Treatment of Non-Monetary Gold in the UK National Accounts

Options Paper

NSCASE(23)28

Executive Summary

Non-monetary gold (NMG) as currently measured in the UK national accounts has caused significant presentational issues for economic data. The majority of these difficulties are found in net trade. This is due to the current treatment of NMG in the national accounts; namely, it impacts on net trade and acquisitions less disposals of valuables. At the top-level Gross Domestic Product (GDP) the effects net out.

Options for NMG:

- **Option 1**: Revise the current treatment of NMG so that it is excluded from both net trade and acquisitions less disposals and left as a balance sheet change, effectively reflecting a change in the asset composition.

- **Option 2**: Maintain the current approach of allowing NMG data to feed into net trade and valuables, but also look at producing gross capital formation estimates excluding NMG.

The ONS recommends option 1.

Two follow-up items cover:

- Should the Office for National Statistics (ONS) research an alternative method of accounting for NMG given the UK's unusual situation?

- Should the ONS research the feasibility of including valuables in the non-financial balance sheet, where currently valuables are not included?

Introduction

Issue synopsis

1. Non-monetary gold (NMG) as currently measured in the UK national accounts has caused significant presentational issues for economic data. The majority of these difficulties are found in net trade. This is due to the current treatment of NMG in the national accounts; namely, it impacts on net trade and acquisitions less disposals of valuables. Valuables are produced goods of considerable value that are not used primarily for purposes of production or consumption but are held as stores of value over time (Para 10.13, SNA, United Nations 2009). At the top-level Gross Domestic Product (GDP) the effects net out and at present, the ONS removes the impact of NMG from headline net trade data.

2. This paper reviews the current treatments against international guidance and treatments in other countries. It provides two options for the National Statistician's Committee for Advice on Standards for Economic Statistics (NSCASE) to consider as well as two subsequent research options. These options are:

    a) Option 1: Revise the current treatment of NMG so that it is excluded from both net trade and acquisitions less disposals of valuables and left as a balance sheet change, effectively reflecting a change in the asset composition.

    b) Option 2: Maintain the current approach of allowing NMG data to feed into net trade and valuables, but also look at producing gross capital formation estimates excluding NMG.

3. The two follow-up items cover:

    a) Should the Office for National Statistics (ONS) research an alternative method of accounting for NMG given the UK's unusual situation as an international gold hub?

    b) To align with the 2008 SNA guidance, should the ONS research the feasibility of including valuables in the non-financial balance sheet, where currently valuables are not included?

Recommendation

4. The preferred option of this paper is to adopt Option 1 with reasons detailed within this paper.

5. Members of NSCASE are invited to:

    a) Offer advice on the two options presented for the treatment of NMG,

    b) Provide their views on the additional research proposals presented.

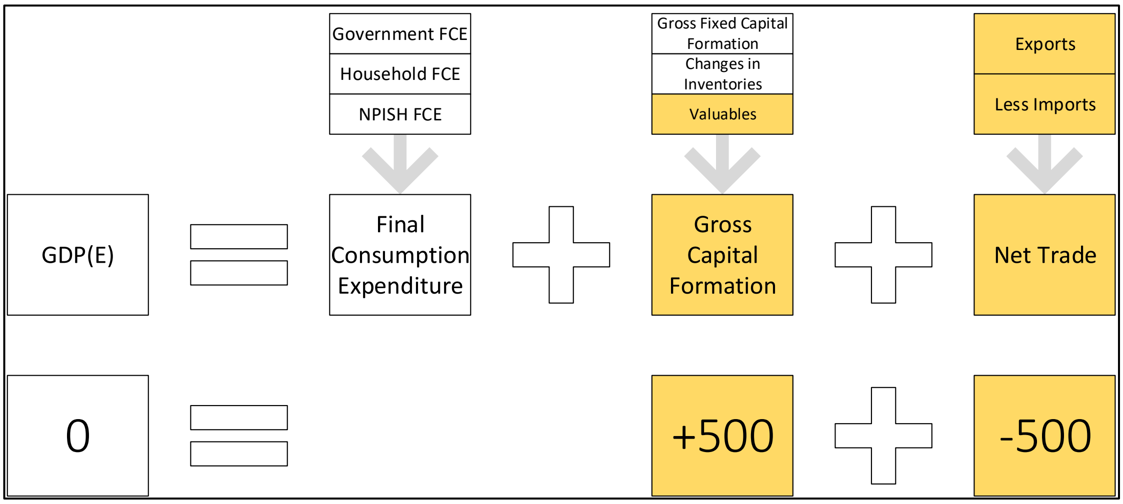
Background

Current issue and current practice

6. This paper reviews the current treatment of non-monetary gold in the UK macroeconomic accounting frameworks. Non-monetary gold is currently

included in the net trade (exports less imports) component of GDP as well as in acquisitions less disposals of valuables. Given the UK's dominant role in the world gold market, the international trade in non-monetary gold, through UK exchanges under the current implementation, leads to NMG having noticeable impacts on transactions. Whilst the impacts are offset at the aggregate GDP level, NMG has a distorting impact on the underlying components. This is illustrated in Figure 1 which shows the offsetting impacts.

Figure 1 - Illustration of NMG current impact on GDP components



7. NMG is included in the capital account within acquisitions less disposals of valuables but is excluded from the non-financial balance sheet, as the UK has not historically compiled balance sheet data for valuables.

8. It is also worth noting that due to volatility issues, since 2020, the ONS started publishing headline trade figures excluding the impact of NMG. Regarding gross capital formation, data are published without any similar sub-analyses.

International Guidance

9. Firstly, in the national accounts framework, gold is in many ways a unique item with a range of special treatments. Hence there are multiple types of gold defined in the System of National Accounts (SNA, United Nations 2009). These types of gold are explained below:

    a) Where gold is held as a reserve asset by the monetary authorities it is classified as a financial asset and designated as monetary gold.

    b) Outside of monetary gold, gold can be held in allocated or unallocated accounts. Allocated gold, outside of gold by monetary authorities held for reserves, is classified as non-financial assets classified as valuables and referred to as non-monetary gold. Unallocated gold accounts are classified as financial assets under currency and deposits but can also be included in reserves if owned by monetary authorities.

c) Beyond this, gold is also produced by certain countries by refining ores into bullion which is classified as production.

d) Gold is also used for industrial purposes (such as manufacturers of jewellery or dentists) which is classified as intermediate consumption.

10. Focussing on the treatment of NMG, gold is treated differently across the economic statistics frameworks as set out below:

a) In international merchandise trade statistics, only the physical movements of gold are recorded, i.e., any changes of ownership that are not physically moved are not included.

