

**Eighteenth Meeting of the
IMF Committee on Balance of Payments Statistics
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Financial Gold and Income on Reversible Gold Transactions

IMF COMMITTEE ON BALANCE OF PAYMENTS STATISTICS
BALANCE OF PAYMENTS TECHNICAL EXPERT GROUP (BOPTTEG)

ISSUES PAPER (BOPTTEG) # 27

NONMONETARY GOLD

Prepared by the Bank of Japan

May 2004

BALANCE OF PAYMENTS TECHNICAL EXPERT GROUP

ISSUES PAPER (BOPTG) # 27

NONMONETARY GOLD

I. Current international standards for the statistical treatment of nonmonetary gold

The IMF Balance of Payments Manual Fifth Edition (hereafter, BPM5) defines nonmonetary gold as follows. “*Nonmonetary gold* covers exports and imports of all gold not held as *reserve assets* (monetary gold) by the authorities. *Nonmonetary gold* is treated the same as any other commodity and, when feasible, is subdivided into gold held as a store of value and other (industrial) gold” (See BPM5, paragraph 157).

The IMF Balance of Payments Compilation Guide indicates that, for non-monetary gold that does not cross frontiers, the difference between the value of goods when acquired and resold should be recorded under merchanting services (See paragraph 138).

II. Concerns and shortcomings regarding the current treatment

The volume of gold merchanting reported in Japan is substantial¹. However, a large portion of these transactions consist of dealing transactions undertaken to obtain capital gains or to collateralize loans. The inclusion of these amounts in the accounting of goods on a gross basis or in the accounting of services on a net basis can obscure trends and developments in trade.

III. Possible alternative treatments

- Non-monetary gold should be treated differently from other goods, primarily for the following two reasons.
 1. Gold is a special good, in that it has characteristics of both goods and financial assets.

¹ During 2003, Japan’s gross transactions of non-monetary gold not involving physical exports and imports amounted to 7341 billion yen in imports and 7373 billion yen in re-exports. These amounts were equivalent to 45.6% and 43.7% of gross merchanting transactions, respectively. Similarly, these amounts were equivalent to 18.5% and 14.2% of total merchandise exports and imports, respectively.

2. As in the case of financial assets, dealing transactions in gold are widely undertaken without any physical exports and imports, through the use of the books of gold dealers.
- Transactions in non-monetary gold *not involving physical exports and imports* can be treated in various ways. Two options are outlined below.
1. Separating transactions in nonmonetary gold into real-demand transactions (jewelry, industrial uses) and dealing transactions (e.g. aimed at obtaining capital gain), and applying different accounting methods to the two categories.

Note: For example, the former can be categorized as goods and accounted for on a gross basis, and the latter can be treated as margin and accounted for on a net basis. Alternatively, transactions in non-monetary gold can be treated as financial transaction and “**Financial Gold**” can be created as a new component of the “Financial Account” to be accounted for on a net basis. In connection with the “Financial Account” it will be necessary to clarify the definition of “**Financial Gold.**”

2. Accounting for the margin on acquisition and resale price as a service.

Note: In the case of dealer-led dealing, consideration must be given to determining who is providing a service to whom.

IV. Questions/Points for Discussion

1. *Do BOPTEG members consider it feasible to separate nonmonetary gold transactions into real-demand transactions and dealing transactions?*
2. *What do BOPTEG members think about reconciling the issue by recording nonmonetary gold involving physical exports and imports under goods and nonmonetary gold not involving physical exports and imports under the Financial Account?*
3. *Do BOPTEG members have any views on creation and definition of “Financial Gold?”*

References

- International Monetary Fund (1993) “*Balance of Payments Manual, Fifth Edition*”
International Monetary Fund (1995) “*Balance of Payments Compilation Guide*”

IMF COMMITTEE ON BALANCE OF PAYMENTS STATISTICS
BALANCE OF PAYMENTS TECHNICAL EXPERT GROUP (BOPTTEG)

ISSUES PAPER (BOPTTEG) # 27A

THE TREATMENT OF NON-MONETARY GOLD IN THE MACRO ECONOMIC ACCOUNTS

Executive summary of a paper prepared for the UK Office for National Statistics
Philip Turnbull, Consultant in Official Statistics
August 2004

BALANCE OF PAYMENTS TECHNICAL EXPERT GROUP

ISSUES PAPER (BOPTTEG) # 27A

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INTRODUCTION

1. This paper is an executive summary of the full paper. It is designed to be the appropriate Issues paper for BOPTTEG. The paper has been commissioned by the UK Office for National Statistics and will be presented to international statistical expert groups reviewing the existing international standards on national accounts and balance of payments. The issue addressed is the current and future treatment of gold in the System of National Accounts 1993 (SNA93 and planned revision) and the 5th edition of the Balance of Payments Manual (BPM5 and planned revision). Any changes would naturally also apply to other macro-economic standards e.g. those for Monetary and Financial Statistics (MFS) and for Government Finance Statistics (GFS).
2. The proposal in this paper is to extend the statistical treatment of gold as a financial asset to all financial institutions, rather than just the monetary authorities as in the present standards. Thus transactions and holdings of gold would be split into two categories: commodity gold, classified as trade in goods and inventories or valuables; and financial gold (including monetary gold) classified as a financial asset.
3. This paper supports and amplifies BOPTTEG Issues Paper #27 prepared by the Bank of Japan, May 2004

CURRENT INTERNATIONAL STANDARDS AND PRACTICE

4. Gold held by the monetary authorities as part of the official reserves of a country or by international financial institutions such as the IMF and BIS is classified as monetary gold and a financial asset. As with SDRs there is no corresponding financial liability, an exception to the norm for financial assets. Direct sales between the monetary authorities are classified as a financial transaction in the SNA.
5. Non-monetary gold is treated as a commodity either for intermediate consumption or additions to inventories (for industrial use e.g. for electronics, dental or jewellery manufacture) or as a 'store of wealth' classified to the SNA capital account as valuables alongside precious stones and works of art etc.

6. Sales of monetary gold to non-monetary holders are decomposed into two flows: (1) a change in classification (demonetisation) of the gold by the monetary authorities under “other changes in volume” to the balance sheet; followed by (2) a sale of valuables by the monetary authorities from their SNA capital account, and an export of goods if the purchaser is a non-resident. A similar treatment applies in reverse.
7. Physical gold owned by depository corporations is classified as a non-financial asset, however the banks’ corresponding liabilities will usually be in the form of deposits denominated in gold and these are financial liabilities under the international standards.

Previous standards

8. The previous international standards were inconsistent. SNA68 had two categories of gold: financial (including monetary) and industrial (or commodity) gold and permitted all sectors of the economy to hold financial gold as a financial asset. Reclassifications between financial gold and industrial gold were accommodated as imports and exports regardless of whether or not the sale involved a non-resident. BPM4 in contrast permitted only the monetary authorities to hold gold as a financial asset (as in the current standards), but also implied an import and an export of physical gold to account for monetisation or demonetisation.
9. In the discussions leading up to the current standards, the presumption was that the treatment would be brought in line. The SNA expert group on external transactions agreed on the current treatment at a meeting in March 1987. Subsequent papers were presented to various expert groups and they confirmed the current treatment, but with minority objections from the UK and Japan.

Current Practice for Non-Monetary Gold

10. As part of the research for this paper the author has examined current practice in the USA, Switzerland and Japan as well as in the UK. These are all countries that have a large and international financial market in gold. In summary: only USA appears to fully follow the current international standards for non-monetary gold. Switzerland, and to a lesser extent Japan, has retained a wider interpretation of gold as a financial asset, while the UK has been unable to implement the treatment of non-monetary gold due to lack of data on cross border changes of ownership.

CONCERNS AND SHORTCOMINGS OF THE CURRENT STANDARDS

11. The core problem is that the international macro-economic standards are at variance with the financial markets in not treating gold as a financial asset. Inclusion of all gold transactions between residents and non-residents as imports and exports of goods would seriously distort the economic accounts of those countries with large international markets in gold. Purchases (or imports) of gold as a financial asset would not represent goods for use in the production process of the country concerned, nor would sales (or exports) be the outcome of a production process.

12. The effect on GDP is negligible since any increase in gold inventories or valuables is offset by the negative effect of greater imports of gold and visa versa. Trade in goods as an economic indicator could however be seriously distorted by the existing standards. The UK figures are not known (since Customs only record physical movements, not changes in ownership), but could be as high as three-quarters of the existing trade flows. In Japan recorded trade in non-monetary gold in 2003 was 14% of imports and 19% of exports.

