

Working Towards a Common Accounting Framework for Gold

Prepared by Kenneth Sullivan

Presented at CEMLA's "XV Meeting on Central Bank Accounting and Budgetary Aspects" –
May 25-27, 2016

Working paper / 16 / 05

About the World Gold Council

The World Gold Council is the market development organisation for the gold industry. Working within the investment, jewellery and technology sectors, as well as engaging in government affairs, our purpose is to provide industry leadership, whilst stimulating and sustaining demand for gold. We develop gold-backed solutions, services and markets, based on true market insight. As a result, we create structural shifts in demand for gold across key market sectors. We provide insights into the international gold markets, helping people to better understand the wealth preservation qualities of gold and its role in meeting the social and environmental needs of society. Based in the UK, with operations in India, the Far East, Europe and the US, the World Gold Council is an association whose members include the world's leading and most forward thinking gold mining companies.

Central Banks & Public Policy

The Central Banks & Public Policy Programme at the World Gold Council provides regular insights, research, and high-level advisory and technical assistance to policymakers and reserve asset managers at central banks and finance ministries. We deliver in-depth analysis assessing how gold can help to support the long-term wealth preservation of nations by providing diversification against other reserve assets and as a hedge against tail risks. Our research assists reserve asset managers in determining the optimal strategic allocation to gold based on both domestic and international considerations. Members of the team are regular contributors to public and closed-door discussions on the role of gold in reserve asset management.

About the author

Kenneth Sullivan is a former Senior Financial Sector Expert with the International Monetary Fund. Previously, he spent seven years at the Reserve Bank of New Zealand as Chief Manager of both Accounting and Corporate Services where the bank won accounting prizes for the transparency of its published financial statements. Prior to that he provided a financial management information system consultancy, held senior accounting roles in insurance and wholesaling, and worked in education.

Starting in 1993, he served as central banking expert on IMF missions, providing technical assistance in accounting, risk management and recapitalization to central banks around the world. He presented at central bank accounting workshops and participated in Financial Sector Assessment Program and Safeguard Assessment missions. He has written on issues of central bank financial reporting, capital adequacy, organization and accountability. He is a qualified Chartered Accountant of New Zealand. He has served as the IMF's representative on the International Financial reporting Standards Advisory Council and currently chairs a range of annual central bank accounting study groups addressing issues of transparency in central bank financial reporting and balance sheet strength. In 2008, he completed a six-month secondment to a London bank where he worked on issues of structured financial instruments.

For more information

Please contact Central Banks & Public Policy Programme:

Natalie Dempster

natalie.dempster@gold.org
+44 20 7826 4707

Ezechiel Copic

ezechiel.copic@gold.org
+1 212 317 3806

Contents

- I. Introduction
- II. The Revaluation of Gold
- III. Observed Practices in Accounting for Gold
 - Cost
 - Fair Value through Profit and Loss (FVTPL)
 - Fair Value to Reserves via Profit
 - Fair Value to Reserves through Other Comprehensive Income (FVOCI)
 - Fair Value Direct to Reserves
 - Fair Value Direct to Non-Equity Revaluation Account
 - Financial Fixed Asset
- IV. Towards a Common Central Bank Practice
- V. Outstanding Issues
 - Not Reporting Realised Revaluation Gains through Profit and Loss
 - The Treatment of Debit Balances
 - Disclosures Regarding Gold Holdings
 - Cost of Sales for Monetary Gold
 - How Central Banks Account for Non-Monetary Gold
- VI. Summary
- VII. Appendix
 - Classification of Gold Holdings
 - Summary of the Financial Statement Effect of the Seven Observed Practices
 - Example of Each Operational Approach

I. Introduction

The management of a country's foreign exchange reserves is a common central bank function. The central bank may manage these as principal, and so carry the reserves on their balance sheet, or as an agent, in which case the reserves sit on the books of the Ministry of Finance. In either situation, the composition of the foreign reserves include foreign currency cash, securities and, for around 100 central banks, monetary gold.^{1,2} A central bank holds foreign exchange reserves to ensure the country's access to foreign currency in the case of a crisis that restricts the supply of foreign exchange through market disruptions. Guidelines for investing foreign exchange reserves give priority to the characteristics of liquidity, solvency, and return.

When managing its foreign exchange reserves, a central bank is typically concerned about the current value of foreign exchange available to the central bank. Hence, market value is the driving principle when accounting for, and reporting on, foreign reserves – though, as will be seen, some banks report their gold holdings at cost. Assuming the bank has invested in liquid and solvent assets, for which deep and liquid markets exist, it should be able to access the current market value of these assets in the event of a need to draw on them. Certainly, the IMF's Balance of Payments Manual³ mandates the reporting of all foreign reserves at market values, also referred to in this paper as fair value.

