at the level of sector disaggregation targeted by the national accounting guidelines. This tends to involve sectors with smaller amounts of gross fixed capital formation, bit is a data gap nonetheless.

3) Tracking inter-sector transactions of produced non-financial assets

a. Inter-sectoral transactions in produced non-financial assets are not explicitly tracked given that the stock is modelled. This poses challenges when large capital projects (i.e., pipelines) change economic ownership and when such a change involves two distinct sectors. While the import and export of machinery and equipment is well represented in terms of acquisitions and disposals, there may be areas where domestic-to-domestic transactions are not shown such as privatizations of public companies.

4) Estimating depreciation profiles for residential assets and intellectual property products: although Canada is fortunate to have a sophisticated collection/estimation process for depreciation profiles of non-residential assets (construction and machinery and equipment), service life profiles for residential assets and intellectual property products are not as robust.

Croatia (Croatian Bureau of Statistics): The CBS has available several sources to compile GFCF, depending on the institutional sectors. The mathematical procedures for the model have been set up along with the compilation framework. However, there are some limitations regarding full PIM implementation: deflators adjusted to purchaser's prices, GFCF time series not long enough, especially for an asset with a longer average service life (but the feasibility study to reconstruct such flows is in the ongoing procedure).

Finland (Statistics Finland): Long data series are not available for all assets, information of servce lives are not totally available for all assets.

Germany (Statistisches Bundesamt / Federal Statistical Office): As no data on actual service lives is available, service lives are estimated based on depreciation tables issued by the Federal Ministry of Finance (AfA tables). The tables do not cover all asset classes and originally serve a different purpose.

Indonesia (Statistics Office of Indonesia): A large area, diverse economic activities and data source that are difficult to obtain are the biggest obstacles in obtaining capital goods information, and there is no subject matter in statistics office for several types of assets, especially types of intellectual property product assets

Italy (Istat): Empirically based data sources on service lives/depreciation rates for some assets are not available. For some institutional sectors (not for S.13) GFCF series are not long enough to apply the PIM for all assets. Second hand assets exchanges are not fully traced for all institutional sectors and industries. Other changes in volume are not fully traced.

Lithuania (State Data Agency. Statistics Lithuania): 1. Technical capacity:
- estimates are made using Excel spreadsheets
2. Data limitations:
GFCF time series at current and previous year prices (for types of assets by A*38 for each institutional sector) since 1995 are available.
price data for types of assets are not differentiated by kind of activities, i. e. the same for all activities and all sectors is applied.
information on service lives and the age structure are based on the two Age structure surveys' for S11, S12, S13 that are not regular
Other:
lack of human resources, i.e. the experts who could assess and provide methodological expertise

Luxembourg (STATEC): CFC are not observed data but rely on mathematical methods based on assumptions. How good these estimated values capture the underlying reality is very difficult to assess.

México (INEGI): We have a 50-year gross capital formation series with a 6-digit SCIAN breakdown level, which allows us to apply the perpetual inventory method. Specifically, we use geometric depreciation. However, we do not have special surveys for capital measurement, and the information we can find on depreciation corresponds to commercial valuations. We also have difficulties opening capital formation by institutional sector. Likewise, service lives studies are very scarce and not very homogeneous.

Mongolia (National Statistical Office): There is limited information on service lives of assets, price data. The national accounts division lacks staff resources.

New Zealand (Statistics New Zealand): The approach used is understood by a relatively small number of people so capacity in this space is limited. In addition the underlying information and assumptions are based on limited information that is very difficult to update.

North Macedonia (State statistical office): Lack of appropriate price indices

Norway (Statistics Norway): There is limited empirical data on important parameters such as service lives and depreciation rates, as well as Other changes in the volume of assets

Perú (INSTITUTO NACIONAL DE ESTADISTICA E INFORMATICA): Se requiere tener disponibilidad de series largas de formación bruta de capital fijo por actividad económica y según tipo de activo, vidas útiles medias por tipo de activo y sería conveniente contar con la asistencia técnica para la estimación del stock de capital fijo y del consumo de capital fijo.

Qatar (Planning and Statistics Authority): The methodology was initially built with information that included some degree of details. The level of data detail data shrank year after year. Nowadays estimates are being updated using aggregated data.

Singapore (Singapore Department of Statistics): Information on average service lives/survival functions, prices as well as age-efficiency or age-price profiles by asset types and industry/sector is not readily available. Significant resources are required to collect and compile such data to accurately measure capital stock and consumption of fixed capital.

Slovenia (Statistical Office of the Republic of Slovenia): Human resources /greater IT automation of compilation process needed; lack of empirical evidence on PIM parameters (service lives, depreciation/retirement patterns).

South Africa (Soth African Reserve Bank): The data limitation is that the statistical office is responsible for gross fixed capital formation time series, and they do not measure it by industry on a quarterly basis only annually. Fixed capital formation data is provided by the Statistical Office in two dimensions (by asset type and industry), and SARB must estimate the third dimension (by type of organisation) using pre-determined ratios which often pose challenges when balancing.

Service lives for new assets is sometimes a problem. Service lives data is scarce and currently sourced exclusively from the annual financial statements - therefore assumptions must be employed for various asset classes, and this renders the data somewhat "soft". However, there is an opportunity to review assumptions every five years.

Price data is also sometimes a problem, as market prices are not available for all types of stocks.

Sweden (Statistics Sweden, NSI): Information on service lives and the scrap value at the end of the service life are not at hand. The information on investments is not as detailed at the product level as necessary.
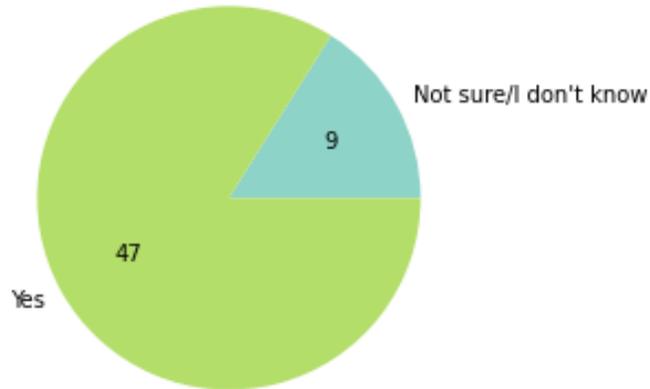
The Netherlands (Statistics Netherlands (CBS)): Especially measuring the service life of intangible assets is a hard challenge as well as assets with a long longevity such as houses etc.

United Kingdom (UK Statistics Authority): Overall, the U.K.'s capital stocks and consumption of capital data production is of sufficient quality for those assets currently captured. Those outside national accounts are estimates via Natural Capital Accounts and there is a clear need to identify methods and systems to bring these together.

United States (Bureau of Economic Analysis): Services lives (especially for IPP) and quality adjusted prices.

Узбекистан (Агентство Статистики при Президенте Республики Узбекистан): Без детальных динамических рядов стоимости валового основного капитала за достаточно продолжительный период для оценки потребления основного капитала применить метод непрерывной инвентаризации не представляется возможным

Q4. **Do you agree that a well-functioning international 'capital measurement (internet-based) information hub' will be a helpful way to share information to improve the methodology on the developments of prices for new assets, age-efficiency and age-price profiles, and service lives?**

Aruba (CBS): Not sure/I don't know

Australia (Australian Bureau of Statistics): Yes

Bangladesh (Bangladesh Bureau of Statistics): Yes

Belgium (National Bank of Belgium): Yes

Brasil (IBGE): Yes

Canada (Statistics Canada): Yes

Croatia (Croatian Bureau of Statistics): Yes

Estonia (Statistics Estonia): Yes

Finland (Statistics Finland): Yes

France (NSI): Yes

Germany (Statistisches Bundesamt / Federal Statistical Office): Yes

Indonesia (BPS): Yes

Indonesia (Statistics Office of Indonesia): Yes

Ireland (Central Statistics Office): Yes

Italy (Istat): Yes

Latvia (Central Statistical Bureau of Latvia): Yes

Lithuania (State Data Agency. Statistics Lithuania): Yes

Luxembourg (STATEC): Yes

Malaysia (Department of Statistics Malaysia): Yes

México (INEGI): Yes

Mongolia (National Statistical Office): Yes

Nepal (National Statistics Office): Not sure/I don't know

New Zealand (Statistics New Zealand): Yes

North Macedonia (State statistical office): Yes

Norway (Statistics Norway): Yes

Perú (INSTITUTO NACIONAL DE ESTADISTICA E INFORMATICA): Yes

Qatar (Planning and Statistics Authority): Yes

Republic of Serbia (Statistical Office of the Republic of Serbia): Yes

Russia (Federal State Statistical Service (Rosstat)): Yes

Singapore (Singapore Department of Statistics): Yes

Slovenia (Statistical Office of the Republic of Slovenia): Yes

South Africa (Soth African Reserve Bank): Yes

South Korea (Bank of Korea): Yes

Sweden (Statistics Sweden, NSI): Yes

The Netherlands (Statistics Netherlands (CBS)): Yes

**Ukraine (State Statistics Service of Ukraine):** Not sure/I don't know

United Kingdom (UK Statistics Authority): Yes

United States (Bureau of Economic Analysis): Yes

Vietnam (General Statistics Office): Yes

Узбекистан (Агентство Статистики при Президенте Республики Узбекистан): Yes

Q5. Do you expect that the exchange of information, as supported by the hub, will contribute to better quality of your estimates of statistics on stocks of fixed capital and flows of consumption of fixed capital?
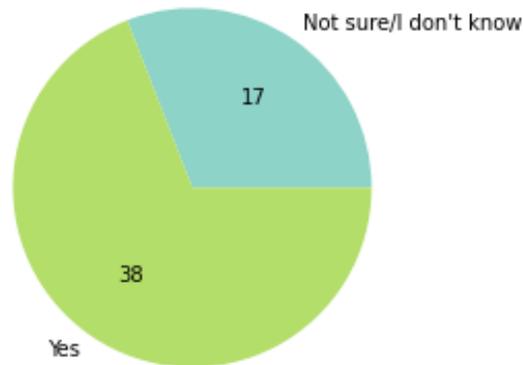
Aruba (CBS): Not sure/I don't know