Gold as a financial asset

13. Throughout history, gold has been used as a medium of exchange or directly as money. In time of political social or currency crises this is still true. Gold has a number of characteristics that can make it more like a financial asset than a commodity or valuables such as fine art, antiques or even other precious metals:
- a. It is traded round the clock on financial markets in an equivalent way to foreign currencies. At any time there is a single quoted and recognised international price based on standard definitions.
 - b. Gold is fungible and readily assayed. Any form of gold can be re-processed into standard high quality bars for on sale on the markets.
 - c. The gold markets are highly liquid. Average turnover in London New York and Tokyo combined is the region of 50 million troy oz per day (worth around \$20bn).
 - d. Gold is traded not just in the spot market. There is a highly sophisticated market of secondary and derivative instruments just as would be expected for a financial asset.
 - e. There is a gold lending/deposit market and quoted interest rates.
14. All sectors may trade gold in this way, particularly financial institutions trading amongst themselves. Gold traded as a commodity is bought for end or intermediate use in the production process, for industrial inventories or as a store of wealth.

Lack of symmetry between assets and liabilities denominated in gold

15. Banks and other financial institutions trade gold between sellers and purchasers or borrow and lend it, but they do not hold significant amounts as physical assets. Gold held in their depositories or vaults is mostly other people's gold, held by the bullion banks for safe custody. There are two methods of placing gold with a bank, either as an allocated holding or an unallocated deposit. Allocated gold, which is more common in Europe than the USA, is a specific and uniquely numbered physical piece of gold, which remains in the ownership of the individual or institution placing it for safe custody with a bank. Unallocated gold deposits in contrast represent a claim on a fixed quantity of gold (in practice the market price of that quantity on the day of withdrawal). They are treated in commercial accounts and in the macro economic accounts as a foreign currency deposit and a financial liability of the bank concerned. The assets of the bank corresponding to these liabilities will be either physical gold or more often loans denominated in gold made to end users such as gold mining companies.
16. Both deposits and loans denominated in gold are financial instruments, but the small quantity of physical gold actually owned by the banks is classified as a non-financial

investment in valuables. However the liquidity of this gold is immediate and unlike any other kind of non-financial asset such as works of art, buildings or computers.

17. An even bigger problem exists in terms of the classification by the assets holder of the deposit liability of a bank denominated in gold. Monetary authorities making gold loans to commercial banks (or equivalently placing gold on deposit with banks) are advised in the international standards to treat this as off balance sheet and to continue to report the gold as part of the official reserves (BPM5 Para 434 refers, but amplified in the Reserve Template Guidelines, Para 99). Thus the financial asset recorded in the system and the corresponding financial liability, are different financial instruments (monetary gold and foreign currency deposits respectively). This is a fundamental breach of a basic rule of SNA, that all financial assets except monetary gold and SDRs have a corresponding financial liability. Gold repos made by monetary authorities are in contrast treated a collateralised loans and treated consistently in the accounts.

Goods and Merchanting

18. SNA93 requires trade in gold, other than directly between monetary authorities, to be treated as imports and exports of goods. The BoP Compilation Guide Para 138 however advises that the buying and selling of goods, including non-monetary gold, should be treated as merchanting services if the goods do not cross the national boundary of the compiling country. The service transactions are recorded net, valued as the profit or loss made on the sales of the goods. Merchanting is also a category in SNA93, but is not defined there.
19. However for countries with an international market in gold (such as Japan, Switzerland, UK) there is little correspondence between the activities of traders on the bullion market, cross-border movements of gold, and the concept of merchanting of a good. The identification of a particular shipment of non-monetary gold, which has been purchased from a non-resident and subsequently sold to another non-resident, is not generally possible, nor meaningful. The gold may be brought to London for safe custody without ever being owned by a UK resident, alternatively it may remain in a London vault/depository throughout several transactions. The purchaser on the London market will not usually be the end users and will resell the gold, most likely to a non-resident trader in gold, who may in turn resell it to local non-resident end users such as jewellery manufactures.

ALTERNATIVE TREATMENTS

20. The **main proposal** is to reintroduce the SNA68 concept of financial gold, but to restrict it to holdings by and transactions between financial institutions. Physical gold (investment grade only) held by financial institutions plus assets and liabilities denominated in gold would all be financial assets. The current category of monetary gold would then become a subset of financial gold. Financial gold would be an asset without a corresponding liability in the overall SNA sector accounts, as with monetary gold at present.

21. Other sectors of the domestic economy would only hold commodity gold as a valuable or for intermediate consumption as at present. When a financial institution sells gold to a non-financial institution the gold would be demonetised to a valuable first, and the subsequent transaction would be a transaction in commodity gold. If one end of this transaction involves a non-resident then it would be recorded as imports or exports of commodity gold. Similarly monetisation of gold would occur after the purchase of commodity gold by a financial institution from a non-financial institution (e.g. from a mining company or refiner). Financial derivatives and bank deposits/loans denominated in gold would however continue to be financial assets for all sectors of the economy as in the current international standards.
22. This is a pragmatic proposal. The reason for not proposing that all sectors of the economy should be allowed to hold financial gold (as in the SNA68) is that the purpose for undertaking gold transactions by other sectors is generally different. They are end users: producing gold, using it in the production process or investing in a 'valuable'. Most financial institutions however are intermediating in a financial market for gold. Transforming maturity, counterparty and currency risk in the process just like any other financial instrument. They match their asset and liability positions in gold either directly or via the use of financial derivatives. In general, they do not hold gold as a valuable or inventory in the sense of the concept as defined in SNA.
23. One consequence of such an extension to the financial asset boundary in SNA and BPM would be a need to measure any corresponding service earnings on dealings in financial gold by financial institutions.
24. The treatment of gold loans (deposits) placed with financial institutions by central banks also needs to be clarified in the manuals to ensure consistency between recording by asset and liability holder. The monetary authorities might record a reduction in physical gold (sale) and the creation of a foreign currency deposit (denominated in gold), to match the liability in foreign currency deposits reported by the banks. Alternatively both sides could treat it as an off balance sheet transaction in the same way as stock lending transactions. Under such a treatment, banks would need to record short positions in gold when they on-sell gold acquired from central banks in this way. The focus of the Reserve Template Guidelines is on the asset side: the liabilities side also needs to be articulated.
25. Should the main proposal above not find favour with the international experts, an **alternative** is needed to cater for those countries that have international markets in gold. As already explained, the BPM Compilation Guide (Paragraph 138) recommends a merchanting treatment for such markets. A modification to the definition of merchanting in BPM5 is needed to cater for this.
26. Merchanting should be defined in terms of purchases from and corresponding sales to non-residents by a resident enterprise without any intention of holding the goods as inventories or valuables for any significant period of time. The current link to no physical movement of the gold into, or out of, the country performing the merchanting operation should be removed (at least for the case of international gold markets). This is fully consistent with the definitions and concepts of assets and liabilities in the economic accounts. Physical movement of goods is only a proxy for the underlying economic concept of change of ownership.

27. A separate Issues paper on Merchanting is being prepared by IMF. If it is decided to continue the current concept of merchanting with no exception for the international gold markets, a new "gold" item could be introduced under the merchanting heading to cover all gold dealing net transactions.

POINTS FOR DISCUSSION:

- (i) Does the nature of trading in gold by non- Monetary Authorities mean that non-monetary gold can be considered as a financial asset as well as a commodity?
- (ii) Does BOPTEG agree with the main proposal to introduce the concept of financial gold for gold traded between financial institutions: such gold would be a financial asset, and monetary gold would be a sub-set of it: trading by other sectors would be in commodity gold?
- (iii) If not, does BOPTEG agree that the definition of merchanting of gold should be broadened to remove the restriction on cross-border movement: in practice this would only affect those countries with an international market in gold?
- (iv) Alternatively does BOPTEG agree that a new "gold" item could be introduced under the merchanting heading for all gold dealing net transactions?

IMF COMMITTEE ON BALANCE OF PAYMENTS STATISTICS
BALANCE OF PAYMENTS TECHNICAL EXPERT GROUP (BOPTTEG)

BOPTTEG ISSUES PAPER # 27B
NON-MONETARY GOLD: A POSSIBLE WAY FORWARD

Prepared by Stuart Brown (ONS) and Chris Wright (Bank of England)

1. This paper offers a clarification to one of the alternative proposals set out in BOPTTEG Issues Paper 27B, on the treatment of non-monetary gold. The current authors consider that the clarified proposal can fully meet the objectives of the earlier Issues Paper but in a way which responds to the concerns expressed by some BOPTTEG members.

The Issue

2. The underlying concern in this debate has been to address the perceived “distortion” of physical trade statistics due to the inclusion of all bullion market transactions undertaken between resident and non resident counterparties. In the words of the paper, “The inclusion of all resident/non-resident gold transactions as gross imports and exports of goods would seriously distort the economic accounts ...”¹ of countries with developed bullion markets, such as Japan and the United Kingdom.