The Balance of Payments and International Investment Position Manual, sixth edition (BPM6; International Monetary Fund, 2009) framework measures changes of ownership whether physically moved or not. However, the BPM6 framework does not recognise production or consumption as these are merely different categories of transactions.

i. As a result, the current account includes both normal goods and services, as well as produced non-financial assets and has an explicit line for NMG.

ii. The capital account only includes non-produced non-financial assets.

iii. The BPM framework also provides source data for the 2008 SNA framework, but this must be done via bridge tables to ensure concepts are harmonised with the conceptual requirements of the 2008 SNA.

iv. As a result, it is correct for BPM6 to include trade in NMG in its presentation.

b) In the SNA framework, we encounter the concept of production.

i. As a result, the national accounts should only record newly produced gold through the production account onwards.

ii. However, for the vast majority of NMG, it has already been produced. As a result, the national accounts are only concerned with changes in the composition of the balance sheet and the production account should only include any commissions as output.

iii. Beyond the production account, NMG is also recorded in the capital account within the valuables transaction and appears in the non-financial balance sheets.

11. As a result, the ONS proposes to only record NMG on the non-financial balance sheet. The current treatment in the UK national accounts is based upon our interpretation of SNA in line with NMG being newly produced.

12. In terms of the international guidance, the discussion of NMG is brief and the 2008 SNA and European System of Accounts (ESA, Eurostat 2014) 2010 are consistent, although the ESA 2010 does provide more detail on specific examples of valuables. All relevant extracts of the 2008 SNA and ESA 2010 are provided in Annex A of this paper.

13. Historically, given the importance of non-monetary gold in the UK economy, the UK has had a strong input into the guidelines as currently defined in previous SNA revisions.

14. In terms of international commitments to provide national accounts data, the only requirement is to provide data on the total acquisitions less disposals of valuables and no further breakdown is required in international transmissions. In the Balance of Payments (BoP), non-monetary gold is required to be provided within the current account breakdown of goods.

International Practice

15. This section reviews the international treatment of NMG across other countries and provides a summary. Annex B provides the full information available from 15 countries where documentation could be sourced. The information is summarised in Table 1.

Table 1 - High-Level Summary of Non-Monetary Gold Treatment by Country

Country	National Accounts	Balance of Payments
USA	Only include NMG related to the production of gold. Investment in gold is excluded.	NMG is included in BoP

Japan	Valuables not included in national accounts at all	Includes transactions in gold bullion
Australia	Production of gold is recorded but valuables are excluded	Limited data on gold included in the BoP
Switzerland	Production of gold is recorded and included in valuables	NMG is included in BoP
EU countries	Generally included in valuables – although based on limited data or assumptions	NMG is included in BoP
UK	NMG included in net trade and valuables	NMG is included in BoP

16. Reviewing the data available on the OECD.Stat website for valuables more generally (available in Annex B)
    a) In the non-financial accounts, 32 of the 65 countries in the database (including the UK) publish data on acquisitions less disposals of valuables (notably major economies such as Australia, Canada, Japan, United States, and South Africa do not include valuables)

    b) For balance sheets, only 7 of the 37 countries providing data include valuables on the balance sheet (of which the UK does not include valuables)

17. Generally, where documentation could be found, outside of the EU non-monetary gold is included for industrial purposes but excluded from valuables. The only major exception is Switzerland, but they are also uniquely placed as the major refiner of raw gold into gold bullion.

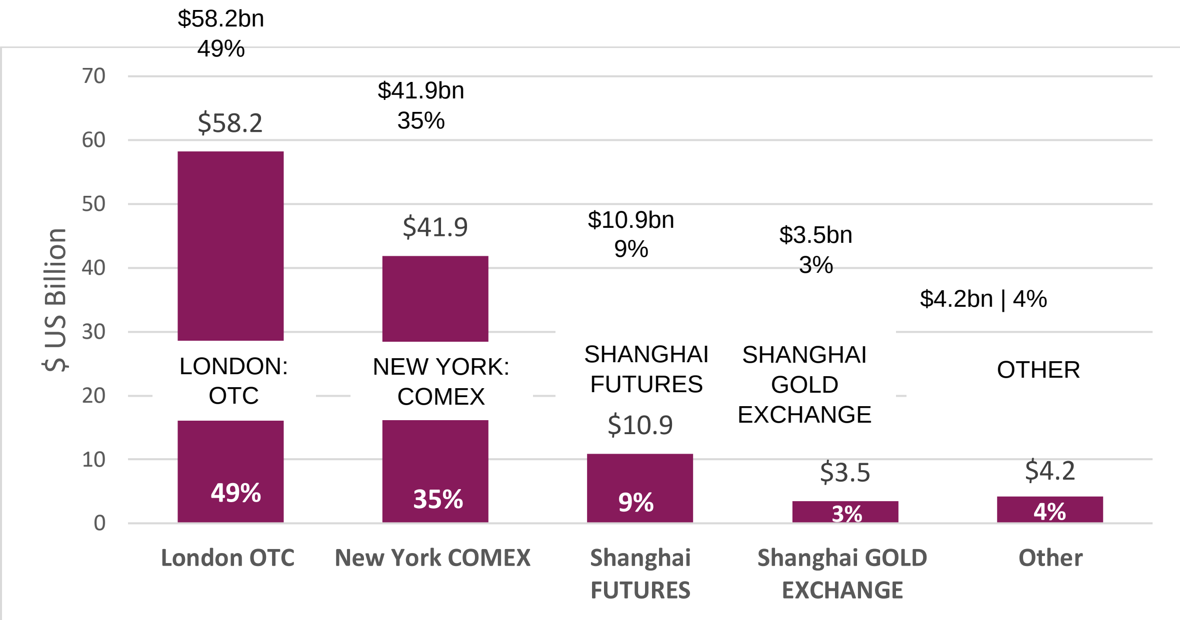
18. It is worth noting that in general, valuables are a very minor item in the national accounts. As Lequiller and Blades (2014) note in 'Understanding the National Accounts': 'This item is very small and is therefore no more than a curiosity for the macroeconomist… In general, transactions in these objects take place between households and are therefore consolidated (in other words, cancel out) in the national accounts, except in the case where the good cross frontiers.'

Relation to Economic Concepts and UK Specific Factors

19. Relating the issue of NMG to economic concepts, the basic notion of measuring valuables is to reflect alternative assets used for investment purposes. This includes works of art, antiques, precious metals, etc. However, in the UK's case, NMG is used extensively in the financial sector to hedge currency swaps, forwards, unallocated gold accounts and other deals where an asset is priced independently of currency. This can suitably de-risk the trade. The largest international market is in London accounting for 49 per cent

of the world market (based on estimates from 2021) with daily notional trades of $58bn as seen in Figure 2.