Australia (Australian Bureau of Statistics): Yes

Bangladesh (Bangladesh Bureau of Statistics): Yes

Belgium (National Bank of Belgium): Yes

Brasil (IBGE): Yes

Canada (Statistics Canada): Yes

Croatia (Croatian Bureau of Statistics): Yes

Estonia (Statistics Estonia): Yes

Finland (Statistics Finland): Yes

France (NSI): Yes

Germany (Statistisches Bundesamt / Federal Statistical Office): Not sure/I don't know

Indonesia (BPS): Yes

Indonesia (Statistics Office of Indonesia): Yes

Ireland (Central Statistics Office): Not sure/I don't know

Italy (Istat): Yes

Latvia (Central Statistical Bureau of Latvia): Yes

Lithuania (State Data Agency. Statistics Lithuania): Yes

Luxembourg (STATEC): Not sure/I don't know

Malaysia (Department of Statistics Malaysia): Yes

México (INEGI): Yes

Mongolia (National Statistical Office): Yes

Nepal (National Statistics Office): Not sure/I don't know

New Zealand (Statistics New Zealand): Yes

North Macedonia (State statistical office): Yes

Norway (Statistics Norway): Yes

Perú (INSTITUTO NACIONAL DE ESTADISTICA E INFORMATICA): Yes

Qatar (Planning and Statistics Authority): Yes

Republic of Serbia (Statistical Office of the Republic of Serbia): Yes

Russia (Federal State Statistical Service (Rosstat)): Yes

Slovenia (Statistical Office of the Republic of Slovenia): Yes

South Africa (Soth African Reserve Bank): Yes

South Korea (Bank of Korea): Yes

Sweden (Statistics Sweden, NSI): Not sure/I don't know

The Netherlands (Statistics Netherlands (CBS)): Not sure/I don't know

Ukraine (State Statistics Service of Ukraine): Not sure/I don't know

United Kingdom (UK Statistics Authority): Not sure/I don't know

United States (Bureau of Economic Analysis): Yes

Vietnam (General Statistics Office): Yes

Узбекистан (Агентство Статистики при Президенте Республики Узбекистан): Yes

Q6A. Do you agree the 2025 SNA should emphasize using geometric depreciation as the default option (in case information on age-price/age-efficiency profiles is not available)?
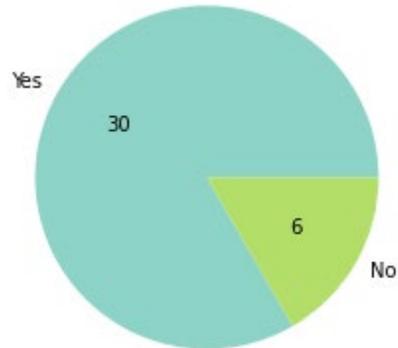
Aruba (CBS): Yes

Australia (Australian Bureau of Statistics): Not sure/I don't know

Bangladesh (Bangladesh Bureau of Statistics): Yes

Belgium (National Bank of Belgium): Not sure/I don't know

Brasil (IBGE): Yes

Canada (Statistics Canada): Yes

Croatia (Croatian Bureau of Statistics): No

Estonia (Statistics Estonia): Yes

Finland (Statistics Finland): Yes

France (NSI): Yes

Germany (Statistisches Bundesamt / Federal Statistical Office): No

Indonesia (BPS): Yes

Indonesia (Statistics Office of Indonesia): Not sure/I don't know

Ireland (Central Statistics Office): Yes

Italy (Istat): Not sure/I don't know

Latvia (Central Statistical Bureau of Latvia): No

Lithuania (State Data Agency. Statistics Lithuania): Not sure/I don't know

Luxembourg (STATEC): Not sure/I don't know

Malaysia (Department of Statistics Malaysia): Yes

México (INEGI): Yes

Mongolia (National Statistical Office): Not sure/I don't know

Nepal (National Statistics Office): Yes

New Zealand (Statistics New Zealand): Not sure/I don't know

North Macedonia (State statistical office): Not sure/I don't know

Norway (Statistics Norway): Yes

Perú (INSTITUTO NACIONAL DE ESTADISTICA E INFORMATICA): Not sure/I don't know

Qatar (Planning and Statistics Authority): Yes

Republic of Serbia (Statistical Office of the Republic of Serbia): Yes

Russia (Federal State Statistical Service (Rosstat)): No

Singapore (Singapore Department of Statistics): Yes

Slovenia (Statistical Office of the Republic of Slovenia): Yes

South Africa (Soth African Reserve Bank): Yes

South Korea (Bank of Korea): Not sure/I don't know

Sweden (Statistics Sweden, NSI): Yes

The Netherlands (Statistics Netherlands (CBS)): Yes

Ukraine (State Statistics Service of Ukraine): Yes

United Kingdom (UK Statistics Authority): No

United States (Bureau of Economic Analysis): Yes

Vietnam (General Statistics Office): Not sure/I don't know

Узбекистан (Агентство Статистики при Президенте Республики Узбекистан): Yes

Q6B. Please elaborate your response
Australia (Australian Bureau of Statistics): Thought should be given to if this is the better conceptual option or if it is just the most practical one?

Belgium (National Bank of Belgium): The recommendations made by the DMES Task Force on fixed assets and estimation of consumption of fixed capital under ESA2010 (TF FIXCAP) is limited to using a convex (cohort) depreciation function.

Brasil (IBGE): We believe that conceptually it would be more correct to use geometric depreciation but we do not have precise depreciation rates for Brazil and with this method the revisions at the end of the series could be significant.

Canada (Statistics Canada): This is the default approach used by Canada and is also the approach that we believe is favoured by international accounting standards such as IFRS. In the absence of further information on age-price/age-efficiency profiles it makes sense to recommend a default option for consistency. However, there could be specific cases where for a given asset the profile, if well understood, may deviate from a geometric function and this information would be desirable to incorporate into the PIM model. Thus, the 2025 SNA should leave the door open for this type of improvement to assumptions.

Croatia (Croatian Bureau of Statistics): It depends on how the mathematical model is set up. If it is set up in such a way that it is possible to combine the linear depreciation and the retirement function to calculate the CFC and eventually the net capital stock, there is no need to limit the compilation to one depreciation function. Of course, we agree that it is not recommended to use linear depreciation without a retirement pattern meaning retirement pattern is to be included in CFC and thus net stock.

Finland (Statistics Finland): Easier to apply across the world so it is better than nothing. And for the productivity calculations it is easier to apply.

Germany (Statistisches Bundesamt / Federal Statistical Office): The Eurostat Task Force on fixed assets and estimation of consumption of fixed capital (FIXCAP) worked on the harmonization of capital and consumption of fixed capital across the EU. It developed guidance on the implementation of the PIM. Concerning the depreciation function the TF recommends the use of a convex cohort depreciation function. We would prefer this recommendation.

Indonesia (Statistics Office of Indonesia): In the calculation that we have already done, we use Retirementt Distribution Winfrey S3. But we haven't compared with the result in the field so not sure yet if the geometric depreciation method is the best

Ireland (Central Statistics Office): We use geometric model for most assets

Italy (Istat): The European Task Force FIXCAP recommends (draft report of recommendations): "Choice of depreciation function: Within the context set by ESA2010 regarding depreciation functions, the recommendation is limited to using a convex (cohort) depreciation function". The 2009 OECD Manual Measuring Capital states "Even when depreciation profiles for a single asset are linear, depreciation profiles for an entire cohort turn out to be of convex shape". 2025 SNA should emphasize using a convex cohort

depreciation function (geometric depreciation or a combination of age-price and retirement profiles, depending on the availability of information, data and technical capacity).

Lithuania (State Data Agency. Statistics Lithuania): There is not enough of experience to support (or not) the proposed options.

México (INEGI): The geometric function allows the statistics between countries to be comparable, in addition it gives rise to a convex curve of the age-price profile.

New Zealand (Statistics New Zealand): A standard default approach, while not relevant to NZ, would have some advantages for across country comparisons if the preferred approach of age-price/age-efficiency profiles is not possible. There does seem to be a question mark over whether this level of guidance is better suited to compilation manuals and guides rather than the SNA itself.

Norway (Statistics Norway): The geometric method has both theoretical and empirical support, and is also relatively easy to implement

Perú (INSTITUTO NACIONAL DE ESTADISTICA E INFORMATICA): En el Perú no se ha realizado el ejercicio con el cálculo de la Depreciación Geométrica, conceptualmente parece factible su implementación, sin embargo, sería importante contar con un ejemplo práctico y conocer la experiencia de otros países que apliquen esta metodología.

Republic of Serbia (Statistical Office of the Republic of Serbia): A simple geometric depreciation pattern may be a very reasonable choice, because it tends to be supported empirically and because it facilitates implementation immensely.

Russia (Federal State Statistical Service (Rosstat)): We use hyperbolic dependence

Singapore (Singapore Department of Statistics): In the absence of information on age-price/age-efficiency, geometric depreciation is computationally simpler to implement. Geometric model is also a suitable approximation since various mortality and age-efficiency functions generate profiles that are in a convex form. A default option also helps improve comparability of countries' estimates.