3. As a solution, IP27B proposed the creation of a new financial instrument classification – Financial Gold – similar in nature to the current SNA concept of Monetary Gold but broader in its scope. Physical gold would then be classified as: Commodity Gold if it were held for industrial use or as a valuable; Non Monetary Financial Gold, if held by financial institutions and/or bullion traders for market making purposes; and Monetary Gold (a subset of Financial Gold) if held by Central Banks as a reserve asset. Such a delineation would then regard inter dealer trading as transactions in financial assets – not purchases and sales of goods – such that bilateral trading positions could then be netted, and resident/non resident business recorded as net financial transactions, that is as financing entries, rather than as trade in goods within the balance of payments.

4. Implementing such a proposal is not straightforward. Specifically, it requires that gold transactions which result in a change of classification – between commodity and financial or between monetary and non monetary financial – should be separately identified, and a reclassification entry logged. This in turn requires that the boundary between commodity and financial gold is well defined.

5. Objections to the proposal are nevertheless principally conceptual. A shared characteristic of financial instruments within the SNA framework is that they are issued by an institutional unit and so represent a liability to that unit as well as an asset to the holder². Gold is an asset which has no corresponding liability so, in an SNA framework, has the hallmarks of a valuable rather than a financial instrument. Nevertheless, the global market in which gold is traded is highly sophisticated, exhibiting all of the characteristics of a financial market.

¹ Issues Paper 27B, paragraph 6.

² Monetary gold and SDRs are exceptions but their status as exceptions is noted in the SNA and their treatment as such remains contentious.

The Proposal

6. In seeking to define a possible boundary between financial and commodity gold, IP27B presents various alternative proposals. That contained in Paragraph 11 has attracted particular interest. This definition, which emerged from discussions with gold traders, views financial gold as “gold traded between counterparties through electronic metal accounts”.

7. The IP is attracted to this definition both because of its precision and practicality. But the description of trading through dematerialised electronic accounts has raised the additional possibility that inter dealer turnover may not in fact give rise to the rapid changes in ownership of commodity gold which were thought likely to dominate conventional measures of trade in goods. The point at issue is whether traders exchange title to physical gold or whether the regular process of trading takes place in a genuine financial asset – a deposit – which happens to be denominated in units equivalent to physical gold, but for which the credit positions of one institutional unit are matched by a liability position for another unit.

So What Are Metal Accounts?

8. Metal accounts are any form of account facility provided by a third party, which give the holder the market risks and benefits of holding physical metal without the need to provide secure storage. They record the holder’s outstanding balance, expressed as a quantity (weight) of metal – gold or other precious metal.

9. But such accounts occur in at least two distinct forms:

- As a record of title to specified allocated gold; and
- As a claim against a third party to deliver unallocated gold.

10. In the former guise, metal accounts are primarily targeted at the investment market. The account provider typically offers a one stop service to investors – purchasing storing and selling investment grade bars and coin to order. Accounts of this type constitute “full outright ownership of the metal” and, as such are advertised as 100% backed by physical stocks.

11. By contrast, accounts denominated in unallocated gold are targeted at the professional gold market. Account providers hold title to physical (allocated) gold and issue claims to account holders denominated in unallocated gold. The account holder does not hold title to physical gold but instead holds an unsecured claim against the account provider, in effect a deposit with the account provider.

12. The two forms of account can operate in tandem. For example, a gold refiner in Australia might deposit and hold allocated gold in an Australian metal account but then be called upon to deliver gold in London. Instead of physically transporting bullion, the refiner can use a facility known as a Location Swap through which his allocated holding in Australia is exchanged for an unallocated claim against a London account provider. This claim can then be converted into an allocated holding allowing delivery of physical gold to the customer. The process described here involves an exchange of title to physical gold between the refiner and the Australian account provider; a counterpart exchange of claims against the London account provider between the Australian account provider and the refiner; and an exchange of title to allocated

gold between the London account provider and the refiner; matched by a counterpart reduction in the refiner's claim against the London account provider. Transactions in physical gold are here seen to be settled through transactions in claims for unallocated gold.

13. The systems used for OTC gold trading are equivalent to those described above. Physical gold typically enters or leaves the gold market through a transaction between an account holder and a metal account provider, who will normally be a market maker. The first round effect is to raise the stock of allocated gold held by the account provider and to raise equivalently market claims for unallocated gold against the provider. Thereafter, inter dealer trading of metal account claims take place and will either be settled for cash or through the further transfer of title to physical gold. Accordingly, bullion market turnover overwhelmingly constitutes transfers of claims against metal account providers - transfers of title to allocated gold following clearing and settlement, are small by comparison.

14. These account types are fully reflected in the London Market. The London Bullion Market Association (LBMA) is the representative body for gold and silver trading in London. It lists nine market making members of which five offer clearing services. Trading is conducted through balances held by its fifty or so ordinary members with the market making members – trading balances taking the form of unsecured claims on unallocated gold. Allocated gold accounts, where holders own title to specified bars also exist but are used either to settle claims or as safe custody, rather than for trading purposes. For example, the Bank of England provides an electronic book entry service for the transfer of title to allocated gold used by LBMA members and other central banks. Daily turnover in these allocated gold accounts has averaged around 3% of unallocated gold turnover in London over the past year.

The Statistical Treatment of Allocated and Unallocated Gold

15. The distinction between allocated and unallocated metal accounts would seem to be a fundamental one. The former are equivalent to a custody record of title while the latter are an unsecured claim against a third party to deliver a specified quantity of metal of defined purity. As such, transactions in these latter credit balances cannot be classified as transactions in gold, since no change in title to physical gold occurs.

16. Unallocated gold credit balances can be viewed as equivalent to a foreign currency deposit. They represent the unsecured claim of the holder to receive from the account provider a stated quantity of gold. They are not title to gold. For its part, the account provider views credit balances in unallocated gold as a liability to be recorded on its balance sheet. Physical gold held by the account provider against these liabilities are held in its own name and will appear as assets (valuables) on its balance sheet. There is no requirement for such holdings to match outstanding liabilities to account holders.

17. Such patterns are observable in the currency analysis of UK banking data. For the LBMA market makers who contribute to these data, deposit liabilities denominated in gold can be identified and typically substantially exceed gold assets. Interestingly, gold liabilities reported by these market makers are predominantly held by non residents.

18. Classifying unallocated gold accounts in this way brings an immediate resolution of the potential problems highlighted by Issue Paper 27B without the need for a new and controversial financial instrument class. It delivers the same results for the trade in goods statistics as the proposed Paragraph 11 definition of Financial Gold in Issue paper 27B. However it does not include the requirement to record reclassifications under OCVA whenever the change in ownership of gold causes it to move from being a financial asset to commodity gold or vice versa.

19. Moreover, classifying metal accounts in this way should facilitate statistical collection. The boundary between allocated and unallocated gold is a precise one which is already recognised in the balance sheets of account providers. In addition, if transactions in unallocated gold deposits are to be regarded as financial, then such transactions need only be collected or estimated net. There is no requirement to record the gross flows needed when gold transactions are regarded as trade in goods.

Questions for BOPTEG

20. BOPTEG members are invited to consider:

- Whether unallocated metal account credits can be classified as financial assets?
- If so whether they meet the definition of deposits or some other existing instrument?
- If they can, whether this removes the case presented in Issue Paper 27B for the creation of a new instrument class – Financial Gold?
- If they are deposits, whether they can be classified as foreign currency deposits, or whether a specific deposit class needs to be assigned?
- Whether the classification of unallocated accounts as financial assets has any knock on implications, not considered by the paper, for the current SNA treatment of Monetary Gold?
- Whether other forms of electronic commodity account exist which should be considered alongside electronic metal accounts and classified similarly?

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BALANCE OF PAYMENTS TECHNICAL EXPERT GROUP (BOPTG)

BACKGROUND PAPER BOPTG ISSUES # 27A

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I INTRODUCTION

1. This paper has been commissioned by the UK Office for National Statistics, and will be presented to international statistical expert groups reviewing the existing international standards on national accounts and balance of payments. The issue addressed is the current and future treatment of gold in the System of National Accounts 1993 (SNA93 and planned revision) and the 5th edition of the Balance of Payments Manual (BPM5 and planned revision). Any changes would naturally also apply to other macro-economic standards e.g. those for Monetary and Financial Statistics (MFS) and for Government Finance Statistics (GFS).
2. The paper reviews the current standards and the immediately proceeding standards and sets out problems with their application, particularly in the context of those countries with active international markets in investment gold such as the UK. The paper proposes an extension to the treatment of gold as a financial asset to all financial institutions, rather than just the monetary authorities as at present.¹ Thus transactions and holdings of gold would be split into two categories: commodity gold, classified as trade in goods and inventories or valuables; and financial gold (including monetary gold) classified as a financial asset.
3. The paper supports and amplifies BOPTEG Issues Paper #27 prepared by the Bank of Japan, May 2004.