Figure 2: Global Gold Exchanges 2021 by nominal trading values



Source: World Gold Council (2023)

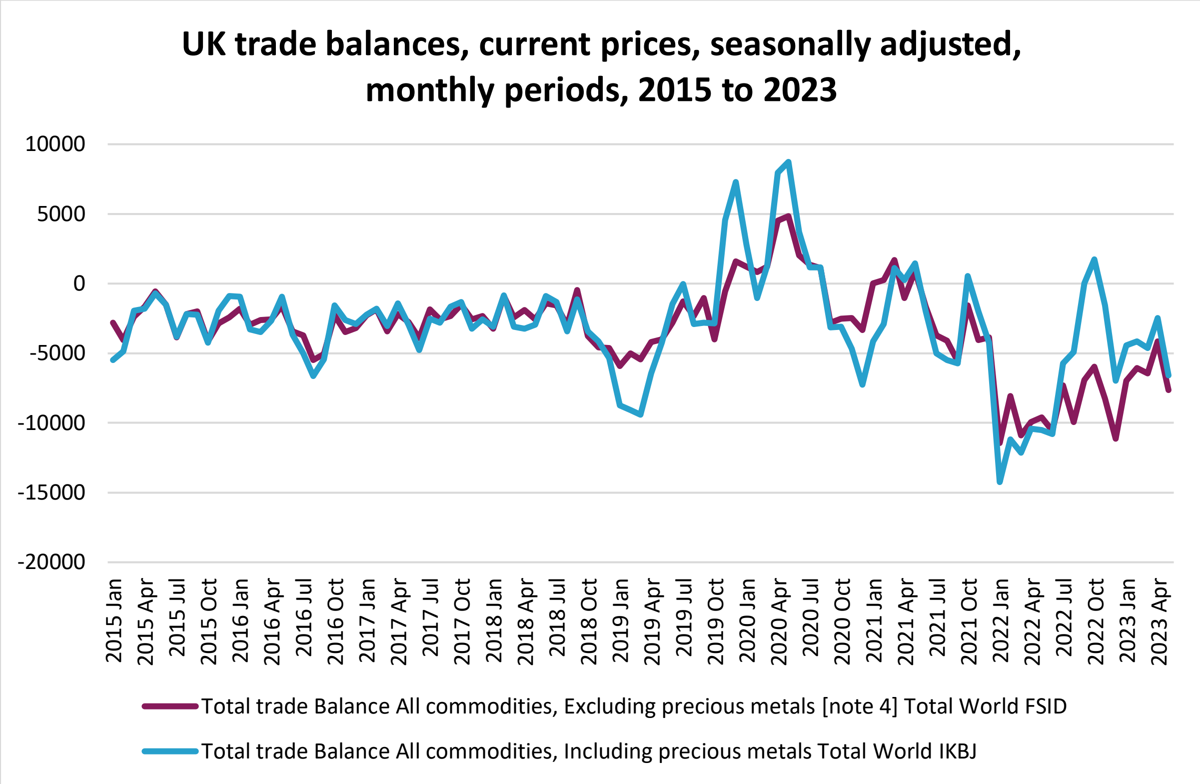
20. Under the current approach, the cumulative effect of the trading volumes means that it can significantly impact the quarterly net trade figures where there are changes of ownership between residents and non-residents and has varied by £8-14bn in some recent quarters. This has two effects:

    a) It can be sufficient to turn a trade deficit into a surplus or vice versa, distorting perceptions of the state of the UK's external position by the inclusion of what is in reality a purely financial transaction in a measure of trade in actual goods and services, and;

    b) It can shift estimates of GCF by upwards of 10%, making it hard for users to understand the net investment position.

21. This is illustrated in Figure 3, which demonstrates that since 2015 the movements have become increasingly significant, particularly post 2019:

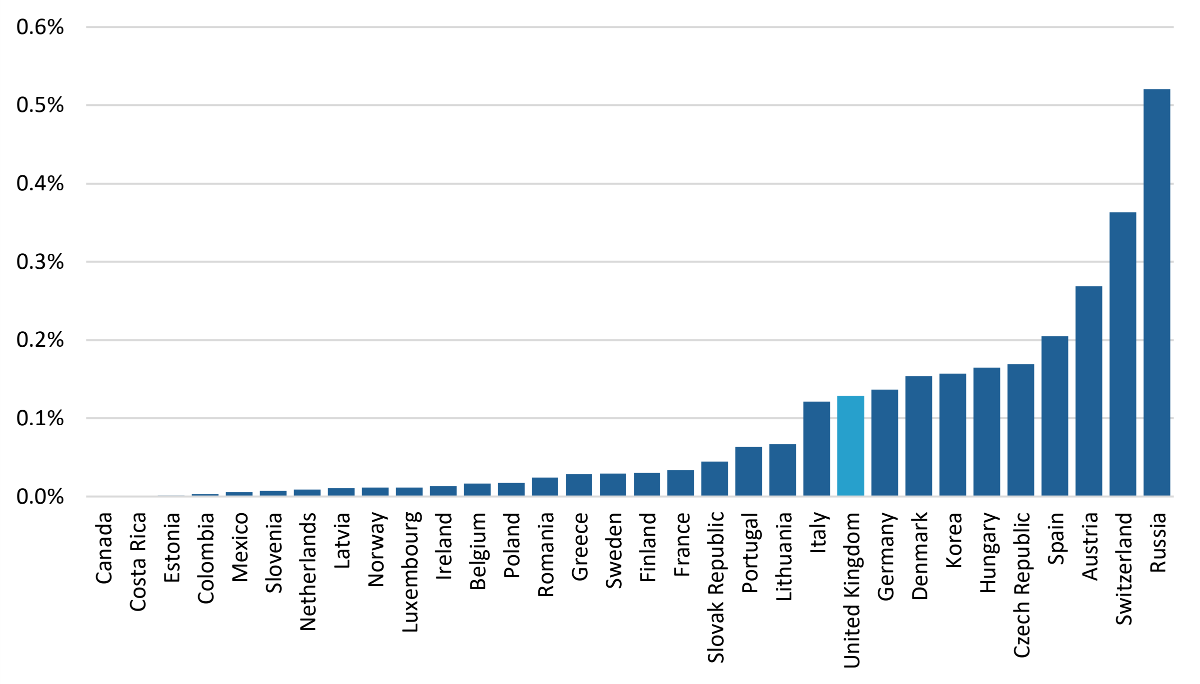
Figure 3 - UK net trade including and excluding non-monetary gold



Source: Office For National Statistics (2023)

NMG is a relatively niche element of the national accounts for the vast majority of countries globally, aside from countries that are either involved in the trade in NMG or the production of gold bullion bars. Whilst no data are available at the NMG level, the following chart of countries (Figure 4) showing valuables data in the OECD databank, indicates the level of importance.

Figure 4 - Comparison of Valuables across OECD countries as a proportion of GDP by expenditure for 2019



Source: OECD (2023b) Stat website Dataset: [14A. Non-financial accounts by sectors]

22. Figure 4 shows valuables as a share of total GDP by country. Of these countries Russia, Switzerland, Austria and Germany host major gold bullion producers (Gold Bars Worldwide, 2023). This may explain the larger proportions for some countries although as this represents total valuables it is difficult to say for sure.

Options

23. The review of the UK's current practice, international guidance and the approach of other countries leads this paper to two broad options within the national accounts.

Option 1

24. ONS will amend the current national accounts treatment by excluding NMG transactions from the expenditure account (imports and exports of goods and valuables), on the basis that most transactions are changes of ownership of NMG that have been produced historically (financial, not real, in nature).