Slovenia (Statistical Office of the Republic of Slovenia): Geometric depreciation is easier to implement and empirically supported. Although it should be considered that the current ESA 2010 Transmission Programme requires reporting of gross capital stocks which cannot be properly defined in case of geometric profiles (OECD, 2009, Measuring Capital, pg. 129).

South Africa (Soth African Reserve Bank): The geometric method is international best practice for compiling CFC statistics, and it opens opportunities for analytical possibilities regarding the capital stock estimates.
Changing from straight line to geometric depreciation improved South Africa's capital stock and consumption of fixed capital formation data.

Sweden (Statistics Sweden, NSI): National accounts is primarily a recording of the physical (volume) using up of resources in the production of volume of output. This means that the using up of resources that have a long service life should be distributed by the volume of output that the resources contribute to. This principle is hard to implement since it takes several years or even decades to establish the true relation after the actual investment has been done. A more appropriate method is therefore needed. Using the geometric approach makes the calculation simple since there is no need to separate different cohorts or datum of past investments except when the rate is changed for some reason. The method is transparent and should from a user perspective be easy to understand and predict the outcome of in forecasting.
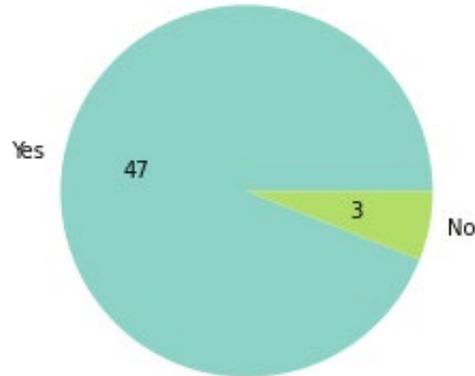
The Netherlands (Statistics Netherlands (CBS)): The system is more harmonized in that way. It should be clear that using a good estimate for age-price/age-efficiency profiles is always the preferred option, but when a good measurement is absent, the geometric depreciation is the best alternative. In Europe, there is already a high level of sharing information, so we can only be positive about more exchange of information.

United Kingdom (UK Statistics Authority): The UK strongly does not agree with a) the implicit removal of country discretion, particularly b) where the expectation imposes a norm which may not be suitable for all asset types in all economies. The default assumption should be that countries should make best efforts to make sensible assumptions given the nature of these assets in their domestic economy. Applying methods consistency does not create improvements in data comparability if different economies behave differently.

The U.K. believes that this proposal is not an appropriate approach.

Узбекистан (Агентство Статистики при Президенте Республики Узбекистан): В случае отсутствия необходимых данных можно использовать этот упрощенный способ,
например, для расчета ПОК применительно к машинам и оборудованию принять, геометрическую аммортизацию, а для зданий можно применить лучше линейную аммортизацию.

Q7A. Do you agree that the 2025 SNA should elaborate more specifically on the necessity to compile net measures for value added, income and saving as explained in the Guidance Note?

Aruba (CBS): Yes

Australia (Australian Bureau of Statistics): Yes

Bangladesh (Bangladesh Bureau of Statistics): Yes

Belgium (National Bank of Belgium): Yes

Brasil (IBGE): Yes

Canada (Statistics Canada): Yes

Croatia (Croatian Bureau of Statistics): Yes

Estonia (Statistics Estonia): Not sure/I don't know

Finland (Statistics Finland): Yes

France (NSI): Yes

Germany (Statistisches Bundesamt / Federal Statistical Office): No

Indonesia (BPS): Yes

Indonesia (Statistics Office of Indonesia): Yes

Ireland (Central Statistics Office): Yes

Italy (Istat): Yes

Latvia (Central Statistical Bureau of Latvia): Not sure/I don't know

Lithuania (State Data Agency. Statistics Lithuania): Yes

Luxembourg (STATEC): Yes

Malaysia (Department of Statistics Malaysia): Yes

México (INEGI): Yes

Mongolia (National Statistical Office): Yes

Nepal (National Statistics Office): Yes

New Zealand (Statistics New Zealand): Yes

North Macedonia (State statistical office): Yes

Norway (Statistics Norway): Yes

Perú (INSTITUTO NACIONAL DE ESTADISTICA E INFORMATICA): Yes

Qatar (Planning and Statistics Authority): Yes

Republic of Serbia (Statistical Office of the Republic of Serbia): Not sure/I don't know

Russia (Federal State Statistical Service (Rosstat)): Yes

Singapore (Singapore Department of Statistics): Yes

Slovenia (Statistical Office of the Republic of Slovenia): Yes

South Africa (Soth African Reserve Bank): Yes

South Korea (Bank of Korea): Not sure/I don't know

Sweden (Statistics Sweden, NSI): Yes

The Netherlands (Statistics Netherlands (CBS)): Yes

Ukraine (State Statistics Service of Ukraine): Yes

United Kingdom (UK Statistics Authority): Not sure/I don't know

United States (Bureau of Economic Analysis): Yes

Vietnam (General Statistics Office): Yes

Узбекистан (Агентство Статистики при Президенте Республики Узбекистан): Yes

Australia (Australian Bureau of Statistics): The ABS supports the proposal to more specifically highlight the usefulness and preferences for compiling net measures for value added, income and saving.

Belgium (National Bank of Belgium): We agree with the arguments listed in the GN, and particularly the fact that the value added is intended to measure the value created by a process of production and should then be measured net of the CFC, which is a cost of production.

Brasil (IBGE): We suggest having two types of net variables given the different stages of development of countries' statistical systems. One adjusted by CFC and the other also including depletion of natural resources.

Canada (Statistics Canada): As the Guidance note correctly points out, the issue is not whether net or gross is the correct number, there are convincing arguments that NDP and NNI are meaningful in an economic sense. However, National Accountants are reticent because they feel less confident in the data used when converting from gross to net measures. This argument has been around since Sir Richard Stone invented the SNA and it has been a long-term development issue in provision of SNA data. Thus, while we feel that these net measures would not yet be ready for promotion as headline values, these net measures would be useful as additional ways to interpret macroeconomic aggregates and trends. Therefore, we welcome more specific elaboration and justification grounded in a realistic assessment of data quality and concepts as part of the 2025 SNA.

Finland (Statistics Finland): The CFC calculations should be harmonised to have comparable figures between countries.

Germany (Statistisches Bundesamt / Federal Statistical Office): We agree with the compilation of value added, income and saving net of consumption of fixed capital as additional indicators. We do not agree to the inclusion of depletion as a cost of production in the core system, as the calculation of depletion strongly depends upon the underlying assumptions. Thus, the results would not really be reliable and probably also not be comparable internationally.

Indonesia (Statistics Office of Indonesia): Information on the net value of the results of economic activity is very important. This can be used for efficiency and productivity calculations, and can become an instrument in producing more precise economic analysis and policies

Ireland (Central Statistics Office): The net measure is a better measure of an economy as CFC is a cost of production. If users can see the walk from gross to net clearly and in detail by asset class CFC and depletions this will help promote the concept. It is crucial to be open about how the CFC is calculated and that it is harmonised across the Statistical producers.

Italy (Istat): We agree with the theory as explained in the Guidance Note. Net measures for value added, income and saving are more appropriate to represent the relationship between production, income and changes in wealth.

Moreover, net measures are less prone to shocks due to the change of ownership of fixed assets (for example Irish IPP) and due to new fixed assets (such as IPP).

We support subtracting the value of consumption of fixed capital (CFC) from gross measures. However we are unsure about depletion (DNR) mainly for practical aspects: measuring depletion of natural resources is not feasible easily. Precise guidelines will be required for calculating and recording depletion in national accounts.

Lithuania (State Data Agency. Statistics Lithuania): The rationale for the need to compile net measures is logical and sound and this will ensure a more exhaustive macroeconomic analysis.

Luxembourg (STATEC): This is an important change, which has to be well explained.

México (INEGI): It is necessary to promote the use of net measures, so the matter should be included in the 2025 SNA manual.

New Zealand (Statistics New Zealand): Conceptually net measures make the most sense. Practically there is limited difference for countries who already have a perpetual inventory model however this does increase the requirements for countries to produce key macro economy series if they don't already have a perpetual inventory model. Suggest that international reporting still requires gross measures to be available. Having net measures also mean that any revisions to capital stocks and consumption of fixed capital will revise headline figures such as quarterly GDP which will increase the work required to put through any revisions in future.

Norway (Statistics Norway): The net measures will be unfamiliar to many NA users and compilers, so there is a need for good explanations and clear guidelines in SNA. For depletion it will be also important with international cooperation (similar to that suggested for CFC above) to ensure the quality and comparability of the estimates

Perú (INSTITUTO NACIONAL DE ESTADISTICA E INFORMATICA): Si por las implicaciones que tienen las valorizaciones en términos netos, tanto para los compiladores como para los usuarios en general.

Singapore (Singapore Department of Statistics): There is increasing prominence on net measures due to greater user needs as well as policy uses. The compilation of net measures is also essential for comparable reflection of capital used in the economy in the Supply and Use Tables.

Slovenia (Statistical Office of the Republic of Slovenia): The statistical framework should base on conceptually most appropriate concepts (eg. Net value added) but at the same time acknowledging measurement challenges. Net measures are important also in the context of accounting for natural resource depletion.

South Africa (Soth African Reserve Bank): Net components should be shown explicitly to allow users to interpret the data. Users and compilers would therefore decide on which one to use based on what they need to analyze. It has been noted that net measures such as net income and savings are preferred to better address the well-being or sustainability perspectives measured in the national accounts.

Some countries will however need technical support to be able to measure consumption of fixed capital. Using different service lives can influence consumption of fixed capital and that can result in countries data not being comparable. This should therefore be phased in until all counties are able to measure consumption on fixed capital and the suggested hub for exchange of information is in place.