II CURRENT INTERNATIONAL STANDARDS AND PRACTICE

II.1 Current standards on gold

4. All the existing international standards for macro-economic accounts are fully consistent in their recommendations for the treatment of monetary and non-monetary gold in the accounts. Gold held by the monetary authorities as part of the official reserves of a country or by international financial institutions such as the IMF and BIS is classified as monetary gold and a financial asset. As with SDRs there is no corresponding financial liability, an exception to the

¹ Gold was first used as a currency is around 550BC in the Kingdom of Lydia (now part of Turkey). Lydia benefited from a river called the Pactolus, which carried a large amount of gold and silver mainly in the form of a natural alloy called electrum. According to mythology, this was the river into which Midas jumped to free himself of the curse that everything he touched turned to gold. The curse was supposed to have passed to the river.

norm for financial assets. Direct sales between the monetary authorities are classified as a financial transaction in the SNA.

5. Non-monetary gold is treated as a commodity either for intermediate consumption or additions to inventories (for industrial use e.g. for electronics, dental or jewellery manufacture) or as a 'store of wealth' classified to the SNA capital account as valuables alongside precious stones and works of art etc.
6. Sales of monetary gold to non-monetary holders are treated as a change in classification (demonetisation) of the gold by the monetary authorities under the "other changes in volume" to the balance sheet, followed by a sale of valuables by the monetary authorities from the SNA capital account, and an export of goods if the purchaser is a non-resident. In reverse, purchases of gold by the monetary authorities (other than directly from another monetary authority) are purchases of non-monetary gold followed by a reclassification as a financial asset (monetisation) when added to the official reserves.
7. Physical gold owned by depository corporations is thus classified as a non-financial asset, however the banks' corresponding liabilities will usually be in the form of deposits denominated in gold and these are financial liabilities under the international standards.²
8. Financial derivatives denominated or linked to gold are also treated as financial assets. Gold swaps undertaken by the monetary authorities are treated as the creation of a new financial instrument (collateralised loan) while gold loans by the monetary authorities are treated as off balance sheet transactions.³

II.2 Previous standards

9. The previous standards for national accounts (SNA68) and for Balance of Payments (BPM4) were inconsistent with each other. SNA68 had two categories of gold: financial (including monetary) and industrial (or commodity) gold and permitted all sectors of the economy to hold financial gold as a financial asset.⁴ Reclassifications between financial gold and industrial gold were accommodated as imports and exports regardless of whether or not the sale involved a non-resident. BPM4 in contrast permitted only the monetary authorities to hold gold as a financial asset (as in the current standards), but also implied an import and an export of physical gold to account for monetisation or demonetisation.⁵
10. In the discussions leading up to the current standards, the presumption was that the treatment would be brought in line. The SNA expert group on external transactions agreed on the current treatment at a meeting in March 1987. The record of the meeting records that other options were considered, but that most members of the group agreed on the conclusion. The current author has not been able to trace any other records of the pre-1993 discussions.⁶ In e-mail correspondence the author of the financial accounts section of the SNA says a subsequent paper

² SNA93 paragraph 11.64

³ See IMF MFSM paragraph 156 and the IMF guide on official reserves paragraphs 99 to 101.

⁴ Gold bars, coin or ingots were treated as financial gold, unless specifically intended for industrial use. Thus the distinction between the two categories of gold depended on final use.

⁵ The manual is ambiguous about this, referring only to the need for counterpart entries to balance the accounts. The record of a 1987 SNA expert group meeting say that BPM4 treated such counterpart entries as reconciliation items, but the manual itself makes no such reference.

⁶ The UN, IMD, ONS and Bank of England archives were searched. A search of the website of the "Review of Income and Wealth" shows only one paper refereeing to gold in the SNA, and that was concerned with the problems of constant prices for gold output in South Africa.

was presented to various expert groups and they confirmed the current treatment, but with minority objections from the UK and Japan.⁷

II.3 Merchancing

11. The BPM5 definition of merchancing does not mention gold and there is no definition at all in SNA93.⁸ However the BPM5 compilation guide (Para 138) specifically says that buying and selling of non-monetary gold that does not cross national boundaries should be recorded in the BOP as net service earnings.⁹

II.4 Current Practice for Non-Monetary Gold

12. As part of the research for this paper the author has examined current practice in the USA, Switzerland and Japan as well as in the UK. These are all countries that have a large and international financial market in gold.¹⁰
 - a. USA – Non-monetary gold is recorded as imports and exports of goods and tables excluding this are also shown. Only monetary gold is shown in the financial accounts (flow of funds) and the national accounts. The banking statistics do however seem to include deposits denominated in precious metals under foreign currency deposits.¹¹ The banking supervision manuals treat gold as a financial asset. The practice of banks holding gold in allocated form (custody holdings) is not common in the US, unlike Europe.

⁷ Extract from the e-mail from Kevin O’Conner, who was with the Statistics Department of the IMF at the time of the SNA93 revision:

“The issue was taken up at the expert group on financial flows and balances in September 1988. That group endorsed the recommendation of the external group, and decided to align the SNA with the BOP. At each stage, the UK and Japan strongly objected, but everyone else agreed. As the perception existed that the Fund was strongly behind limiting financial gold, I wrote the paper "Gold Revisited" for the expert groups and the Group of Financial Statisticians. The paper simply reviewed the pros and cons of the possible treatments of financial gold, and made no recommendation. It was clear that the Fund was neutral on what was decided, as long as the same decision applied to both BOP and SNA. Mahinder Gill and I presented this view at a number of meetings. The Fund's main interest was in gold as a reserve asset, and none of the various treatments would have had any impact on that, as monetary gold in reserves could always be a subcategory of a more broadly defined financial gold. The issue was discussed by the experts in Washington in December 1990 and in Harare in May 1991, as well as at other meetings. Once again, the UK and Japan strongly endorsed a broad treatment of financial gold.”

⁸ Paragraph 262 of BPM5:

“*Merchandising* is defined as the purchase of a good by a resident (of the compiling economy) from a nonresident and the subsequent resale of the good to another nonresident; during the process, the good does not enter or leave the compiling economy. (Changes in stocks held abroad by merchants are excluded.) The difference between the value of goods when acquired and the value when sold is recorded as the value of merchancing services provided. If the commodities are not resold by the merchant in the same accounting period, an import of goods is recorded in the first period, and a negative import entry is recorded in the later period. (See paragraph 213.) Although merchancing is recorded on a net basis, separate data recorded on a gross basis may be useful for analytical purposes.”

⁹ Paragraph 138. of the BoP Compilation Guide.

¹⁰ In addition the central banks of some gold producing countries, act as central-marketing bodies for the sale of locally produced gold in the international markets. These countries have great difficulty in separating out the classification of monetary gold from non-monetary and in handling the changes in classification between the two. This was the situation for South Africa at the time of the 1993 revision, although it is no longer true in their case.

¹¹ Explicitly mentioned in the weekly money stock return FR2900, but not mentioned in the notes to the “call” reports.

- b. SWITZERLAND – The banking balance sheets statistics explicitly show precious metals as both a financial asset and liability of the banking system. Both are split between domestic and foreign which suggests that the assets side covers lending on gold as well as physical holdings of gold. Allocated gold is treated as custody holdings and not on-balance sheet. The notes to the annual balance of payments publication indicate that financial gold (and other precious metals) is included in the financial account under other investment. It is estimated as total financial flows recorded by banks less those recorded by Customs as industrial gold and trade in goods.¹² No reference was found to the treatment of gold in the national accounts.
- c. JAPAN – No references to non-monetary gold have been found in the national accounts BOP, or in the flow of funds publications. However in e-mail correspondence the Japanese have explained that gold as a valuable has not been included in their national accounts due to lack of data, but that industrial gold is estimated for imports and exports of goods. They also explain that their BoP includes three categories of non-monetary gold: goods, merchanting, and a special restricted category of financial gold.¹³ The recent paper prepared by the Bank of Japan for the BOP review (reference 10) confirms that the international gold market transactions in Japan are treated as merchanting.
- d. UK – Gold is excluded from the merchandise trade statistics because most of the physical movement reported by Customs is not for UK end use.¹⁴ Adequate statistics on

¹² This treatment was confirmed in an e-mail from Hildegard Muff, Schweizerische Nationalbank:

“The import and export of gold as raw materials and of coins according to trade statistics, and from 2000 onwards, cross-border sales of gold by the National Bank, are recorded in the financial account, "other investment". Imports of precious metals (import of industrial gold and silver) recorded in the current account have been deducted. The National Bank started to sell gold under the central bank agreement. These gold sales to the private sector constitute a so called demonetisation of gold. Sales abroad are not treated as part of the international reserves (currency reserves) category in the balance of payments; as mentioned above, they figure as "other investments" under exports of precious metals in the financial account.”

¹³ Extract from e-mails from Mrs Eika Yamaguchi, Balance of Payments Section, Bank of Japan:

“The treatment of "non-monetary gold" (i.e. gold as goods) in Japan is as follows;

(1) According to explanation of the Cabinet Office, responsible for compiling Japan's national accounts, gold to be held as a store of value (as valuables) is not estimated in Japan's national accounts, because raw data for such gold are not compiled or do not exist.