25. This approach is consistent with the approach taken by the USA, Japan, and Australia.

26. As the data will still be recorded in the balance of payments, users can use data from that framework.

27. Alongside this, theoretically, changes of ownership of NMG between residents and non-residents should still be recorded in the non-financial balance sheet as UK institutions are changing the composition of their asset holdings, through the substitution of non-monetary gold for currency and/or other deposits. Reconciliation between end-period stocks, needed given the national system is an integrated system of stock and flows, would be through other volume changes (see SNA paragraph 12.16 in appendix A) and revaluation flows.

28. However, the UK does not currently compile balance sheets for valuables, which is an issue to pick up in the future.

Option 2

29. ONS will maintain the current treatment of including NMG in the imports and exports of goods and valuables.

30. Align the presentation of results for gross capital formation with the net trade data by producing an alternative high-level aggregate that excludes NMG.

31. This would align with the approach adopted by Switzerland (although their basis for including NMG is justified in their unique role as the major exporter of gold bullion from their refineries).

32. As per Option 1, changes of ownership are recorded in the non-financial balance sheet.

Summary of Options

33. Both options do not affect aggregate GDP or recorded financial transactions. However, Option 1 removes the volatility in the expenditure components of GDP, that the ONS are already reflecting in the UK Trade publication. Regarding the Balance of Payments, the current treatment of NMG is correct and no changes are required.

34. Beyond these two options, there is a further option of the UK adopting an alternative method of accounting for NMG. Given that the UK is uniquely affected by this issue, it could be argued that a departure from the SNA is warranted.

35. The ONS could also research the feasibility of including valuables in the non-financial balance sheet. Recent discussions with the Bank of England have suggested that data on levels are available (holdings of gold, silver, platinum, and palladium in troy/fine troy ounces).

Borderlines

36. Non-monetary gold as defined is a borderline issue already given the number of different uses and in particular the different treatment of gold as an asset depending on the party holding it.

System coherence

37. The current approach (Option 2) includes NMG in both the Balance of Payments (BoP) current account and net trade in the national accounts. Option 1 would leave NMG in the BoP current account but would exclude transactions from the national accounts. The difference from Option 1 reflects the differences in the two frameworks, not a data inconsistency.

International comparability

38. Adopting Option 1 will improve our comparability, all the major economies that have significant trading centres exclude NMG from the national accounts in their national accounts. The only major economy that does include it is Switzerland but that is due to their position as a gold bullion producer. Hence, Option 1 improves international comparability, Option 2 distorts it.

Data continuity

39. There are no issues with data continuity under either option as we have a full time-series for NMG, and it can therefore be removed or kept without generating any discontinuities.

Practicality

40. Set against aggregate GDP, this remains a non-issue. In terms of reputational risk, Option 1 does go against papers publicly presented on this topic previously but on the other hand, we have already made changes to publications to focus user attention onto net trade data excluding NMG.

Designation

41. Option 1 would remove NMG from impacting expenditure component parts of GDP (although not on the aggregate total) and would have no impact on the designation of national statistics.

Summary

42. In summary, the benefits of Option 1 over the current approach of Option 2, are that it removes the volatile component of net trade that already features in our statistical bulletins. Overall, however, neither option impacts total GDP.

Summary Table

	Benefits	Disbenefits	
Option 1	Aligns to the current preferred presentation of UK Trade publication	The data presented is different to that presented in the BoP	
Option 2	The data presented is the same as that presented in the BoP	Volatile lower-level components still distort expenditure components	

43. In terms of impact on data, please see

44. Figure 3. That figure illustrates the effect of removing NMG from net trade.

Conclusion

45. Gold is, for most countries, a marginal item in their accounts, but the UK faces distinct challenges which materially affect the usability of the data the ONS publishes, due to the UK being affected by the exceptional nature of its gold exchange.

46. This paper recommends moving the UK practice to Option 1 and treating NMG solely through the accumulation accounts rather than the current accounts.

47. The benefits of this are:

    a) The method is a better conceptual match to the actual use of non-monetary gold in the UK as a financial instrument.

    b) The trade and investment data would no longer be distorted by a component that is not involved in production.

48. Beyond the main options, two further areas could be investigated:

a) ONS to consider research adopting an alternative method of accounting for NMG given that the UK is uniquely affected by this issue.

b) The ONS could also research the feasibility of including valuables in the non-financial balance sheet.

49. The ONS welcomes the views of NS-CASE on these additional areas.

Outcome of NS-CASE

50. Following discussion at NS-CASE at the October 2023 meeting, Option One was supported. Subject to the approval by the National Statistician the ONS can add this requirement to the backlog of changes for future Blue Books in terms of removing NMG from trade in goods and valuables, whilst keeping NMG in the BoP presentation. Subject to National Statistician approval, the ONS can also work with the Bank of England in terms of developing a non-financial balance sheet for NMG. Any further updates will be communicated in future Blue Book scope articles.

References

Eurostat. (2010) *European System of Accounts 2010*. Eurostat.

Gold Bars Worldwide (2023), Additional Gold Refiners & Brands (accessed July 2023)

International Monetary Fund (2009), Balance of Payments and International Investment Position Manual (6th Edition). IMF Multimedia Services Division.

Lequiller & Blades (2014), Understanding National Accounts Second Edition

OECD (2023a), Table 9B. Balance sheets for non-financial assets

OECD (2023b), Table 14A. Non-financial accounts by sectors

OECD (2023c), Table 40. Use at purchasers' prices

Office for National Statistics (2023), UK Trade – May 2023,

United Nations (2009), System of National Accounts 2008

World Gold Council (2023), Major Global Trading Hubs (accessed July 2023)

Annex A | References to Non-Monetary Gold in International Manuals

2008 SNA References

Introduction

1.50 When GDP is derived from the expenditure side, allowance has also to be made for goods and services produced by non-residents but consumed by residents as well as for goods and services produced by residents but consumed abroad. For the SNA to be comprehensive in coverage, all transactions with the rest of the world have to be identified so their impact on measures relating to the resident economy is properly accounted for. The complete set of transactions with the rest of the world in the SNA matches exactly the set of transactions captured in the balance of payments.

Overview

2.27 Transactions in goods and services (products) describe the origin (domestic output or imports) and use (intermediate consumption, final consumption, capital formation or exports) of goods and services. By definition, goods and services in the SNA are always a result of production, either domestically or abroad, in the current period or in a previous one. The term products is thus a synonym for goods and services.

Stocks, flows and accounting rules

3.43 Produced non-financial assets come into being via the production process or as imports. Two exceptions exist. Historical monuments are included as produced assets even though they may have been constructed long before economic accounts existed. Occasionally a monument may be newly recognized as having value and thus enter the asset boundary as a produced asset other than through a current production process. Similar arguments apply to artefacts treated as valuables. Produced non-financial assets leave the asset boundary by being exhausted or by being sold to resident units that will not continue to use the asset in production as a source of future benefits or by being sold to non-resident units.

3.102 The first category relates to the appearance and disappearance of assets and liabilities other than by transactions. Some of these may relate to naturally occurring assets, such as subsoil resources, so that the entrances and exits come about as interactions between institutional units and nature. Others relate to assets created by human activity, such as valuables. For valuables, for example, the capital account records their acquisition as newly produced goods or imports in transactions, and it records transactions in existing goods already classified as valuables. It is the recognition of a significant or special value for goods not already recorded in the balance sheets that is considered an economic appearance to be recorded as an other flow. These valuables may not be in the balance sheets for any of several reasons. For example, they may antedate the accounts or were originally recorded as consumption goods.