Sweden (Statistics Sweden, NSI): The comparison between countries with a high degree of capital formation in relation to countries with low capital intensity will benefit from the net concept which is closer to the possible level of consumption. As a measure of the economic activity all social costs of production should be regarded also consumption of fixed assets. The use of natural resources on the other hand does not constitute a cost to the society at large so a concept net of depletion is hard to interpret.

The Netherlands (Statistics Netherlands (CBS)): Both gross and net measures are important in the national accounts figures. It is valuable to have a good quality measure of both available, independent on the preferred choice (net or gross).
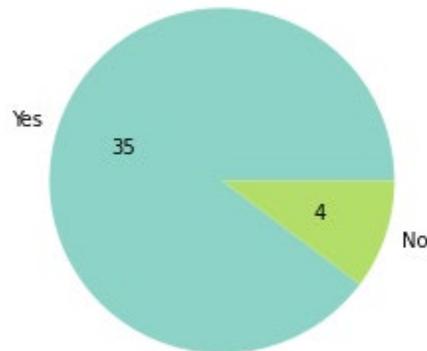
United Kingdom (UK Statistics Authority): The U.K. is of the conception that this should be a "yes". However, the U.K. would like to address that the SNA already makes the point that standard net measures, which can be created from the National Accounts should be created by countries to aide comparability. The U.K. wishes to address that it is not sure that building a communications case for "wider usage" of these data, is necessarily the purpose of the SNA.

Additionally, the U.K. does not believe the Guidance Note appropriately addresses 'how do we migrate users and producers to NDP in a simultaneous fashion, so countries who move are not outliers / at a disadvantage?'. The U.K. is of the position that the SNA isn't necessarily the most suitable fora to address this action-based question. Yet, the U.K. would advocate that there is a clear need for international discussion of how to develop a plan to enable simultaneous action by countries.

United States (Bureau of Economic Analysis): Net measures are important for assessing sustainability.

Узбекистан (Агентство Статистики при Президенте Республики Узбекистан): Для целей экономического анализа была бы полезна информация по чистым показателям добавленной стоимости, дохода и сбережений. Но, учитывая неизбежные погрешности в учете потребления основного капитала, необходимо сохранить учет этих показателей на валовой основе.

Aruba (CBS): Not sure/I don't know

Australia (Australian Bureau of Statistics): Yes

Bangladesh (Bangladesh Bureau of Statistics): Yes

Belgium (National Bank of Belgium): Not sure/I don't know

Brasil (IBGE): Yes

Canada (Statistics Canada): Yes

Croatia (Croatian Bureau of Statistics): No

Estonia (Statistics Estonia): Yes

Finland (Statistics Finland): Yes

France (NSI): Yes

Germany (Statistisches Bundesamt / Federal Statistical Office): Yes

Indonesia (BPS): Yes

Indonesia (Statistics Office of Indonesia): No

Ireland (Central Statistics Office): Yes

Italy (Istat): Yes

Latvia (Central Statistical Bureau of Latvia): Yes

Lithuania (State Data Agency. Statistics Lithuania): Not sure/I don't know

Luxembourg (STATEC): Yes

Malaysia (Department of Statistics Malaysia): Yes

México (INEGI): Yes

Mongolia (National Statistical Office): Yes

Nepal (National Statistics Office): Yes

New Zealand (Statistics New Zealand): Yes

North Macedonia (State statistical office): Not sure/I don't know

Norway (Statistics Norway): Yes

Perú (INSTITUTO NACIONAL DE ESTADISTICA E INFORMATICA): Yes

Qatar (Planning and Statistics Authority): Yes

Republic of Serbia (Statistical Office of the Republic of Serbia): Not sure/I don't know

Russia (Federal State Statistical Service (Rosstat)): Not sure/I don't know

Singapore (Singapore Department of Statistics): Yes

Slovenia (Statistical Office of the Republic of Slovenia): Yes

South Africa (Soth African Reserve Bank): Yes

South Korea (Bank of Korea): Not sure/I don't know

Sweden (Statistics Sweden, NSI): Yes

The Netherlands (Statistics Netherlands (CBS)): Yes

Ukraine (State Statistics Service of Ukraine): Not sure/I don't know

United Kingdom (UK Statistics Authority): Not sure/I don't know

United States (Bureau of Economic Analysis): Yes

Vietnam (General Statistics Office): Not sure/I don't know

Узбекистан (Агентство Статистики при Президенте Республики Узбекистан): Not sure/I don't know

Australia (Australian Bureau of Statistics): Explicitly showing the elements of consumption of fixed capital and depletion as part of publishing net measures of value added, income and saving will be crucial in supporting the understanding and usefulness of these measures. The promotion of transparency will also support the higher prominence and use if these measures by users.

Belgium (National Bank of Belgium): From a theoretical point of view, we agree that the depletion of natural resources should be considered as a cost of production. From a practical point of view, clear and pragmatic guidance is necessary to compile estimates of the costs of depletion of natural resources.

Brasil (IBGE): We suggest having two types of net variables given the different stages of development of countries' statistical systems. One adjusted by CFC and the other also including depletion of natural resources.

Canada (Statistics Canada): Yes, regardless of whether these are presented as Gross-Net adjustments, both CFC and depletion of natural resources should be published as distinct elements given their usefulness for a range of analyses. While this is commonplace for CFC, depletion of natural resources within the macroeconomic framework is sometimes embedded with other elements.

Statistics Canada does currently publish detailed information on the consumption of fixed capita (see Flows and stocks of fixed non-residential and residential capital, by sector and asset, provincial and territorial, https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3410016301) as well as depletion (see Value of selected natural resource reserves, https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3810000601). It should be noted that there are occasional issues where the current approach to estimating depletion occasionally yields negative depletion. While this can be solved with average price measures, it does highlight an impact when resource rent is negative.

Finland (Statistics Finland): The CFC methods should be consistent to have comparable results.

Germany (Statistisches Bundesamt / Federal Statistical Office): We would prefer depletion only to be shown in an extension to the core system. We do not advocate the recording of the costs of depletion of natural resources due to the high level of assumptions necessary and thus the risks of low reliability and international comparability.
But if these net measures are published, users should also be informed explicitly on the size and variation of depletion.

Indonesia (Statistics Office of Indonesia): for the country's wealth to become the secret of the country

Ireland (Central Statistics Office): Need to be open and clear about CFC and depletions in as much detail as is allowed by the data.

Italy (Istat): It is necessary to highlight which of the two components (CFC and/or DNR) is included and the amount of each, to make the data clear and transparent to users, as well as to make consistent comparisons across countries with homogeneous and comparable data. Countries could be able to estimate CFC and not depletion, or vice versa; therefore, they should explicitly show which of the two is taken into account

Lithuania (State Data Agency. Statistics Lithuania): It is difficult to say until clear guidelines are issued on how to estimate depletion of natural resources.

Luxembourg (STATEC): Depletion of natural ressources may be a bigger issue in some countries. Therefore it is interesting to show it seperately from CFC.

Malaysia (Department of Statistics Malaysia): COFC - yes, depletion of natural resources - not sure (data constraints)

México (INEGI): This information would allow a better understanding of the discrepancies when comparing the countries' statistics and provide greater transparency regarding the components that make the difference.

New Zealand (Statistics New Zealand): It is likely that some customers will want to exclude these adjustments so having the information available is important to support a number of types of use of the series.

Norway (Statistics Norway): Depletion of natural resources is a new concept in NA, the calculations are model based, and its value will vary a lot across countries. So it is important to show the impact of depletion on the net measures explicitly.

Perú (INSTITUTO NACIONAL DE ESTADISTICA E INFORMATICA): Sería preferible mostrarlos independientemente, para distinguir cual de los elementos esta influenciando en los términos netos, ya que no todos los países van a disponer de ambos elementos.

Russia (Federal State Statistical Service (Rosstat)): There are doubts about the issue of accounting for the depletion of natural resources as a factor directly affecting net profit. Perhaps this question will become clearer after reading the full text of the Guideline.

Singapore (Singapore Department of Statistics): We agree that the two elements are costs of production and should be presented explicitly to show how net measures are computed from gross measures. It also facilitates comparison of the use of fixed assets vs natural resources in production across countries.

Slovenia (Statistical Office of the Republic of Slovenia): The transformation of gross to net measures should be transparent to users.

South Africa (Soth African Reserve Bank): To make this granularity available to users, as part of a broader trend of collecting and disseminating more statistical information will provide a better understanding of the adjustment to arrive at net. Showing both net and gross values will enhance transparency and credibility of a country's data and make cross-country data comparisons easier.

South Korea (Bank of Korea): The recent move to increase the usefulness of the system of national accounts as a tool for measuring economic well-being is desirable. However, in the system of national accounts, it is expected that it will be difficult to regard the depletion of natural resources as an item similar to the consumption of fixed capital.

Sweden (Statistics Sweden, NSI): It is important to separately show the impact of natural resources on the aggregates for those researchers who would like to exclude depletion from the analysis since it is not consistent with the definition of value added as soley created by human activity.

The Netherlands (Statistics Netherlands (CBS)): The elements are so different that they both need to be explicitly shown in the figures. It should be noted that discussion whether depletion on natural sources will be adjusted for in Gross-Net adjustments is ongoing. Nevertheless, it is valuable to measure it, independent of the outcome of that discussion.

Ukraine (State Statistics Service of Ukraine): The estimates of natural resources value are not implemented so far.