(2) In the Balance of Payments, exports or imports of gold are compiled and published as "non-monetary gold" under the TRADE BALANCE of goods (such exports and imports for 2003 are 100.7 billion yen and 61.6 billion yen respectively). Exports or imports of gold not crossing national boundaries are counted under MERCHANTING SERVICES (relevant figures are not published, but the figures for 2003 are as much as 7373.1 billion yen and 7340.9 billion yen respectively as mentioned in the BOPTTEG paper).

The former treatment (gold as goods) is based with IMF Balance of Payments Manual 5th Edition (BPM5) and the latter (gold as merchanting) is in line with IMF Balance of Payments Compilation Guide. Both cases in current accounts of Japan's BOP, gold to be held as a store of value and industrial gold are not distinguished (this distinction is proposed by BPM5 only when "if feasible"). As for financial accounts of Japan's BOP, however, we create and publish unique item called Financial Gold (note that this might not be exactly same with the concept of Financial Gold which is now being discussed at BOPTTEG etc.) under OTHER INVESTMENT. This item records gold bought or sold for accounts exclusively used for gold storage or gold investment. Though one of the reasons this item was created under financial accounts was to eliminate fluctuation of trade statistics, scale of the recent transactions is negligible.

(3) In the Flow of Funds, the flows of non-monetary gold are excluded.”

¹⁴ The physical movement of gold into and out of the UK is heavily dominated by the activities of the international gold market in London (see section V) and in most cases is not for end use within the UK. Furthermore much of the physical

the activities of the London Bullion market have not so far been available to treat all or part of the flows as merchandise services trade.¹⁵ This exclusion of the activities of the London Bullion Market was also the accepted practice under the previous BPM4/SNA68 based UK statistics. Gold denominated deposits are included under foreign currency deposits in the financial account, but not separately identified, however the corresponding commodity gold assets held by banks are included but not separately identified under non-financial assets.¹⁶ Allocated deposits of gold are treated as off balance custody holdings and not separately recorded. The UK valuables account of the capital accounts does not include gold holdings by financial institutions and households due to lack of data, but does include those held by non-financial enterprises. The rules for banking supervision explicitly treat gold as a foreign currency, and apply a zero weight to gold denominated assets for capital adequacy calculations.

- e. BIS – The Basle capital adequacy rules for supervision of banks treat gold as a financial asset, and apply a zero weight to holdings of gold. This treats gold as one of the most credit worthy and least risky financial assets available alongside deposits placed with the central bank.
13. In conclusion of the four countries studied, only USA appear to fully follow the current international standards for non-monetary gold. Switzerland, and to a lesser degree Japan (for BOP only) has a wider interpretation of gold as a financial asset, while the UK has been unable to implement the treatment of non-monetary gold due to lack of data on cross border changes of ownership. Practice under banking supervision standards in all four countries however is unambiguously to treat gold as a financial asset.

III CONCERNS AND SHORTCOMINGS OF THE CURRENT STANDARDS

14. The core problem is that the international macro-economic standards are at variance with the financial markets in not treating gold as a financial asset. Inclusion of all transactions between residents and non-residents as imports and exports of goods would seriously distort the economic accounts of those countries with large international markets in gold. Such imports would not represent goods for use in the production process of the country concerned, nor would such exports be the outcome of a production process.
15. The effect on GDP is negligible since any increase in gold inventories or valuables is offset by the negative effect of greater imports of gold and visa versa. Trade in goods as an economic indicator could however be seriously distorted by the existing standards. The UK figures are not known (since Customs only record physical movements, not changes in ownership), but could be as high as three quarters of the existing trade flows. In Japan recorded trade in non-monetary gold in 2003 was 14% of imports and 19% of exports.

movement is custody holdings into and out of bullion depositories, and does not represent a purchase or sale by a UK resident.

¹⁵ The Bank of England will introduce a new quarterly reporting form on gold for members of the London Bullion Market Association commencing from Q1 2005.

¹⁶ This treatment is confirmed by the accountancy guide drawn up by the British Bankers Association, but which also asks those banks heavily engaged in the Gold market to separately identify their assets and liabilities denominated in gold.

16. Secondary shortcomings with the current standards are: a lack of symmetry in the treatment of gold denominated liabilities and assets; and difficulties in applying the definition of merchanting to the international gold markets.

III.1 Gold as a financial asset

17. Throughout history gold has been used as a medium of exchange or directly as money. In time of political social or currency crises this is still true. Prior to the Second World War European individual investors purchased large quantities of gold as an investment/insurance against such turmoil. The same is now true throughout the Middle East and Asia. In more stable countries and circumstances, gold is still traded on the financial markets as a foreign currency and not as a commodity.

18. The case was usefully summarised in Carter, 1993 as follows:

“It is necessary to question whether SNA93’s treatment of all gold, other than that held by the monetary authorities, as either valuables alongside diamonds, jewellery, old masters etc. or a commodity entering a production process pays insufficient regard to the different nature of investment grade gold and its role in some economies. It alone is universally accepted as a means of settlement; gold bars can be divided and reconstituted to match the size of the debt that is being discharged. Surely gold bullion held by financial intermediaries has more in common with high denomination notes and coin, for which there is a daily market, than with antiques, gold jewellery, etc., for which the market price is far more subjective. Investment grade gold behaves like a financial asset – it is readily usable in place of national currency or a claim on a non-resident (which is, of course, what foreign currency notes are) in discharging a debt. Furthermore, it can be used to earn interest.”

19. The definition of a financial asset in the SNA is as follows

A financial asset is an economic asset involving a relationship between units (usually an unconditional creditor/debtor relationship) that provides economic benefits by generating interest income, providing claims on the net income of other units, serving as store of value, or providing holding gains or losses. (SNA ¶11.16-17; MFSM ¶ 119)

A financial asset entitles the creditor to receive payment from a debtor in circumstances specified in a contract between them, or specifies between the two parties certain rights or obligations, the nature of which requires them to be treated as financial. (SNA ¶11.17)

Monetary gold and SDRs are treated as financial assets, by convention.

20. The absence of a corresponding liability to gold as an asset should not be seen as a hindrance to treating gold as a financial asset. Although this is indeed a characteristic of most financial assets, it is not the defining one. Indeed the fact that gold is no one's liability makes it, in this particular sense, a superior financial asset to most others. This is still the prime (albeit not the only) reason why central banks hold gold in their reserves - in other words why it is a monetary asset. It would be illogical for the main characteristic that is responsible for it being a monetary asset to disqualify it from being a financial one. Particularly as the same point applies to the SDR.
21. Gold has a number of characteristics that can make it more like a financial asset rather than a commodity or valuables such as fine art or antiques:
 - a. It is traded on financial markets in an equivalent way to foreign currencies. At any time there is a single quoted and recognised international price based on standard definitions.

It is traded round the clock and can be more easily be bought and sold than any other commodity including other precious metals.¹⁷

- b. Gold is fungible and readily assayed. Any form of gold can be re-processed into standard high quality bars for on sale on the markets.
 - c. The Gold markets are highly liquid. Average turnover in London New York and Tokyo combined is the region of 50 million troy oz per day (worth around \$20bn).¹⁸
 - d. Gold is traded not just in the spot market. There is a highly sophisticated market of secondary and derivative instruments just as would be expected in a financial asset.
 - e. Gold is used for both short-term arbitrage purposes, as well as for savings or long-term holdings.
 - f. Exchange traded funds (where there is a direct link between one share and a specified quantity of gold, which are backed one-to-one by physical gold) are quoted on the relevant stock exchanges and regulated by the appropriate financial authorities (the FSA in the UK).
 - g. There is a gold lending/deposit market and quoted interest rates.¹⁹
 - h. Governments are increasingly recognising gold as a financial asset. There have been movements to equalise its tax treatment with those of other financial assets. Notable examples include the removal of VAT from investment gold purchases by the European Union in 2000 and the recent moves to achieve equal capital gains tax treatment in the USA.²⁰
 - i. There are well-researched and documented arguments as to why gold has a role in an investment portfolio. Notable among these is its role as a diversifier – the lack of correlation of returns on gold to those on equities and the maintenance of this lack of correlation in times of stress. Gold is also a well-known hedge against the US dollar and an inflation hedge.²¹
22. All sectors may trade gold in this way, particularly financial institutions trading amongst themselves. Gold traded as a commodity is bought for end or intermediate use in the production process, for industrial inventories or as a store of wealth.

¹⁷ See references Harmston, 1998, Matthews 2003 and Laurance, 2003. The UK Financial supervision regulations also treat gold as a foreign currency.