The capital account

10.13 Valuables are produced goods of considerable value that are not used primarily for purposes of production or consumption but are held as stores of value over time. Valuables are expected to appreciate or at least not to decline in real value, nor to deteriorate over time under normal conditions. They consist of precious metals and stones, jewellery, works of art, etc. Valuables may be held by all sectors of the economy.

10.40 When the sale takes place between two resident producers, the positive and negative values recorded for gross fixed capital formation cancel out for the economy as a whole except for the costs of ownership transfer. Similarly, if an existing immovable fixed asset, such as a building, is sold to a non-resident, by convention the latter is treated as purchasing a financial asset that is the equity of a notional resident unit while the notional resident unit is deemed to purchase the asset, so that the sale and purchase of the asset takes place between resident units. However, if an existing movable fixed asset, such as a ship or aircraft, is exported, no positive gross fixed capital formation is recorded elsewhere in the economy to offset the seller's negative gross fixed capital formation.

10.41 Some durable goods, such as vehicles, may be classified as fixed assets or as consumer durables depending upon the owner and the purpose for which they are used. If, therefore, the ownership of such a good were transferred from an enterprise to a household to be used for final consumption, negative gross fixed capital formation is recorded for the enterprise and positive consumption expenditure by the household. If a vehicle owned by a household were to be acquired by an enterprise, it would be recorded as an acquisition of a "new" fixed asset by the enterprise, even though it is an existing good, and as negative consumption expenditure by the household. A similar treatment is applied to imports of used products acquired by resident producers as assets.

10.133 Materials and supplies do not include works of art or stocks of precious metals or stones acquired by enterprises as valuables. However, there are some producers that do use gold, diamonds, etc. as intermediate inputs into the production of other goods or services, for example, manufacturers of jewellery or dentists. Stocks of gold, diamonds, etc., intended for use in production are recorded under materials and supplies.

10.149 Valuables include precious metals and stones, antiques and other art objects and other valuables. However, not all items that may be described by one of these titles should necessarily be included as a valuable in the balance sheet of the owner. The intent of the heading is to capture those items that are often regarded as alternative forms of investment. At various times, investors may choose to buy gold rather than a financial asset and pension funds have been known to buy “old master” paintings when the prices of financial assets were behaving in a volatile manner. Individuals (households in SNA terminology) may also choose to acquire some of these items knowing that they may be sold if there is a need to raise funds.

10.150 Costs of ownership transfer, such as valuers’ and auctioneers’ margins, are often incurred when valuables are exchanged. As with other non-financial assets, these costs are treated as gross capital formation and included in the value of the items when recorded in the balance sheet.

10.151 A possible categorization of valuables is: precious metals and stones; antiques and other art objects; and other valuables. This list should be regarded as indicative and supplementary rather than a standard breakdown. The context of each category is described to assist in identifying and valuing valuables.

10.152 Precious metals and stones are treated as valuables when they are not held by enterprises for sale or use as inputs into processes of production nor are held as monetary gold and are not held as a financial asset in the form of unallocated metal accounts.

10.153 Paintings, sculptures, etc., recognized as works of art and antiques are treated as valuables when they are not held by enterprises for sale. In principle, museum exhibits are included under valuables.

10.154 Other valuables not elsewhere classified include such items as collections of stamps, coins, china, books etc. that have a recognized market value and fine jewellery, fashioned out of precious stones, and metals of significant and realizable value.

The financial account

11.45 Monetary gold is gold to which the monetary authorities (or others who are subject to the effective control of the monetary authorities) have title and is held as a reserve asset. It comprises gold bullion (including gold held in allocated gold accounts) and unallocated gold accounts with non-residents that give title to claim the delivery of gold. All monetary gold is included in reserve assets or is held by international financial organizations. Only gold that is held as a financial asset and as a component of foreign reserves is classified as monetary gold. Therefore, except in limited institutional circumstances, gold bullion can be a financial asset only for the central bank or central government. Transactions in monetary gold consist of sales and purchases of gold among monetary authorities. Purchases (sales) of monetary gold are recorded in the financial account of the domestic monetary authority as increases (decreases) in assets, and the counterparts are recorded as decreases (increases) in assets of the rest of the world. Transactions in non-monetary gold (including non-reserve gold held by the monetary authorities and all gold held by financial institutions other than the monetary authorities) are treated as acquisitions less disposals of valuables (if the sole purpose is to provide a store of wealth) and otherwise as final or intermediate consumption, change in inventories, exports or imports. Deposits, loans, and securities denominated in gold are treated as financial assets (not as gold) and are classified along with similar assets denominated in foreign currencies in the appropriate category. A discussion on the treatment of allocated and unallocated gold accounts appears under currency and deposits.

11.60 It is possible to hold accounts for both “allocated gold” and “unallocated gold”. The distinction is precise, practical and recognized in the balance sheets of units holding these accounts. An allocated gold account gives full outright ownership of the gold and is equivalent to a custody record of title. The unallocated gold account does not give the holder the title to physical gold but provides a claim against the account provider denominated in gold. In effect, therefore, it is a deposit denominated in gold. They are thus treated as deposits in foreign currency. Accounts that are held for allocated gold, on the other hand, are treated as holdings of valuables unless they are held by monetary authorities, or other units authorized by them, as reserves.

The other changes in the volume of assets account

12.8 One important function of the other changes in the volume of assets account is to allow certain assets to enter and leave the SNA other than by transactions. The acts of entering and exiting from the balance sheet are referred to as economic appearances and disappearances. Some entrances and exits happen when naturally occurring assets, such as subsoil assets, gain economic value or become worthless. Such entrances and exits come about as interactions between institutional units and nature, thus contrasting with entrances and exits that come about as a result of transactions, which typically are interactions by mutual agreement between institutional units. Yet other entrances and exits may also relate to assets created by human activity, such as valuables, purchased goodwill or gold.

12.13 Two types of assets can appear under this item: public monuments and valuables. As was described in chapter 10, public monuments are objects, structures or sites of significant or special value. Valuables are items held as stores of value because their value is expected to appreciate, or at least not depreciate, over time. The capital account records the acquisition of valuables and public monuments when these are newly produced goods or imported and it records transactions in existing goods already classified as valuables and public monuments.

12.14 However, existing goods, valuables and public monuments may not already have been recorded in the balance sheets for any of several reasons; they may date from a time before the time period covered by the accounts, they were originally recorded as consumption goods or, if structures, they have already been written off.

12.16 For valuables, such as precious stones, antiques and other art objects, when the high value or artistic significance of an object not already recorded in the balance sheet is first recognized, it is classified as an economic appearance. Hitherto, the object may have been of little value and not considered an asset. For example, the item might have been considered an ordinary good whose purchase had been included in household final consumption expenditure or been regarded as a consumer durable. Recognition of its worth as a store of value leads to its entrance into the balance sheet as a valuable. The recognition of the value of a previously unvalued item is often associated with a sale (for example at auction). The sale is recorded in the capital account as the sale and purchase of a valuable, it having been entered first into the balance sheet of the seller.