United Kingdom (UK Statistics Authority): The U.K. believes that countries are the fundamental decision makers in what should and what shouldn't be published. Additionally, the UK believes the SNA may not be the correct vehicle to propose a simplified guide on how to publish measurements. The update of the SNA should deliver a full approach on guidance of measurements, including all the factors which impact the transition from gross to net measures.

The guidance note explores several options for introducing net product, income and saving measures in the compilation of the national accounts of a country. Obviously, the introduction of net measures should be brought in line with user needs and accounting applications such as compiling indicators and calibrating macroeconomic forecasting models.

United States (Bureau of Economic Analysis): Because of measurement challenges and because some users are more interested in one of the two measures, we should present both separately.
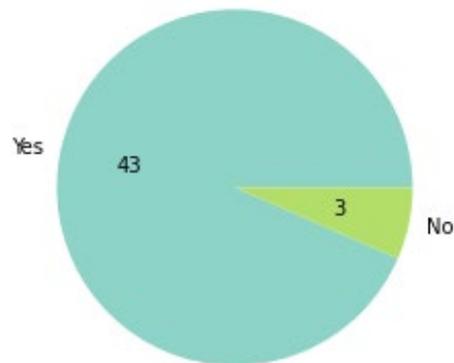
Vietnam (General Statistics Office): We understand the importance of publishing these two elements but not all countries can publish this, especially about the depletion of natural resources. It depends on the data source and measurement capacity of each country (such as technical methods, financial issues, and lack of skilled labor...). Hopefully, with the standard methodology amended in SNA 2025 and the support from international

organizations, we could measure the depletion of natural resources in order to compile NDP in the future

Узбекистан (Агентство Статистики при Президенте Республики Узбекистан): Учитывая возможность значительных расхождений в разных методах оценки потребления основного капитала, возможно не сопоставимость данных между различными странами. Кроме того, истощение природных ресурсов не всегда поддается математической оценке, так как есть много факторов, влияющих на те или иные природные ресурсы.

Q9A. Do you agree that countries should introduce, in the compilation of their national accounts, net value added (including Domestic Product),income and saving as complementary information items to gross product, income and saving?

Aruba (CBS): Not sure/I don't know

Australia (Australian Bureau of Statistics): Yes

Bangladesh (Bangladesh Bureau of Statistics): Yes

Belgium (National Bank of Belgium): Yes

Brasil (IBGE): Yes

Canada (Statistics Canada): No

Croatia (Croatian Bureau of Statistics): No

Estonia (Statistics Estonia): Yes

Finland (Statistics Finland): Yes

France (NSI): Yes

Germany (Statistisches Bundesamt / Federal Statistical Office): Yes

Indonesia (BPS): Yes

Indonesia (Statistics Office of Indonesia): Yes

Ireland (Central Statistics Office): Yes

Italy (Istat): Yes

Latvia (Central Statistical Bureau of Latvia): Not sure/I don't know

Lithuania (State Data Agency. Statistics Lithuania): Yes

Luxembourg (STATEC): Yes

Malaysia (Department of Statistics Malaysia): Yes

México (INEGI): Yes

Mongolia (National Statistical Office): Yes

Nepal (National Statistics Office): Yes

New Zealand (Statistics New Zealand): Yes

North Macedonia (State statistical office): Not sure/I don't know

Norway (Statistics Norway): Yes

Perú (INSTITUTO NACIONAL DE ESTADISTICA E INFORMATICA): Yes

Qatar (Planning and Statistics Authority): Yes

Republic of Serbia (Statistical Office of the Republic of Serbia): Not sure/I don't know

Russia (Federal State Statistical Service (Rosstat)): Yes

Singapore (Singapore Department of Statistics): Yes

Slovenia (Statistical Office of the Republic of Slovenia): Yes

South Africa (Soth African Reserve Bank): Yes

South Korea (Bank of Korea): Yes

Sweden (Statistics Sweden, NSI): Yes

The Netherlands (Statistics Netherlands (CBS)): Yes

Ukraine (State Statistics Service of Ukraine): Yes

United Kingdom (UK Statistics Authority): Yes

United States (Bureau of Economic Analysis): Yes

Vietnam (General Statistics Office): Yes

Узбекистан (Агентство Статистики при Президенте Республики Узбекистан): Yes

Q9B. Please provide further details supporting your answer from a conceptual and a practical point of view.

Australia (Australian Bureau of Statistics): Where the production of net measures through accurate measurement of consumption of fixed capital and in the future, depletion, is possible or practical, it is useful to introduce net measures.

Brasil (IBGE): Due to the different stages of the statistical system in the countries, it would be better if they were in supplementary tables.

Canada (Statistics Canada): Generally, we support the continued development and discussion of these net measures; they should be brought to light and made available in a way that users can understand the value they offer from an analytical perspective. However, we do not believe that they should be introduced within or alongside the core measures at this time or in the near future. We also feel that the process to socialize these measures to data users and assess their quality and comparability should commence in earnest. A phased in approach would be useful whereby countries can first provide preliminary estimates so that international comparison can be made, and methods assessed for reliability. This approach would also provide the required time to properly consult with primary data users and domestic policymakers to better inform what kind of transition process is needed and to identify additional benefits or limitations to these measures from their perspectives. Moreover, releasing research papers that assess annual net measures (and move to quarterly) while starting the process of highlighting net alongside gross measures outside of our core releases represents a more gradual and measured approach to implementing this significant shift.

Practical – The methods used to produce estimates of the consumption of fixed capital are based on a model that is based on assumptions, which are in turn based on data collected using additional assumptions. While the resulting output can be robust and consistent with the measurement concepts being sought, it does not reflect an estimate that is ready to be incorporated in such a significant way within the macroeconomic accounts. While many countries may be producing PIM-based estimates of economic depreciation, this does not mean that these methods are yielding the same quality of results. Overall, these aspects may hinder the international comparability of these net measures especially when assumptions and methods are not clearly understood between countries (and likely underpins the request in this survey for information about CFC compilation).

Conceptual – A concern for incorporating CFC into net measures is the fact that employing a geometric profile versus linear profile in the estimation of the consumption of fixed capital can yield estimates that are considerably different, and these differences grow as a counties gross stock becomes larger, although proportionately to some extent. Even with all countries adopting geometric depreciation, there is nothing to say that more accurate profiles may exist for specific assets, especially those where information is more readily available and where materiality in terms of their weight in the stock of non-financial assets is considerable.

Croatia (Croatian Bureau of Statistics): Based on our experience of the high volatility of the P51c, at the moment, we do not see possibility of the introduction the net value added in the compilation of Croatian national accounts.

Germany (Statistisches Bundesamt / Federal Statistical Office): Net figures are valuable indicators for national accounts users.
We therefore agree that countries should strive to introduce them in their compilation of value added, income and saving (net of consumption of fixed capital) as additional indicators if they don't already do so. We do not agree to the inclusion of depletion as a cost of production in the core system, though.
Note: As we do not advocate the recording of the costs of depletion of natural resources, net for us means only deduction of CFC.

Indonesia (Statistics Office of Indonesia): but for the calculation of savings is still difficult to do

Ireland (Central Statistics Office): NVA, NNP and NNI already released nationally to users in the Annual National Accounts.

Italy (Istat): Italy already introduces net (for CFC) measures in Italian national accounts in order to provide complete, transparent and clear information.

Lithuania (State Data Agency. Statistics Lithuania): This will ensure a more exhaustive macroeconomic analysis.

Luxembourg (STATEC): It is methodological sound to do so.

México (INEGI): Making the depletion of natural resources visible in official statistics is a responsible and necessary action. Most countries have the statistical infrastructure to carry out these estimates.

New Zealand (Statistics New Zealand): Complimentary information enables multiple uses and flexibility. It may be confusing having both gross and net measures, but this could be covered by building customers understanding and how the information is presented

Norway (Statistics Norway): Statistics Norway already publishes net (i.e. CFC adjusted) items.

Perú (INSTITUTO NACIONAL DE ESTADISTICA E INFORMATICA): Se entiende conceptualmente que los valores netos del valor agregado, el ingreso y ahorro, son medidas del crecimiento económico, que expresa volúmen, al extraer de los valores el CCF y el agotamiento de los recursos naturales y que al disponer de estadísticas en valores netos se tendría mayores elementos de comparabilidad internacional.

Singapore (Singapore Department of Statistics): While we agree that it will be useful to provide net measures as complementary information items, before there is a more consistent approach to measuring consumption of fixed capital and depletion of natural resources, we are of the view that they should be released as experimental series initially. In addition, more assessment on resource availability to produce quality estimates as well as the impact of net measures is also necessary before implementation.

Slovenia (Statistical Office of the Republic of Slovenia): Conceptually CFC and depletion are not newly created values so net measures are preferred and should be introduced as complementary information. In practice, this would encourage compilers of statistics to improve their net estimates and enable the users to gradually familiarise with the new concepts.

South Africa (Soth African Reserve Bank): The gross value-added data should be continued in the national accounts for the foreseeable future as many users have existing data models and ratio calculations which use these statistics. The net values can be added as complimentary information as suggested, and perhaps over time short information boxes using the net value data can be published to analyze the net value added numbers and expose users to the new data. South Africa publish net and gross saving. Users mostly use the net saving data.

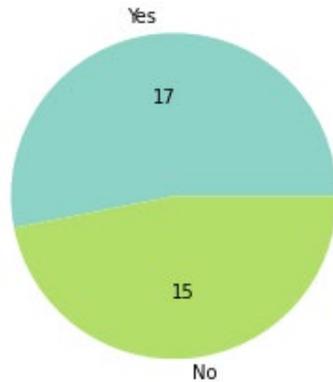**The Netherlands (Statistics Netherlands (CBS)):** See answer at 7B

United Kingdom (UK Statistics Authority): The U.K. is in a good position to meet this demand in principle, although there is a key issue of frequency which we address in a following answer if one wishes to maximise usage.