¹⁸ LBMA clearing data on the London markets averaged 14.9m oz daily in 2003. There is a considerable amount of netting off in these data and as a rule of thumb market participants would multiply this figure by 3 to arrive at total turnover. The New York and Tokyo markets together average around 6m oz daily. Additional amounts need to be added for trading where the gold is not cleared through London.

¹⁹ Gold is often borrowed, with maturities of several years, from banks by gold mining companies to hedge against price movements or to finance new mining developments. The banks themselves mostly obtain the gold as short-term loans from central banks. The commercial banks are thus playing a traditional maturity transformation role as financial intermediaries in this market. It can also be borrowed, again via a bank intermediary, for arbitrage reasons, eg by hedge funds wishing to capitalise on the very low interest rates for gold denominated funds.

²⁰ The 1978 IMF Articles of Association however limit the role of gold as a foreign currency. Members are not allowed to link their currency in any way to gold, and are supposed to promote the use of SDRs as a reserve currency instead of gold. (see, Ware, 2001).

²¹ See Capie, Mills and Wood, forthcoming.

23. Other precious metals such as silver and platinum do have some of these same characteristics as well. However: they are not as liquid; are not fungible in the same way as gold; and they do not have the advantage of large tradable stocks, which makes the gold market behave in a similar way to a market in foreign currency.

III.2 Lack of symmetry between assets and liabilities denominated in gold

24. Banks and other financial institutions do not feature as end users of gold. They trade gold between sellers and purchasers or borrow and lend it, but they do not hold significant amounts as physical assets. Gold held in their depositories or vaults is mostly other peoples gold held by the bullion banks for safe custody. There are two methods of placing gold with a bank either as an allocated holding or an unallocated deposit:
- a. Allocated gold is a specific and uniquely numbered physical piece of gold, which remains in the ownership of the individual or institution placing it for safe custody with a bank.²²
 - b. Unallocated gold deposits in contrast represent a claim on a fixed quantity of gold (in practice the market price of that quantity on the day of withdrawal). They are treated in commercial accounts and in the macro economic accounts as a foreign currency deposit and a financial liability of the bank concerned. The assets of the bank corresponding to these liabilities will be either physical gold or more often loans denominated in gold made to end users such as gold mining companies.²³
25. Both deposits and loans denominated in gold are financial instruments, but the small quantity of physical gold owned by the banks is classified as a non-financial investment in valuables. However the liquidity of this gold is immediate, unlike any other kind of non-financial asset such as works of art, buildings or computers.
26. An even bigger problem exists in terms of the classification by the assets holder of the deposit liability of a bank denominated in gold. Monetary authorities making gold loans to commercial banks (or equivalently placing gold on deposit with banks) are advised in the international standards to treat this as off balance sheet and to continue to report the gold as part of the official reserves.²⁴ Thus the financial asset recorded in the system and corresponding to the financial liability are different financial instruments (monetary gold and foreign currency deposits respectively).²⁵ This is a fundamental breach of a basic rule of SNA, that all financial assets except monetary gold and SDRs have a corresponding financial liability.

III.3 Goods and Merchating

27. Generally speaking, SNA93 requires trade in gold other than directly between monetary authorities to be treated as imports and exports of goods (valuables). The BoP Compilation Guide Para 138 however advises that the buying and selling of goods, including non-monetary

²² This practice is more common in Europe than in the USA.

²³ The physical gold itself will be sold on the market by the bank to fund a cash loan to the mining company as a form of forward sale. In turn the mining company will provide an equivalent quantity of newly mined gold to the bank at the maturity of the loan period (plus interest). Gold-based financial derivatives are used as part of this process of financial intermediation by the banks.

²⁴ See IMF Guidelines of Reserves, paragraph 99.

²⁵ Gold repos and swaps made by monetary authorities are in contrast treated a collateralised loans and treated consistently in the accounts.

gold, should be treated as merchanting services if the goods do not cross the national boundary of the compiling country. These service transactions are recorded net, valued as the profit or loss made on the sales of the goods. Merchanting is also a category in SNA93, but is not defined there. The manuals indicate that there should be no build up of inventories.

28. However for countries with an international market in gold (such as UK, Japan and Switzerland) there is little correspondence between the activities of traders on the bullion market, cross-border movements of gold, and the concept of merchanting of a good. The identification of a particular shipment of non-monetary gold, which has been purchased from a non-resident and subsequently sold to another non-resident, is not generally possible, nor meaningful. The gold may be brought to London for safe custody without ever being owned by a UK resident, alternatively it may remain in a London vault/depository throughout several transactions. The purchaser on the London market will not usually be the end users and will resell the gold in London, most likely to non-resident traders, who may in turn sell it to non-resident local end users such as jewellery manufactures.
29. Another difficulty with a merchanting solution for international gold markets is the recommended treatment for transactions taking place across two accounting periods. The BOP compilation guide says, *“Entries in the goods component of the BOP will also be required for merchanting transactions in which goods are purchased in one period and sold in another. In the period of acquisition, an import of goods should be recorded. In the period of disposal, a negative import—equal in value to the first period’s entry—should be recorded”*.
30. Since this accounting period is of unspecified length, a literal interpretation would mean that such special import entries in the monthly accounts would not be so recorded in the quarterly accounts, and similarly between quarterly and annual accounts. The purpose of these special import entries is presumably to preclude the build up of inventories of goods by the merchanting trader. Indeed paragraph 262 of BPM5 in the context of merchanting says, *“Changes in stocks held abroad by merchants are excluded.”*

IV PROPOSED ALTERNATIVE TREATMENTS

IV.1 Extend the treatment of gold as a financial asset

31. The proposal to avoid the problems highlighted in the previous section is to reintroduce the SNA68 concept of financial gold, but to restrict it to holdings by and transactions between financial institutions.²⁶ All other gold would be classed as commodity gold. Physical gold (investment grade only) held by financial institutions plus assets and liabilities denominated in gold would all be financial assets. The current category of monetary gold would then become a subset of financial gold. Financial gold would be an asset without a corresponding liability in the overall SNA sector accounts, as with monetary gold at present.
32. The logic of following the market practice, and recognising gold as a financial asset, would be to allow all sectors of the economy to hold gold as a financial asset (as in the SNA68) and to restrict non-financial gold to that being used for industrial purposes. However the reason for the more restricted proposal is that gold can only be a financial asset by convention rather than by nature since it is the liability of no sector of the economy. The purpose for undertaking gold transactions by non-financial sectors is different. They are either producers, end users or end

²⁶ This proposal is similar to that made in a recent paper from the Bank of Japan (reference 10), and to an earlier proposal from the Shirley Carter of UK prior to the finalisation of the European System of Accounts 1993 (reference 6).

investors: producing gold, using it in the production process or investing in a ‘valuable’ as a precaution against political, economic or financial turmoil and which always can be resold in times of need. There is also a practical aspect to the proposed restriction. The main non-financial sector actually holding gold as a store of wealth is the household sector, and no country has yet been able to accurately measure this and include it in their estimates of sector balance sheets.

33. In contrast, financial institutions dealing in gold (other than the Monetary Authorities) are intermediating in a financial market for gold. Transforming maturity, counterparty and currency risk in the process just like any other financial instrument. They match their asset and liability positions in gold either directly or via the use of financial derivatives. They do not hold gold as a valuable or inventory in the same sense of the concept as defined in SNA. There is a case for excluding financial institutions that are long term investors, such as pension funds and insurance companies, from the group who are permitted to hold financial gold, but that case is not developed further here.
34. Under the proposal in this paper, sectors of the domestic economy, other than financial intermediaries, would continue to hold commodity gold as a valuable or for intermediate consumption as at present.²⁷ When a financial institution sells gold to a non-financial institution the gold would be demonetised to a valuable first, and the subsequent transaction would be a transaction in commodity gold. If one end of this transaction involves a non-resident then it would be recorded as imports or exports of commodity gold. Similarly monetisation of gold would occur after the purchase of commodity gold by a financial institution from a non-financial institution.
35. One consequence, of such an extension to the financial asset boundary in SNA and BPM, would be a need to measure any corresponding service earnings on dealings in financial gold by financial institutions. The correct treatment would be the same as for dealings in securities and foreign currency - the spread earnings between actual bid and offer prices excluding any holding gains/losses plus any explicit fees and commissions.
36. The treatment of gold loans (deposits) placed with financial institutions by central banks also needs to be clarified in the manuals to ensure consistency between recording by asset and liability holder. One option would be for the monetary authorities to record a reduction in physical gold and the creation of a foreign currency deposit (denominated in gold), to match the liability in foreign currency deposits reported by the banks. Alternatively both sides could treat it as an off balance sheet transaction in the same way as “stock lending” transactions. Under such a treatment, banks would need to record short positions in gold when they on-sell gold acquired from central banks in this way.²⁸ The focus of the Reserves Template Guidelines is on the asset side: the liabilities side also needs to be articulated.