12.36 Financial assets that are claims on other institutional units are created when the debtor accepts the obligation to make a payment, or payments, to the creditor in the future; they are extinguished when the debtor has fulfilled the obligation under the terms of the agreement. Monetary gold held in the form of gold bullion, however, cannot be created and extinguished in this way; hence when it becomes a reserve asset it enters the financial part of the balance sheet as a reclassification in the other changes in the volume of assets account from valuables to monetary gold. (At the time it is acquired by a monetary authority it is first classified as a valuable.) The same recording is followed for allocated gold accounts that become part of monetary gold. When allocated gold accounts become reserve assets they are reclassified from currency and deposits to monetary gold, also in the other changes in the volume of assets accounts. Monetary gold may be sold to another monetary authority but otherwise any reduction in holdings follows a similar declassification path; the monetary gold is reclassified to be either a valuable (in the case of gold bullion) or currency and deposits (in the case of allocated gold accounts). Subsequent transactions, if and when they occur, are recorded in terms of valuables or currency and deposits and not in terms of monetary gold.

Balance sheet

13.42 Given their primary role as stores of value, it is especially important to value works of art, antiques, jewellery, precious stones and metals at current prices. To the extent that well-organized markets exist for these items, they should be valued at the actual or estimated prices that would be paid for them to the owner were they sold on the market, excluding any agents' fees or commissions payable by the seller, on the date to which the balance sheet relates. On acquisition they are valued at the price paid by the purchaser including any agents' fees or commissions.

13.43 An approach in the absence of organized markets is to value these items using data on the values at which they are insured against fire, theft, etc., to the extent information is available.

Supply and use tables

14.112 The range of products held as valuables is quite extensive and it is an area where existing goods may feature. For example, antiques and old masters, by their very nature, are not output of the current period. The importance of the value of acquisition less disposals of valuables as an item of capital formation, though, tends to be limited and any major disposal, such as sales by a museum, are likely to be well known.

Cross-cutting and any special issues

17.242 Gold bullion may be sold by one monetary authority to another in another country. In such a case the exchange is recorded as an exchange of financial assets only. In all other cases, the gold is reclassified as commodity gold and thus a valuable held by the monetary authority (and is no longer part of reserves) and is then sold as commodity gold. The reclassification is recorded in the other changes in the volume of assets account as demonetization of gold. If the gold is sold abroad it will feature in exports and imports of the countries concerned. When commodity gold is sold, there may be a trade margin attached to it. When a monetary authority acquires monetary gold a reverse path is followed. The gold is acquired initially as commodity gold either from a domestic unit or from abroad and is subsequently reclassified to monetary gold as monetization in the other changes in the volume of assets account.

The rest of the world accounts and links to the balance of payments

26.47 There are no exact parallels in the international accounts for the production account, the generation of income account and use of income account because the international accounts do not describe production, consumption (or capital formation). Products imported and exported are treated as simple transactions in all cases; whether the products will eventually be used for intermediate consumption, final consumption, capital formation, or will be re-exported is unknown in the context of the international transaction. The use made of products is entirely domestic in nature.

26.53 ... Other adjustments to IMTS may be needed to bring estimates into line with the change of economic ownership of goods, either generally or because of the particular coverage of each country. Possible examples include merchanting, nonmonetary gold, goods entering or leaving the territory illegally, goods procured in ports by carriers, and goods moving physically but where there has been no change of ownership.

ESA 2010 References

Transactions in Products and Non-Produced Assets

3.154 Definition: valuables are non-financial goods that are not used primarily for production or consumption, do not deteriorate (physically) over time under normal conditions and are acquired and held primarily as stores of value.

3.155 Valuables include the following types of goods:

(a) precious stones and metals, such as diamonds, non-monetary gold, platinum, silver, etc.;

(b) antiques and other art objects, such as paintings, sculptures, etc.;

(c) other valuables, such as jewellery fashioned out of precious stones and metals and collectors' items.

3.156 Such types of goods are recorded as acquisition or disposal of valuables in the following examples:

(a) the acquisition or disposal of non-monetary gold, silver, etc. by central banks and other financial intermediaries;

(b) the acquisition or disposal of these goods by enterprises whose principal or secondary activity does not involve the production or trade in such types of goods. This acquisition or disposal is not included in the intermediate consumption or fixed capital formation of these enterprises;

(c) the acquisition or disposal of such goods by households. Such acquisitions are not included in final consumption expenditure by households.

3.160 Exports and imports of goods and services do not include:

(a) establishment trade, i.e.:

> (1) deliveries to non-residents by non-resident affiliates of resident enterprises, e.g. sales abroad by foreign affiliates of a multinational owned/controlled by residents;
>
> (2) deliveries to residents by resident affiliates of nonresident enterprises, e.g. sales by domestic affiliates of a foreign multinational;

(b) primary income flows to or from the rest of the world, such as compensation of employees, interest and revenues from direct investment. The revenues from direct investment may include an indistinguishable part for the provision of various services, e.g. training of employees, management services and the use of patents and trademarks;

(c) the cross-border sale or purchase of financial assets or non-produced assets, such as land.

3.165 Imports and exports of goods include transactions between residents and non-residents in the following:

(a) non-monetary gold;

(b) silver bullion, diamonds and other precious metals and stones;

3.182 This definition of existing goods has the following consequences:

(e) transactions in existing valuables are to be recorded as the acquisition of a valuable (positive gross capital formation) by the purchaser and as the disposal of a valuable (negative gross capital formation) by the seller. In case of a transaction with the rest of the world, the import or export of a good is to be recorded. The sale of a valuable by a household is not to be recorded as negative final consumption expenditure;

Annex B: Treatment of Non-Monetary Gold by other NSI's

Australia Approach,

The ABS only record the production of the gold industry and exclude NMG from valuables.

National Accounts (Australian Bureau of Statistics, 2023; Australia Department for Foreign Affairs and Trade, 2011)

Balance of Payments (Australian Bureau of Statistics, 2011)

Austria

Extract from the Austria GNI Inventory (Statistics Austria, 2022):

Valuables are non-financial goods that are not used primarily for production or consumption, do not deteriorate (physically) over time under normal conditions and are acquired and held primarily as stores of value. These include precious stones and metals such as gold and silver bars and coins, antiques and other art objects, such as paintings, sculptures and other valuables (see ESA 2010, Annex 7.1). Valuables are calculated on the basis of goods, since there is no information of sector classification and activity of the units involved in acquisition or disposal of these goods. For publication purposes such a breakdown is not necessary. The estimation of gold and silver bars and coins, gold jewellery and pearl jewellery or pearls is based on the Commodity Flow approach and calculated with the Commodity Flow application described in chapter 5.7.3.2. The Commodity Flow calculation also contains acquisitions less disposals of museum collections, which mainly consist of restitutions. For acquisitions less disposals of works of art and antiques short term statistics, Structural Business Statistics, turnover Tax Statistics and ITGS are used as data sources.