United States (Bureau of Economic Analysis): BEA publishes several net measures such as NDP, NVA, net income, net saving, net capital stocks and these measures provide insights that gross measures do not.

Vietnam (General Statistics Office): We are still really confused about the Net Value Added and we hope this could be explained further in SNA 2025. Why should we exclude the consumption of fixed capital when compiling Value Added? Because if we consider the consumption of fixed capital as the reduction in the value of previously created fixed assets when they are used up in the production process, we also think about the compensation of employees is also the amount paid for labor to reimburse their health and effort in the production process. So we consider Value added to be "net" and exclude the consumption of fixed assets, why do we still include the compensation of employees to VA?

Узбекистан (Агентство Статистики при Президенте Республики Узбекистан): В качестве справочной информации в практических целях для анализа экономической ситуации такая информация будет полезна и одновременно будет соблюдена концептуальная основа.

Q10A. Using the volume growth of net domestic product (NDP) as the measure of economic growth?

Aruba (CBS): No

Australia (Australian Bureau of Statistics): Yes

Bangladesh (Bangladesh Bureau of Statistics): Yes

Belgium (National Bank of Belgium): No

Brasil (IBGE): No

Canada (Statistics Canada): No

Croatia (Croatian Bureau of Statistics): No

Estonia (Statistics Estonia): Not sure/I don't know

Finland (Statistics Finland): Not sure/I don't know

France (NSI): Yes

Germany (Statistisches Bundesamt / Federal Statistical Office): No

Indonesia (BPS): Yes

Indonesia (Statistics Office of Indonesia): Yes

Ireland (Central Statistics Office): Yes

Italy (Istat): Yes

Latvia (Central Statistical Bureau of Latvia): Not sure/I don't know

Lithuania (State Data Agency. Statistics Lithuania): Not sure/I don't know

Luxembourg (STATEC): Yes

Malaysia (Department of Statistics Malaysia): Not sure/I don't know

México (INEGI): Yes

Mongolia (National Statistical Office): Yes

Nepal (National Statistics Office): Yes

New Zealand (Statistics New Zealand): Not sure/I don't know

North Macedonia (State statistical office): Not sure/I don't know

Norway (Statistics Norway): No

Perú (INSTITUTO NACIONAL DE ESTADISTICA E INFORMATICA): Yes

Qatar (Planning and Statistics Authority): Yes

Republic of Serbia (Statistical Office of the Republic of Serbia): Not sure/I don't know

Russia (Federal State Statistical Service (Rosstat)): Yes

Singapore (Singapore Department of Statistics): Not sure/I don't know

Slovenia (Statistical Office of the Republic of Slovenia): Yes

South Africa (Soth African Reserve Bank): Yes

South Korea (Bank of Korea): Not sure/I don't know

Sweden (Statistics Sweden, NSI): Not sure/I don't know

The Netherlands (Statistics Netherlands (CBS)): Not sure/I don't know

Ukraine (State Statistics Service of Ukraine): Not sure/I don't know

United Kingdom (UK Statistics Authority): No

United States (Bureau of Economic Analysis): No

Vietnam (General Statistics Office): Not sure/I don't know

Узбекистан (Агентство Статистики при Президенте Республики Узбекистан): Not sure/I don't know

Australia (Australian Bureau of Statistics): It is acknowledged that net domestic product is a conceptually useful measure that should be encouraged and promoted for its usefulness in measuring economic growth. It should be acknowledged though that GDP has a long and consistent history of use and that it is most likely, and perhaps best, to promote understanding of the differences between the two measures (NDP & GDP) and allow users to use this information and different measures as suits their uses best.

It is also likely that many key users may find difficulty in focussing on NDP, at least initially, due to potential difficulties in forecasting the consumption of fixed capital and depletion estimates.

Belgium (National Bank of Belgium): Gross and net amounts should be presented together.

Brasil (IBGE): All users are familiar to gross measures. Before starting to use net measures, they will need long time series.

Canada (Statistics Canada): Please see above. Eventually, these could be provided in addition to gross measures.

Croatia (Croatian Bureau of Statistics): The users of our national accounts data are used to using gross domestic product (GDP) from both point of views.

Finland (Statistics Finland): In the EU this is impossible as long as GDP is included in EU laws. In principle in the long run the gradually change to NDP is OK.

Germany (Statistisches Bundesamt / Federal Statistical Office): From a conceptual point of view, the NDP concept is of course convincing.
From a practical point of view, it is not only more difficult to calculate, but also not reliable and not internationally comparable as the calculation of depletion strongly depends on assumptions which can differ greatly between countries (see above).
Also, the calculation of depletion with its high level of assumptions migth have irregular effects on NDP; thus, it is less suited for business cycle analysis.

Indonesia (Statistics Office of Indonesia): net value is likely to be a more precise measure of the results of economic activity

Ireland (Central Statistics Office): This is possible within the current SNA framework. Again the consistent deflation of CFC is important here along with consistent estimation of volume measurement across all of the other variables involved.

Italy (Istat): Theoretically we agree: the economic growth (and its sustainability) should be measured taking into account the deduction in the value of previously created fixed assets (and the depletion of nature resources) due to their use in the production process: CFC (and DNR) are not newly created value.
However there are critical issues for estimating depletion (practical issue: it is not feasible easily).

Lithuania (State Data Agency. Statistics Lithuania): This may cause confusion and difficulties for users of the information, as some of them, even key users (e.g. media, journalists), don't have enough understanding of the essential differences between gross and net measures.

Luxembourg (STATEC): Not sure that it will be easily feasible to calculate net measures for backdata, especially for the depletion item.

Malaysia (Department of Statistics Malaysia): Depending on the availability of data

México (INEGI): Using gross measurements is more of a practical custom; there isn't any other conceptual reason. However, the use of net measures that reflect the measurement of climate change is more useful for analysis and public policy proposals.

New Zealand (Statistics New Zealand): A gradual approach appears to suggest that countries could chose to do this over time with no co-ordination across countries. This is not recommended as it will be very confusing for customers. Suggest instead that a future SNA update (assume next one) replace gross measures with net as the headline measures. As noted above, for international reporting across the world it is recommended that gross be required to be made available, say at least in current prices. Also note that there will be a significant effort required to build customers understanding of any changes and what that might mean for their use of macro-economic measures.

Norway (Statistics Norway): Volume growth of GDP and NDP both have their uses (and users), so it would be better to use both than to replace GDP. It may also be more demanding to provide NDP on a quarterly and monthly basis, than on an annual basis.
In NDP, we should differentiate between adjustment for CFC and for depletion.

Perú (INSTITUTO NACIONAL DE ESTADISTICA E INFORMATICA): El cambio en términos netos debería ser gradual (valor agregado, ingreso y ahorro) se entiende que el PDN conceptualmente es la medida preferida del crecimiento económico, que expresa volúmen, al extraer de los valores el CCF y el agotamiento de los recursos naturales que no son fuentes de crecimiento económico; sin embargo en la práctica se considera que es muy compleja la compilación de ambos valores.

Russia (Federal State Statistical Service (Rosstat)): From a practical point of view, this issue should be resolved in a coordinated manner by the departments responsible for economic policy

Singapore (Singapore Department of Statistics): Due to users' familiarity with GDP, significant user engagement is necessary for GDP to be fully replaced by NDP. In addition, until countries have robust estimates of consumption of fixed capital and depletion of non-produced natural resources, NDP will not be meaningful as a measure of economic growth and for country comparison.

Slovenia (Statistical Office of the Republic of Slovenia): In practice NDP and GDP growth rates are expected to be similar due to stability of the CFC and depletion costs, so the volume growth of NDP could be gradually introduced.

South Africa (Soth African Reserve Bank): To gradually replace gross value added (including Domestic Product) can maybe take a very long time but it could have its benefits. Compilers and users have become accustomed to GDP and GNI therefore they will decide on which one to use, based on what they need to analyse. However net measures such as net income and savings are preferred to better address the well-being or sustainability perspectives measured in the national accounts.
By moving to net value-added measures the production data can effectively be compared to net income and net saving measures, which is practical. In South Africa the consumption of fixed capital data is readily available so it will not pose too many problems to calculate NDP as well as GDP, however this can be problematic for other countries, and sufficient guidance must be available to these countries. Also, it is crucial that the calculation of CFC methodology must be standardized in order to get to have comparable NDP data.

Sweden (Statistics Sweden, NSI): As long as we provide both measures it will up to users to weight advantages against drawbacks with the different concepts and convince the public of which measure is the better.

The Netherlands (Statistics Netherlands (CBS)): Conceptual:
Conceptual, there are pros and cons for moving to NDP. Pros would be that the net figure of the domestic product is more 'clean', with fits better for economic growth. It is less dependent on huge capital investments. A con would be that it is hard to interpret the economic growth between countries with different economies regarding capital/labour ratios.

For income and savings figures we agree that it would be best to move to net values. Net income and net saving are more logical concepts than their gross counterpart. It would bring these concepts also more in line with FDI and RIE, as RIE is calculated by setting net savings at zero.

Together, this could possibly lead to a situation where domestic product in measured gross, but income and savings are measured net.

Practical:
There are a lot of practical issues when moving to net domestic product for economic growth. Most important is the harmonization of the gross-net adjustments for all countries.

Furthermore, measuring consumption of fixed capital yearly is more accurate than quarterly, whereas economic growth is quarterly.

Ukraine (State Statistics Service of Ukraine): Net domestic product may compliment the GDP indicator.