IV.2 Merchancing²⁹

37. Should the proposal above not find favour with the international experts, a mechanism is needed to cater for those countries that have international markets in gold. And for which

²⁷ Financial derivatives and bank deposits/loans denominated in gold would however continue to be financial assets as in the current international standards.

²⁸ The choice between the above two methods of ensuring symmetry of treatment is part of a wider SNA/BPM debate about the correct treatment of a range of reversible transactions in the accounts.

²⁹ A recent paper from the Bank of Japan (reference 11) highlights these and other anomalies with the definition of merchancing but comes to a different conclusion. The flows should be reported gross as merchandise trade, except for financial gold.

treatment as imports and exports would not be meaningful. As already explained, the BPM5 compilation guide recommends a merchanting treatment for such markets. A modification to the definition of merchanting in BPM5, at least in the case of international gold markets, would help to facilitate this.

38. Merchanting should be defined in terms of purchases from and corresponding sales to non-residents by a resident enterprise without any intention of holding the goods as inventories or valuables for any significant period of time. The current link to no physical movement of the gold into, or out of, the country performing the merchanting operation should be removed (at least for the case of international gold markets). A reasonable assumption would be that the net value of all gold transactions by resident financial institutions with non-residents would be included in merchanting. Resident end users would in most cases buy their gold from resident dealers. This is fully consistent with the definitions and concepts of assets and liabilities in the economic accounts. Physical movement of goods is only a proxy for the underlying economic concept of change of ownership.
39. Secondly the special import entries recommended when merchanting transactions overlap into two accounting periods should be reconsidered. Better to say directly in the definition that merchanting transactions are intended as purchases and sales without any build up of inventories. Any incidental holding gains or losses could be adjusted for in the calculation of the net service earnings of the merchanting operation.
40. A separate Issues paper on Merchanting is being prepared by the IMF. If it is decided to continue the current concept of merchanting with no exception for the international gold markets, a new "gold" item could be introduced under the merchanting heading to cover all gold dealing net transactions.

V SUPPLEMENTARY INFORMATION

V.1 The World Gold Market

41. Gold Fields Mineral Services Ltd produce the only regular and reliable statistics on world supply and demand in the gold market (see references). They are reproduced in summary form on the website of the World Gold Council and shown in tables 1 and 2 below. In these tables the supply side includes net figures for gold borrowed for mining companies (gold hedging) as this is physically available for purchase on the market.³⁰
42. The current stock of gold in the world is estimated at 150,000 tonnes (end 2003) worth around 1.8 trillion dollars at end 2003 prices. New supply from mines continues to add to this stock without any significant losses. Gold unlike most other commodities is not used up in the process of production. Thus the stock is about 40 times annual demand. This is one of the key factors, which make its price, and supply-demand, behaviour different from any other commodity including other precious metals and gems. New supply from stock can appear relatively quickly in response to a price rise.
43. Gold has different end uses, the main ones being:
 - a. *Jewellery* – around 51% of the current gold stock and around just under 80% of its annual demand (although see below).

³⁰ Negative in recent years as companies are unwinding long-term positions on forward sales of gold borrowed in past years when the price of gold was falling. See also footnotes 19 and 23.

- b. *Industrial and medical (dental)* - around 11% of stock and 11% of annual demand.
- c. *Monetary* – ie reserves of central banks and other international official institutions – around 22% of total stocks.
- d. *Private investment (bars and coin)* - Accounts for 16% of the stock and on average around 13% of annual demand.³¹

Table 1 World Gold Supply and Demand (tonnes)

tonnes	2003	% change 2003 vs 2002	03.Q3	03.Q4	04.Q1 ¹	% change 2003 vs 2002
Supply						
Mine production	2,593	0.1%	706	640	584	-2.5%
Net producer hedging	-310	-26.6%	2	-56	-85	-31.8%
Total Mine supply	2,283	5.3%	708	584	499	5.1%
Official sector sales ²	617	13.1%	153	170	96	-26.8%
Old gold scrap	945	13.0%	210	240	221	-19.0%
Total Supply	3,845	8.3%	1,071	994	815	-7.1%
Demand						
Fabrication						
Jewellery	2,532	-5.6%	651	640	606	4.5%
Industrial & dental	385	7.1%	95	98	100	6.7%
Sub-total above fabrication	2,917	-4.1%	746	739	706	4.8%
Bar & coin retail investment ³	314	-15.8%	75	83	102	45.2%
Total Demand	3,231	-5.3%	821	821	808	8.7%
Balance⁴	614	-5.3%	249	173	8	-94.2%

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Notes to table 1

1. Provisional.
2. Excluding any delta hedging of central bank options.
3. Bar hoarding plus medal, official coin & imitation coin fabrication.
4. This is the residual from combining all of the other data in the table. It includes institutional investment, stock movements and other elements as well as any residual error.

³¹ Bars of one kilogram or less of 995 fineness or more that are purchased by investors; or coins minted after 1800 which are not less than 900 fineness, are or have been legal tender in the country of origin and are not sold for more than 180% of the value of their gold content.

Table 2: World Gold Demand (\$bn)

	2003	% change 2003 vs 2002	03.Q3	03.Q4	04.Q1 ¹	% change 2003 vs 2002
Fabrication						
Jewellery	29.57	10.8%	7.60	8.05	7.96	21.3%
Industrial & dental	4.50	25.6%	1.11	1.24	1.31	23.8%
Sub-total above fabrication	34.07	12.6%	8.71	9.29	9.27	21.6%
Bar & coin retail investment ²	3.67	-1.2%	0.88	1.04	1.34	68.4%
Total Demand	37.74	11.1%	9.59	10.33	10.61	26.0%
Balance ³	7.17	431.0%	2.91	2.17	0.10	-93.3%
London PM fix (US\$/oz)	363.32	17.3%	363.16	391.06	408.44	16.0%

Source: World Gold Council calculations based on GFMS data

44. Gold is used as an investment in the private sector in various ways. First of all around 50-60% of annual demand for gold jewellery is considered as “investment jewellery”. In much of Asia and the Middle East jewellery is purchased not just as a means of adornment but also as a form of saving. Such jewellery is typically high carat (varying according to tradition in the country concerned from 21 to 24 carat – 24 carat being pure gold). It will have been bought by weight according to the ruling gold price plus a small margin. Such jewellery is frequently traded in either for cash or in exchange for another piece. The use of jewellery as savings is common in rural areas (where banking systems may be limited). It is particularly important to women in more traditional Hindu and Muslim cultures where a woman’s jewellery may be the only asset she can own in practice.
45. The second way in which gold is used as an investment is the purchase of small coins and bars by retail investors. In Asia and the Middle East such gold would be bought as a means of saving for similar reasons to jewellery. In Japan gold can be bought under a Gold Accumulation Plan, which is a form of regular, contractual savings for private individuals. In addition high net worth savers often buy kilobars and it is noticeable that such purchases increase when there are fears of bank failure or when economic/and political concerns increase.

V.2 The London Bullion Market

46. The London gold bullion market is the largest spot market for gold in the world and only deals in large wholesale quantities – it is estimated that as much as three quarters of the gold traded on international markets is traded via London. The standard size of bars traded in London is larger than most end users except monetary authorities would wish to buy.³² The buyers and sellers on the market are therefore largely gold producers, monetary authorities and specialised bullion banks. As of July 2004, there were 8 major specialised bullion banks registered as market makers in gold with the FSA and the LBMA, of whom 5 handle the clearing of behalf of all other members of LBMA.

³² Minimum traded amounts are 1,000 troy ounces. Delivery is in the form of standard bars each weighing around 400 troy ounces (about 12 kilos) of 995 or higher fineness and valued at about US\$160,000 each in May 2004.

47. The London price which is fixed twice daily in US\$ per troy ounce is the international standard reference price upon which the prices in other gold markets and all financial contracts involving gold are based. The prices specified include good delivery in London (known as loco London).³³ Gold is thus often physically moved to London and out of London when bought and sold even when both seller and purchaser are non-UK residents. More usually the gold will not move at all, since it might already have been stored in London, or arrangements made for it to remain in a vault elsewhere.³⁴
48. The Financial Services Authority regulates all gold dealers in the market as financial institutions. The London market itself follows a code of conduct drawn up under the auspices of the Bank of England. This is known as the Non-Investment Products code (NIPS) and applies to dealing in foreign currencies including 'gold'.

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³³ Good delivery means that it must be one of a specific range of bars, of minimum 995 fineness, produced by a specified gold refinery. The London Bullion Market Association produces this list. In addition 'good delivery' must be to one of a specified list of bullion depositories, all located in London.

³⁴ UK Customs data on the physical movement of gold (not included in UK trade statistics) show gold valued at UK£5,154 million entering the country in 2002 and UK£914 leaving the country, about 2% of the value of published imports and exports of goods.