Canada,

Canada do not appear to measure valuables but included non-monetary gold in their Balance of Payments data.

National Accounts (Statistics Canada, 2023)

GDP by expenditure table showing no valuables

Balance of Payments (Statistics Canada, 2014)

11.12 However, there are two general instances where customs data do not correspond to a change in ownership. First, there is the case of goods that change ownership but which are not recorded in customs documents. These goods could include, for example, satellites or vessels (which do not necessarily cross a country's economic territory) or non-monetary gold traded with non-residents, but which remain in the country. In these cases, the customs data are amended with information from other administrative sources or Balance of Payments Division surveys.

11.19 There are three final adjustments to export data on software, gold and pharmaceutical products. Pre-packaged software exports are undervalued because certain transactions of U.S. imports, the source of these data, are estimated at the value of the medium (CD, DVD) rather than the value of the content. The data used to calculate the adjustment comes from the Bureau of Economic Analysis. The adjustment on non-monetary gold consists of adding the gold sold to non-residents, but which is left in Canada. Data for these adjustments are obtained from surveys of Canadian banks and refiners. Also added to exports of non-monetary gold is the value of monetary gold sold by Canadian monetary authorities to foreign residents other than foreign monetary authorities.

Denmark

Extract from the GNI inventory (Statistics Denmark, 2003):

5.14 Valuables

Acquisitions less disposals of valuables are estimated from the supply side using the commodity flow method. Table 129 shows net acquisitions of valuables divided into those products which were included in this capital accumulation category in 1995.

Table 129 Acquisitions less disposals of valuables

Product n°	Text	DKK million
V570201	Kelem and similar hand-woven rugs	178
V711301	Articles of jewellery of silver	255
V711303	Articles of jewellery of precious metals	216
V711401	Articles of silversmiths' wares	172
V711403	Articles of goldsmiths'/silversmiths' wares of precious metals	11
V711600	Goods of natural pearls/cultured pearls	1
V711700	Imitation jewellery n.e.c.	93
V970101	Paintings, drawings and pastels	251
V970200	Original engravings, prints or lithographs	68
V970300	Original sculptures or statuary	331
V970601	Antiques of an age exceeding 100 years	-135
Total		**1 440**

France

Extract from the GNI inventory (INSEE - The National Institute of Statistics and Economic Studies (France), 2016):

5.12 Valuables are not subject to an in-depth statistical investigation in the French national accounts.

5.367 Only households acquire items of value. It has been decided to limit valuables to goods made of precious metals and goldsmiths' wares. In this way, an arbitrary amount has been deducted from the initial estimate of household consumption on the corresponding products and allocated to the acquisition, net of disposals, of valuables. This amount subsequently changes in the same way as household consumption. It totalled €681 million in 2010.

Germany,

Extract from the GNI inventory (Destatis - Federal Statistical Office of Germany, 2022):

5.492 In Germany, the figures for net acquisitions are calculated for of the following goods representing the above categories:

1. Gold bars and coins

2. New and existing art objects

3. Jewellery, gems, etc.

These goods adequately represent the overall acquisitions less disposals of valuables for Germany as was shown during the 2019 revision.

a) Gold bars and coins

5.493 Household purchases of gold bullion from banks are recorded as acquisitions less disposals of valuables. The data relate only to newly cast gold bars (the 'primary market'), since sales of existing gold bars (the 'secondary market') between households cancel each other out. The calculation of newly cast gold bars is based on figures from the production statistics (GP09-2441 20 300 gold in raw form or as a powder ('Gold in Rohform oder als Pulver').

5.494 The net import of gold coins and gold for the purpose of GFCF (investment gold), as well as merchanting with gold are also recorded as an acquisition less disposals of valuables. In 2016, the net import of investment gold totalled EUR 416 million. Imports and exports of gold coins and merchanting with gold are adopted from the German Central Bank's balance of payments. For the rest of trading with gold, data from the German Central Bank is used, too. The German Central Bank, however, does not estimate the amount of gold used as GFCF, so an assumption about the use of gold – valuable or raw material – has to be made. These assumptions are based on data from the annual GFMS gold survey on the demand of gold bars taken.

5.495 Since the switch to BPM6, new data is available from the balance of payments statistics of Deutsche Bundesbank for gold traded on the international bullion market. This data source has been introduced in the benchmark revision 2019. Deutsche Bundesbank introduced a survey which explicitly covers changes in ownership for gold when gold is located and remains abroad or when gold is located and remains in Germany.

This data source does not differentiate between the groups of buyers and only provides total amounts of income and expenses.

In total, acquisitions less disposals of gold bars and coins thus totalled EUR 1,350 million in 2016.

Hungary

Extract from the GNI inventory (Hungarian Central Statistics Office, 2009):

5.14. Acquisitions less disposals of valuables (P.53), intangibles. There is no information available on this item, and no estimation process is elaborated to measure it for the time being.

India

Based on a methodological note (Ministry of Statistics and Programme Implementation – India, 2015), India measures non-monetary gold as a valuable as well as an industrial input.

Japan

Japan has a similar decentralised approach to statistics to the US. National accounts are compiled within the Cabinet Office, BoP by the Bank of Japan and some Input Output Tables by the Statistics Bureau of Japan.

National Accounts Treatment

In their national accounts, valuables are not included.

In the Balance of Payments, under BPM5: (Bank of Japan, 2011)

Under BPM5, non-monetary gold was treated as follows.

However, transactions of nonmonetary gold pertaining to investment in gold and gold savings accounts are excluded. These are included in "Capital and financial account".)
Transactions of nonmonetary gold pertaining to investment in gold and gold savings accounts are also included in other investment (excluded from "goods" in the current account). These transactions are defined as financial transactions because they do not involve physical movement of goods across Japanese customs frontiers, and they generate fixed interest.
Since BPM6 (Bank of Japan, 2022)

1.A.a.3 Nonmonetary gold

This item covers transactions in gold bullion other than those included in monetary gold. It covers not only physical deliveries of gold bullion but also deliveries through allocated accounts held at overseas banks or other institutions.

Netherlands

Extract from the GNI inventory (Central Bureau of Statistics – Netherlands, 2017):

5.12 Acquisitions less disposals of valuables

The European Union task force on intangibles limited the number of goods (assets) to be classified as valuables to AN.131 Precious metals and stones, AN 132 Antiques and other art objects, and AN.133 Other valuables. The different goods that are distinguished at Statistics Netherlands are, pearls (AN.131), diamonds (AN.131), works of art (AN.132), antiques (AN.132), jewellery (AN.133), coins (not legal tender) (AN.131), non-monetary gold (AN.131), stamps, museum exhibits, securities (all three concern antiques) (AN.133).