United Kingdom (UK Statistics Authority): The U.K. would like to stress that there should not be any indication to "replace" as there is still valid uses and users of GVA etc. The U.K. would like to mention that it is not immediately clear that the SNA is the best place to consider issues of "usage", or indeed whether this topic should be "in scope" of a document of this nature. "Usage" should be the decision of NSIs and domestic data users, noting that international bodies, like IMF and OECD set their requirements for compiling international datasets.

United States (Bureau of Economic Analysis): Because of the measurement challenges and because our users are especially interested in gross measures, we should continue to feature the gross measures and present net measures as a separate, side calculation for those who are interested in the net measures. It's feasible that some aggregate gross measures should be de-emphasized but only on a selected basis.

Узбекистан (Агентство Статистики при Президенте Республики Узбекистан): Дополнительная информация будет приветствоваться, при условии, что будут указаны данные на валовой основе

Q10B. Using NDP as the denominator in critical ratio indicators such as government debt and government net lending/borrowing related to GDP/NDP.
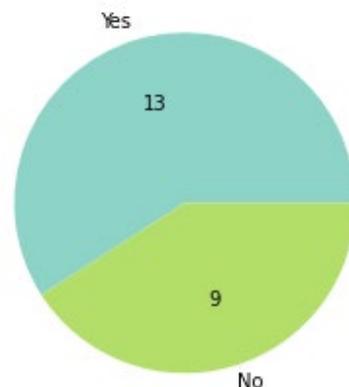
Aruba (CBS): No

Australia (Australian Bureau of Statistics): Not sure/I don't know

Bangladesh (Bangladesh Bureau of Statistics): Not sure/I don't know

Belgium (National Bank of Belgium): No

Brasil (IBGE): No

Canada (Statistics Canada): Not sure/I don't know

Croatia (Croatian Bureau of Statistics): No

Estonia (Statistics Estonia): Not sure/I don't know

Finland (Statistics Finland): Not sure/I don't know

France (NSI): Yes

Germany (Statistisches Bundesamt / Federal Statistical Office): No

Indonesia (BPS): Yes

Indonesia (Statistics Office of Indonesia): Not sure/I don't know

Ireland (Central Statistics Office): Yes

Italy (Istat): Yes

Latvia (Central Statistical Bureau of Latvia): Not sure/I don't know

Lithuania (State Data Agency. Statistics Lithuania): Not sure/I don't know

Luxembourg (STATEC): Not sure/I don't know

Malaysia (Department of Statistics Malaysia): Not sure/I don't know

México (INEGI): Yes

Mongolia (National Statistical Office): Yes

Nepal (National Statistics Office): Yes

New Zealand (Statistics New Zealand): Not sure/I don't know

North Macedonia (State statistical office): Not sure/I don't know

Norway (Statistics Norway): Not sure/I don't know

Perú (INSTITUTO NACIONAL DE ESTADISTICA E INFORMATICA): Not sure/I don't know

Qatar (Planning and Statistics Authority): Yes

Republic of Serbia (Statistical Office of the Republic of Serbia): Not sure/I don't know

Russia (Federal State Statistical Service (Rosstat)): Yes

Singapore (Singapore Department of Statistics): Not sure/I don't know

Slovenia (Statistical Office of the Republic of Slovenia): Not sure/I don't know

South Africa (Soth African Reserve Bank): Not sure/I don't know

South Korea (Bank of Korea): Not sure/I don't know

Sweden (Statistics Sweden, NSI): Not sure/I don't know

The Netherlands (Statistics Netherlands (CBS)): Not sure/I don't know

Ukraine (State Statistics Service of Ukraine): Not sure/I don't know

United Kingdom (UK Statistics Authority): Not sure/I don't know

United States (Bureau of Economic Analysis): Not sure/I don't know

Vietnam (General Statistics Office): Yes

Узбекистан (Агентство Статистики при Президенте Республики Узбекистан): Not sure/I don't know

Q10B. Please provide further details supporting your answer from a conceptual and a practical point of view.

Australia (Australian Bureau of Statistics): This is a decision that is best left until after the prominence of NDP itself is more embedded and more widely used.

Belgium (National Bank of Belgium): The implications are too important. The estimates of CFC and depletion of natural resources are based on too many assumptions to be used in key indicators such as Government debt.

Brasil (IBGE): Because of the same reasons explained above.

Canada (Statistics Canada): GDP is used as a key denominator for not only government financial ratios (i.e., public debt), but also for ratios related to households and non-financial corporations (i.e., private debt). In this case, the nominal value of GDP is used. This has the benefit in that borrowers pay interest on the debt associated with the gross purchase price of capital, not the net value of that capital as it depreciates over time. In this way, it is reasonable to link items such as debt to a gross measure. Additionally, gross nominal GDP is frequently used as an indicator of the tax base for government fiscal planning. Thus, GDP is directly relatable to current and future government revenues in a way that is useful to users when producing these financial ratios. Net GDP may prove to be similarly useful given that there are tax allowances for depreciation, but this has yet to be established. In practical terms, these financial ratios are meant to provide a consistent base relating to the productive capacity of the economy. For consistency of time series and interpretation by

users, there is not a clear benefit to changing the current arrangement, nor is the materiality of switching to a net measure denominator known (although this would be useful future analysis that can serve as part of the ongoing exploration of these topics).

Finland (Statistics Finland): Should we have net concepts when comparing to NDP (for example net debt/NDP)?

Germany (Statistisches Bundesamt / Federal Statistical Office): As mentioned above, the high level of assumptions necessary to calculate depletion includes the risks of low reliability and low international comparability. With regard to critical indicators such as government debt or gross (net) national income, this could have severe financial and political consequences.
From a legal point of view, using NDP would also be problematic: As defined in the Protocol on the excessive deficit procedure annexed to the treaty on the European Union from 1992 (Maastricht treaty), member states shall avoid excessive government deficits. More specifically, excessive government deficits are measured as "the ratio of the planned or actual deficit to gross domestic product at market prices" and "the ratio of government debt to gross domestic product at market prices", exceeding certain reference values. As European member states are legally bound to calculate these ratios with gross indicators, we generally disagree to use NDP as the denominator in critical ratio indicators.
We furthermore see the potential risk of confusing key users by providing a supplementary indicator.

Ireland (Central Statistics Office): Ireland currently provides an alternative measure of GNI (called GNI*) which excludes factor income of redomiciled companies, depreciation of imported R&D and trade in Intellectual Property and depreciation of aircraft leasing. This measure aims to exclude globalization effects that disproportionately impact the size of the Irish economy. National Users and Government already use this indicator as a denominator in some analyses and GNI* is well used in Irish economic analyses.

Italy (Istat): Froma a conceptual poit of view Using NDP as the denominator in critical ratio indicators such as government debt and government net lending/borrowing related to GDP/NDP is coorect. However, given the sensitivity of such indicators (mainly in the EU), the comparability across countries must be attentively esamined.

Lithuania (State Data Agency. Statistics Lithuania): The use of NDP as denominator in critical ratio indicators related to Government finance statistics cannot be used until the use of NDP in laws related to those indicators is introduced, such as the Maastricht Criteria

Luxembourg (STATEC): In the EU this may have important consequences (EDP, own ressources on GNI) and surely needs further discussions.

México (INEGI): The use of the NDP as the denominator of various indicators may also be a gradual transition. We do not see any drawbacks in this regard.

Norway (Statistics Norway): This will require a transition period and good communication with users.

Perú (INSTITUTO NACIONAL DE ESTADISTICA E INFORMATICA): Es esencial conocer las fuentes de compilación y métodos para calcular el CCF y el agotamiento de los recursos naturales, y expresar el PBI en términos netos y usarse como denominador en los ratios mencionados puede tener efectos sustanciales.

Russia (Federal State Statistical Service (Rosstat)): From a practical point of view, this issue should be resolved in a coordinated manner by the departments responsible for economic policy

Slovenia (Statistical Office of the Republic of Slovenia): The choice of a denominator depends on the purpose of use of the indicator. It is not clear conceptually or practically what would be the advantages or disadvantages of changing the denominator from GDP to NDP.

South Africa (Soth African Reserve Bank): Not sure, as this will increase the ratio. There could be some situations where a GDP denominator is more appropriate for indicators.

South Korea (Bank of Korea): If the accuracy of quarterly and annual fixed capital consumption estimation is improved, and extensive and in-depth economic analysis of the relationship between net indicators and other indicators(government debt, etc.) is carried out, the utilization of net indicators will gradually increase.

Sweden (Statistics Sweden, NSI): From the NSI point of view we think it is important to inform users of the statistical differences (in terms of relevance, accuracy, comparability, and coherence) between gross and net concepts to facilitate the optimal use of gross and/or net concepts in relation to user needs.

The Netherlands (Statistics Netherlands (CBS)): Conceptual:
If it is agreed upon that the net measures are more insightful/valuable, then it would be logical to move to the NDP as denominator in critical ratio indicators.

Practical:
We are fully dependent on the European regulations regarding these critical ratio indicators.

Ukraine (State Statistics Service of Ukraine): The selection of indicator depends upon the needs of user of statistical information.

United Kingdom (UK Statistics Authority): The U.K. would like to re-iterate its concern around whether this decision lies within the scope of the SNA, particularly where this may be an issue covered by other legal arrangements / contractual processes.