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BALANCE OF PAYMENTS TECHNICAL EXPERT GROUP (BOPTTEG)

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Treatment of Gold in Balance of Payments Statistics

Prepared by International Department
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Treatment of Gold in Balance of Payments Statistics

1. Characteristics of Gold Transactions by Japanese Residents

In order to understand the characteristics of transactions in gold and to find out proper treatment in balance of payments statistics, the Bank of Japan conducted a study on activities of cross-border transactions in gold performed by Japanese residents. Following are the main findings of the study:

- (1) The magnitude of transactions in gold traded without any cross-border physical shipment is much larger than that of international gold shipments with Japan's trading partners (see table 1 below). Transactions in gold without cross-border physical shipment involve gold that is deposited in metal accounts with a financial corporation in London; transfer of ownership is conducted by the settlement in those accounts.

Table 1. Transactions in Non-monetary Gold in Japan's Balance of Payments Statistics

(100 million yen)

	Non-monetary gold shipped across Japanese border			Non-monetary gold without physical shipment ¹ (figures for internal use)		
	Balance	Export	Import	Balance	Export	Import
1997	-656	265	922	-1,635	34,337	35,972
1998	-664	245	909	-1,240	33,287	34,527
1999	-644	416	1,060	-169	36,148	36,317
2000	-147	465	612	173	27,901	27,727
2001	-37	398	435	320	31,559	31,239
2002	-452	471	923	-155	41,376	41,531
2003	391	1,007	616	310	73,731	73,421

Note: Figures for non-monetary gold without physical shipment have not been published.

¹ Gold bullion (including 90 % or more fine gold) purchased and sold by residents without physical shipment.

(2) Japanese trading firms rather than financial corporations handle most transactions in gold that don't involve physical shipment. Three major trading firms concentrate more than 90 percent of transactions of gold without physical shipment (see table 2 below). Historical reasons explain that these trading firms have played an important role in transactions in gold in Japan. After the World War II, the Japanese government banned exports/imports of gold so that national saving could be used to develop emerging industries. After the deregulation of gold transactions in the 1980's, non-bank traders started dealing with international gold traders. Meanwhile, in 1982, banks were allowed to sell gold in retail markets, but were not allowed to get into wholesale gold markets. This measure was aimed to protect small non-bank gold traders. Large trading firms, such as Mitsui Corporation and Mitsubishi Corporation, took advantage of this fragmentation of the gold market, and expanded their transactions in gold into wholesale markets using their large capital funds.

Table 2. Market Share of Major Trading Firms for Non-monetary Gold without Physical Shipment in Japan

(100 million yen)

	Export		Import	
		Three major Japanese trading firms		Three major Japanese trading firms
Amount transacted	6,574.05	6,067.62	6,633.04	6,090.74
Market share (%)	----	92.3	----	91.8

Note: Figures for September 2004. Figures for three major Japanese trading firms have not been published.

(3) Most transactions of trading firms are forwards on gold. They are taking advantage of arbitrage opportunities on the OTC forward market in London, and on those between the OTC forward market in London and the future market in Tokyo Commodity Exchange. It follows that positions on forwards on gold are supposed to be offset at the time of the delivery date; however, the transfer of ownership of gold in metal accounts does not usually occur unless there are exceptional circumstances.

(4) Wholesalers of gold that import gold for industrial purposes do not engage in forwards in gold. They usually import gold using consignment contracts with Swiss banks and sell it to manufacturing firms in Japan when they deem it necessary. Since there are different ends to the use of gold and gold is fungible merchandise, gold

wholesalers do not distinguish gold held for its storage value and gold held for other purposes, e.g., used in the industry.

2. Current Treatment of Gold in Japan's Balance of Payments Statistics

Currently, settlements of forward transactions of gold are treated as merchanting transactions in Japan's balance of payments statistics. This is irrespective of whether they are settled by cash transfer or ownership transfer of gold in metal accounts. There are several reasons that explain why we adopted this treatment.

First, it was understood that classification under merchanting was the relevant item for transactions that involve change in ownership without physical shipment; the *Balance of Payments of Compilation Guide* (paragraph 138) explicitly refers to selling and buying of nonmonetary gold as being a merchanting transaction. This element is further confirmed by the *Balance of Payments Textbook*, that speculative gains or losses realized from transactions in commodity arbitrage are also recorded under merchanting (paragraph 361).

In this connection, reclassifying nonmonetary gold without physical shipment from trade in goods to trade in services was considered appropriate, as this could reduce the volatility of the figures of trade in goods. Before implementing the recommendation of *BPM5*, all settlements of gold without physical shipment were recorded as trade in goods on a net basis since 1983. Balance of payments figures of gross credits and debits were volatile and excessively inflated with successive purchases and sales, and recording transactions on a net basis could mitigate this problem.

Second, there was still ambiguity in international guidelines on the treatment of forwards on commodities. We regarded forwards on gold as fixed-price contracts, which should be excluded from financial derivatives as discussed in *Financial Derivatives A Supplement to the Fifth Edition (1993) of the Balance of Payments Manual*.

Third, because data sources had several limitations, it was considered difficult to distinguish between settlements by cash transfer and settlements by ownership transfer of gold in metal accounts. As a consequence, we decided to view net amounts of reported

figures as margins for merchanting transactions.

These reasons explain why initially transactions on gold were reported under merchanting transactions. However, we believe now that this approach needs to be revisited.

3. Revision of the Treatment of Gold in Japan's Balance of Payments Statistics

Given that forwards on gold are dealt by Japanese trading firms for arbitrage purposes, such forwards are considered to be offsetable and fall within the boundary of financial assets. According to the *Financial Derivatives Additions to the Fifth Edition (1993) of the Balance of Payments Manual*, offsetability means that it is often possible to eliminate the risk associated with a derivative by creating a new but “reverse” contract having characteristics that countervail the risk of the first derivative.

Settlements on gold should be treated as transactions in financial derivatives, rather than merchanting transactions. Thus, as positions are settled by cash transfers, the outstanding positions should be simply debited or credited under financial derivatives. When positions are settled by ownership transfer of gold in metal accounts, the ownership transfer of gold should be recorded at the current gold price, while the difference between the forward and current prices is debited or credited under financial derivatives.

A remaining and very important issue is how to treat the transfer of ownership of gold to settle forwards when deliveries occur under exceptional circumstances. We believe that it is not relevant to go back to pre-*BPM5* treatment and record it as trade in goods on a gross basis, since transfer is executed simply in metal accounts and is not consistent with the concept of trade in goods. A solution would be to treat the transfer of ownership of gold using metal accounts as financial transactions. This is exactly the reason why we support the creation of a financial gold item, distinct from non-monetary gold and gold as a reserve item.

4. Distinction between Gold and Other Precious Metals

One may argue that forwards on other precious metals, such as platinum and silver, as well as other commodities can be traded the same way as forwards on gold in balance of payments statistics and international investment positions. How could forwards on gold be treated differently from forwards on other precious metals and commodities?

The *International Reserves and Foreign Currency Liquidity Guidelines for a Data Template* states that forwards on gold should be included in the item of other reserve assets. Based on the *Guidelines*, it seems appropriate to include only forwards and options on gold that the monetary authorities used for the management of reserve assets.

We have the following arguments in favor of making a clear case between forwards on gold and forwards on other commodities.

First, forwards on other precious metals and commodities are not necessarily offsettable due to the lack of market liquidity. Therefore, such forwards fall outside the boundary of financial assets. Most forwards on other precious metals and commodities can be regarded as fixed price contracts for goods, because such forwards are not standardized so that the market risks therein can be traded in financial markets in its own weight.

Second, most forwards on gold are aimed for financial investment (including arbitrage), while most forwards on other precious metals and commodities are directly linked to procurement of those materials. Investment in other precious metals and commodities are performed in future markets, rather than OTC forward markets, with some exceptions (e.g., forwards on other precious metals in London Metal Exchange). As a result, the price of gold is affected by macro-economic circumstances, whereas prices of other precious metals are primarily affected by demand in industries.

Third, gold itself has characteristics of financial assets. For example, gold has been used as means to store value due to its fungibility and high liquidity in its market.

5. Conclusion

We recommend that a new item of financial gold be clearly established in the financial account. The definition of financial gold should be gold deposited with financial corporations, such as metal accounts London, without physical shipment (especially across borders). Such category broadly corresponds to gold used for investment/speculation by financial corporations and trading firms.

The item of monetary gold, which is held by monetary authorities, should be kept because the scope and use of monetary gold is slightly different from that of financial gold. Although part of monetary gold is deposited with overseas central banks, it may include gold shipped across borders and kept in own vaults by monetary authorities.

For nonmonetary and nonfinancial gold, the subdivision of gold held as a store of value and other (industrial) gold should be deemphasized, given the fungibility of gold. Gold held as a store of value can be easily converted into other (industrial) gold and vice versa, subdividing nonmonetary gold into these two items is not feasible or meaningful.