The acquisitions less disposals of valuables are estimated by using international trade statistics that provides information about the imports and exports of valuables. Furthermore, an estimate of domestic production and intermediate use is made with the help of expert information. In the balancing process estimates are adjusted by confronting supply and use. The values estimated for each type of valuables are, 2010 (million euros):

- pearls (AN.131) -
- diamonds (AN.131) -
- works of art (AN.132) 158
- antiques (AN.132) -
- jewellery (AN.133) 14
- coins (not legal tender) (AN.131) 20
- non-monetary gold (AN.131) 125
- stamps, museum exhibits, securities (all three concern antiques) (AN.132) 124

Norway

Extract from the GNI inventory (Statistics Norway, 2019):

5.12.1 Acquisitions less disposals of valuables represent a new main category of gross capital formation. In the NNA, this item so far has really not been introduced in a significant way. It seems that reliable sources are not available, although this has to be better explored (on research agenda). It will therefore be on the agenda for the next main revision. Valuation aspects should be looked carefully at as well.

5.12.2 Just an insignificant value has been incorporated as yet. It relates to the NNA-product - works of art - as characteristic product of the activity of artistic and literary creation and interpretation. This NNA-product is mainly domestically produced, while used partly for investment, household consumption expenditure, and to a much lesser extent intermediate consumption and exports. With just a rather small value for investment, the item has been listed among GFCF items instead of being focused separately as an aggregate.

Sweden

Extract from the GNI inventory (Statistics Sweden, 2021):

9. P53 Acquisition less disposals of valuables

USES		
Sectors	**Sources**	**Methods**
S1		Sum of all subsectors
S11	N/A	Zero value
S12	N/A	Zero value
S13	N/A	Zero value
S14	Artist's incomes	Based on a commodity flow model where assets are estimated based on output, imports, exports and trade margins. The source for the output is "Artist's incomes" which was carried out in 2005. This benchmark is extrapolated with annual growth rate of the NACE industry in question. No further adjustments are made to the total attained in the flow model. Please see GNI inventory table 5.10.16
S15	N/A	Zero value
S2	N/A	Zero value
Balancing adjustments across all sectors		The production items are calculated and compiled in that part of the national accounts system known as the product accounts. The annual calculation is performed and balanced in a system of supply and use tables. The supply and use tables (SUT) are the basic tables which is further processed to Input-Output tables. The balancing procedure, or balancing process, can be divided into two stages: • the manual balancing of supply and use of individual product groups with the help of SUT • the final, mechanical (automatic) balancing performed with the RAS method For more information read chapter 6.1 in GNI Inventory.
Additional details		A new survey for Artis's incomes was done for 2014 and it was published in 2016. In the coming benchmark revision planned to be published in 2024, this source will be incorporated in the National accounts. The benchmark will be updated with this data in the next benchmark revision for NA in 2024.
RESOURCES		
N/A		

Switzerland

The Swiss balance of payments has, since 2014, included private sector imports and exports of gold bars in the current account – under 'non-monetary gold' in the goods item. Previously, the entire precious metals trade was entered in the financial account. At the time of the reallocation, the data were extrapolated back to 2000, so that values for gold trade reported under goods trade in the present balance of payments now go back to 2000.

Since 2014, the Swiss Customs Administration (SCA) has also been reporting gold trade within foreign trade. Previously, the SCA reported gold trade under a separate heading but not as part of foreign trade. The new practice, both in the balance of payments and by the SCA, corresponds to international standards. One consequence of the new publication practice is that gold trade is more prominent in the statistics.

The Swiss approach aligns with the current UK approach; i.e. recorded in imports and exports of goods (with a separate series excluding NMG) and in valuables – which provides offsetting impacts.

For Switzerland over the period of 1995-2021, NMG imports account for 22% of total goods imported and NMG exports account for 18% of total goods exported which broadly offsets

For valuables, they account for less than one percent of total gross capital formation.

The Swiss approach can be justified as they are a major producer of gold bullion.

National Accounts (Federal Statistics Office – Switzerland, 2022)

Balance of Payments (Swiss National Bank, 2014)

USA

Adjustment of gold (lines 2, 22, and 24). Gold is used for two purposes: for industrial demand (as an input into the production of goods and services, such as jewelry, watches, and electronic equipment) and for investment (as a store of wealth and a hedge against inflation). In the NIPAs, all domestic production of gold, regardless of its final use, is included in GDP. However, the NIPAs do not treat transactions in valuables, such as gold, as investments in fixed assets, and so investments in gold (other than gold held in industrial inventories) are not reflected in gross domestic purchases (PCE, gross private domestic investment, and government consumption expenditures and gross investment). For example, if households purchase gold as a form of investment, including that purchase in PCE would distort the analysis of consumption and saving. In contrast, in the international guidelines presented in the 2008 System of Accounts (SNA), the capital account includes the net acquisition of gold and similar valuables (such as antiques and other art objects) that are held as stores of value in gross fixed capital formation as “Acquisitions less disposals of valuables.”

Only a small share of the international transactions in nonmonetary gold recorded in the ITAs is for business or industrial use; most transactions are for investment or other purposes. Consequently, the NIPA estimates for exports and imports of nonmonetary gold are not based on the ITA estimates. Instead, the NIPAs incorporate a special adjustment for transactions in gold.

The NIPA estimates for gold begin with an estimate of domestic production of gold, which is included in GDP and in the associated gross domestic income for gold. Domestic gold production is measured as the sum of mine production of gold and of secondary production of gold in the United States multiplied by the average price of gold. Annual estimates of gold production are based on data provided by the Gold Fields Mineral Survey (GFMS), and quarterly estimates are based on data provided by the U.S. Geological Survey’s Mineral Industry Surveys—Precious Metals. The average price of gold is based on the producer price index for metal ore mining from the Bureau of Labor Statistics (BLS).

Part of domestic gold production is for domestic industrial use (that is, business transactions in gold used for production of final goods, such as jewelry, specialty coins, and medals and for electronics and dental applications). Annual and quarterly estimates of industrial demand for gold are derived using GFMS data on gold used for production multiplied by the average price of gold.

The difference between domestic gold production and industrial demand for gold is entered into the NIPAs in the form of an adjustment to net exports: specifically, the adjustment consists of removing the ITA estimates of exports (line 2) and imports (line 22) of nonmonetary gold and of adding “Gold, NIPAs” (line 24) to imports with its sign reversed. This treatment maintains the relationship of GDP to gross domestic purchases (gross domestic purchases is equal to GDP minus net exports) while protecting the integrity of the other final expenditures components of GDP.

Note on NIPA

28 Because source data do not allow a complete accounting of valuables for the United States, investments in valuables are not included in the NIPAs. See “Asset boundary” in chapter 2 of this handbook.

Bureau of Economic Analysis (2019)

BoP method (Bureau of Economic Analysis, 2022)

OECD Data (OECD, 2023a, b, c)

The following tables have been downloaded from the OECD website focussing on valuables to see where it is recorded internationally.

OECD - SUT Valuables Extract - 2019.xlsx

OECD - NFA.xlsx

OECD - Non-Financial Balance Sheet Extract.xlsx

Annex B references

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OECD (2023a), Table 9B. Balance sheets for non-financial assets

OECD (2023b), Table 14A. Non-financial accounts by sectors

OECD (2023c), Table 40. Use at purchasers' prices

Statistics Austria (2022), Gross National Income Inventory

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