Узбекистан (Агентство Статистики при Президенте Республики Узбекистан):
Есть опасения, что возможная некорректная оценка потребления основного

капитала может внести искажение в реальное положение дел по чистому
кредитованию

Q10C. How would your key users (media, economic analysts, government representatives) reflect on the need, usefulness and feasibility of moving towards applying net(instead of gross) value added (including Domestic Product), income and saving in their work?
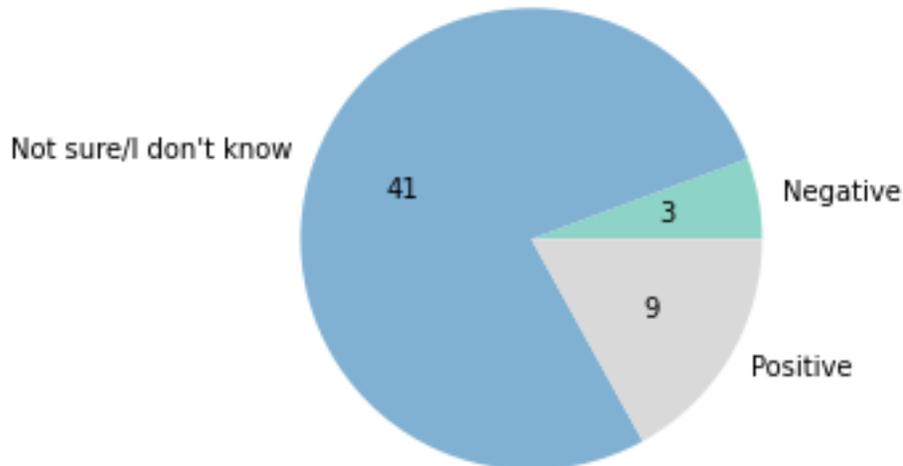
Aruba (CBS): Negative

Australia (Australian Bureau of Statistics): Not sure/I don't know

Bangladesh (Bangladesh Bureau of Statistics): Positive

Belgium (National Bank of Belgium): Not sure/I don't know

Brasil (IBGE): Not sure/I don't know

Canada (Statistics Canada): Negative

Croatia (Croatian Bureau of Statistics): Not sure/I don't know

Estonia (Statistics Estonia): Not sure/I don't know

Finland (Statistics Finland): Not sure/I don't know

France (NSI): Not sure/I don't know

Germany (Statistisches Bundesamt / Federal Statistical Office): Negative

Indonesia (BPS): Not sure/I don't know

Indonesia (Statistics Office of Indonesia): Positive

Ireland (Central Statistics Office): Positive

Italy (Istat): Positive

Latvia (Central Statistical Bureau of Latvia): Not sure/I don't know

Lithuania (State Data Agency. Statistics Lithuania): Not sure/I don't know

Luxembourg (STATEC): Not sure/I don't know

Malaysia (Department of Statistics Malaysia): Not sure/I don't know

México (INEGI): Not sure/I don't know

Mongolia (National Statistical Office): Positive

Nepal (National Statistics Office): Positive

New Zealand (Statistics New Zealand): Not sure/I don't know

North Macedonia (State statistical office): Not sure/I don't know

Norway (Statistics Norway): Not sure/I don't know

Perú (INSTITUTO NACIONAL DE ESTADISTICA E INFORMATICA): Not sure/I don't know

Qatar (Planning and Statistics Authority): Positive

Republic of Serbia (Statistical Office of the Republic of Serbia): Not sure/I don't know

Russia (Federal State Statistical Service (Rosstat)): Not sure/I don't know

Singapore (Singapore Department of Statistics): Not sure/I don't know

Slovenia (Statistical Office of the Republic of Slovenia): Not sure/I don't know

South Africa (Soth African Reserve Bank): Not sure/I don't know

South Korea (Bank of Korea): Not sure/I don't know

Sweden (Statistics Sweden, NSI): Not sure/I don't know

The Netherlands (Statistics Netherlands (CBS)): Not sure/I don't know

Ukraine (State Statistics Service of Ukraine): Not sure/I don't know

United Kingdom (UK Statistics Authority): Not sure/I don't know

United States (Bureau of Economic Analysis): Not sure/I don't know

Vietnam (General Statistics Office): Positive

Australia (Australian Bureau of Statistics): Our users have not been consulted nor have we yet raised the topic of the usefulness of net measures with them. The ABS already publishes net measures.

Brasil (IBGE): It's difficult to know for sure, mainly because the key users comprise a heterogeneous group.

Canada (Statistics Canada): The proposals contained within this guidance note involve a drastic rethink on how aggregate macroeconomic measures are presented and used. Consultations would need to take place with domestic stakeholders to determine the impact on their current policy-making tools and models to fully answer this question. As supplementary detail, separate estimates of CFC and depletion would likely be welcomed, but incorporation within the core GDP estimates and replacement of gross measured with net measures would necessitate a longer timeline for socialization of key data users. As stated, gross measures are used for a variety of reasons from fiscal planning to informing key policy decisions that affect all citizens. These decisions must be based on the highest quality estimates available, and the conceptual benefit of net measures may not outweigh potential statistical drawbacks.

Germany (Statistisches Bundesamt / Federal Statistical Office): The reaction would depend on the respective user. Initially, most users would certainly be critical. The advantages of the net concept would have to be carefully and patiently communicated, as suggested in the GN.
Regarding net lending/borrowing, it might be a useful supplementary indicator. In terms of the financial rating of a state, net lending/borrowing might be even more meaningful than gross lending/borrowing. However, we see practical difficulties regarding the valuation of assets, which presumably differ greatly internationally. Also, the calculation of depletion with its high level of assumptions migth have irregular effects on NDP; thus, it is less suited for our key users with a focus on business cycle analysis.

Indonesia (Statistics Office of Indonesia): The calculation of matrix capital stock data according to business fields and institutions which will become the basis for calculating the depreciation value is starting to become mandatory at the national statistics office

Ireland (Central Statistics Office): See above.

Italy (Istat): Of course an appropriate communication shall be organised both at the national and international level

Lithuania (State Data Agency. Statistics Lithuania): Users behavior and reactions are always difficult to predict and will undoubtedly vary. Even some of key users don't have

enough basic understanding of the essential differences between gross and net measures, that is why it will take time for them (and active communication of statistic compilers) to realize the need, usefulness and feasibility of moving towards applying net measures. The media will probably not care much about this in principle, but economic analysts would probably welcome it because they should understand the reasons for it and the benefits for economic analysis. It is difficult to say something about the government representatives - there is no doubt that all their thinking is now based on GDP, because all the relative indicators are based only on GDP, many measurements of planning and progress are based with GDP figures in the denominator of indicators, everyone associates economic growth only with the GDP indicator.

Luxembourg (STATEC): Probably mixed reactions. Some may be convinced by the change, others may be more reluctant for a change. For some users which need longer time series, it may be problem. Not sure that it will be easily feasible to calculate net measures for backdata, especially for the depletion item.

Malaysia (Department of Statistics Malaysia): Key users need to be given exposure and understanding of the differences and advantages before moving towards applying net value added, income and saving.

México (INEGI): In general, there is an illiteracy of economic statistics and even more so of national accounts. However, the users who use the national accounts are few and specialized, so we believe they can understand the change and accept the reasons.

Mongolia (National Statistical Office): NSO Mongolia highly appreciates the progress with the work program for updating the System of National Accounts 2008.

North Macedonia (State statistical office): There is no national debate on these issues

Perú (INSTITUTO NACIONAL DE ESTADISTICA E INFORMATICA): Se tendría que dar muchas explicaciones a los usuarios de las ventajas y desventajas de los valores a nivel bruto y neto.

Singapore (Singapore Department of Statistics): We would need to engage users to understand their needs and views on the move towards net measures.

Slovenia (Statistical Office of the Republic of Slovenia): From a user perspective there will likely be a long transition period to accept net measures, especially in the context of cross-country comparability.

South Africa (Soth African Reserve Bank): It would take users time to grasp the NDP concept and also to obtain a judgemental understanding of these new growth rates. Moving to NDP numbers will take some education campaigns and a major effort to get users on board with the new measures in countries.
However, over time users will find it more useful, especially if every indicator is expressed on a net basis.

Sweden (Statistics Sweden, NSI): We have currently not had an opportunity to address these issues to the key users. A first introduction of the main issues in the SNA-update is planned to be provided to a user reference group later this year.

The Netherlands (Statistics Netherlands (CBS)): We have no idea yet how several users would respond. It would differ very much between those users. We think that it is best to investigate this further when the desire to use NDP is larger, as this would be also a practical argument for (not) using the NDP for economic growth.

Ukraine (State Statistics Service of Ukraine): This issue was not discussed with users.

United Kingdom (UK Statistics Authority): The U.K. has answered "not sure/don't know" as a fundamental factor will come down to how we present the work. To ensure there is a positive response the U.K. will need to ensure that the production is as timely/as granular/as frequent as alternative metrics such as GDP, if only because we know that GDP is already a poor proxy for what it is used to describe yet still dominates existing alternatives for reference, please see Annex 1 of Heys, Martin and Mkandawire (2019) – https://escoe-website.s3.amazonaws.com/wp-content/uploads/2020/07/14160047/ESCoE-DP-2019-16-V1.pdf.

In the UK, where we have moved to monthly GDP publication, these high frequency estimates form the 'new competition' and strongly suggest that to help users migrate we would need to deliver at least quarterly, if not monthly, estimates. This would be a challenging undertaking and would depend on funding / resources being made available.

Additionally, the U.K. does view it highly unlikely that annual numbers would gain significant policy traction, or at least any more than is currently attained by existing annual net measures, however this may be best placed to be discussion for NSI with domestic policy users and international bodies.

United States (Bureau of Economic Analysis): It's likely that our key users would respond negatively to this change, although not sure how universal that woudl be. The negative perception would likely be driven by the challenges, both conceptual and practical, with accurately measuring CFC.

Узбекистан (Агентство Статистики при Президенте Республики Узбекистан): Для аналитических целей наличие подобной информации несомненно будет полезно для специалистов, для широкого круга пользователей такие данные вряд ли информативны.