Central bank accounting for foreign currency and securities at fair value⁴ is widely practiced. Although central banks may recognise the foreign currency revaluation movements in their income statements, the usual practice is to transfer the unrealised revaluation elements to some form of revaluation reserves, thus excluding them from distributions to stakeholders, usually the government.⁵ This requirement to avoid distribution of unrealised revaluations is a critical element in the accounting for foreign reserves and generates, as the paper shows, a wide variety of accounting practices. It is important that the two aspects of fair value measurement and non-distribution of the unrealised revaluations are considered together.

When it comes to accounting for monetary gold, the situation is more complicated than in the accounting for foreign currency cash or for liquid financial instruments.⁶ First, the market for gold differs from those that exist for the world's reserve currencies and the sovereign securities denominated in these currencies. Large sales by central banks can move gold's market price, thus raising the question regarding whether market value is, in fact, the most appropriate valuation for this asset.⁷ The existence of the Central Bank Gold Agreement (CBGA) indicates that material central bank transactions in gold have the ability to disrupt the market.⁸ Second, and perhaps because of the first reason, central banks do not frequently trade gold. Rather, they hold it as a strategic asset in their reserves portfolio, creating a risk diversifying element in the portfolio that reduces volatility due to a degree of negative covariance with exchange rate movements. Thirdly, International Financial Reporting Standards (IFRS) specifically state that gold is not a financial instrument, but rather a

¹ The International Monetary Fund (IMF)'s Balance of Payments and International Investment Position Manual (BPM6) defines monetary gold as "gold which includes gold bullion and unallocated gold accounts with non-residents that give title to claim the delivery of gold." The manual goes on to state that "gold bullion takes the form of coins, ingots, or bars with a purity of at least 995 parts per 1,000, including such gold held in allocated gold accounts".

² Some central banks may hold foreign equities and even property though they usually hold these assets within an investment portfolio or sovereign wealth fund (SWF). The asset split between foreign reserves and SWFs are not consistent across banks.

³ Balance of Payments Manual 6. Paragraph 3.84.

⁴ Fair value of foreign reserves consists of movements in the asset's price and the exchange rate in which it is denominated. While central banks reflect the exchange rate movement using current exchange rates, there is a mixture of fair value and amortised cost in the valuation of securities.

⁵ The accounting for foreign cash and securities is covered under IFRS in IAS 39 (IFRS 9 post 2018) and IAS 21, while the European system of central banks (ESCB) have developed their own accounting framework for these transactions.

⁶ Page 20 includes a discussion of the differences between monetary and non-monetary gold and the ways that central banks account for their non-monetary gold holdings.

⁷ Markets quote gold prices in troy ounces while central banks transact in terms of tonnes.

⁸ As discussed in the paper, some central banks apply a discount on market value to recognise the potential impact of any large scale sales. See III. Observed Practices in Accounting for Gold.

commodity and should be accounted for accordingly.⁹ Also, while it is clear that monetary gold is not a financial instrument, IFRS is not specific that gold qualifies as a currency. If gold is not a currency, then it qualifies as a non-monetary item under the standard covering foreign exchange (IAS 21).¹⁰ Although the world has yet to universally adopt IFRS, its principles increasingly provide the basis for national accounting frameworks where IFRS is not the default framework. The convergence between IFRS and the US' Generally Accepted Accounting Principles (GAAP) provides a broadly similar framework on accounting for gold holdings.¹¹

As a result of these factors, central banks adopt a variety of approaches in their accounting for gold and the treatment of the revaluation gains and losses arising from it. This paper reviews the different approaches to gold accounting demonstrated by central banks and will discuss the elements of a common approach for central banks.

The paper is not a discussion of the principles governing the composition of foreign reserves portfolios, but accepts that many central banks find it appropriate to hold gold as part of their reserves portfolio. The discussion focuses on the accounting for gold holdings. The paper surveyed the financial statements of 98 central banks and two international financial institutions that hold gold (BIS and IMF) to ascertain their accounting. All the information in the paper comes from published financial statements or annual reports.¹²

II. The Revaluation of Gold

The current accounting for gold reflects a broader issue for central banks. This covers the treatment of gold revaluations on the liability side of the balance sheet and whether or not they are distributable. This issue may be of more significance than the actual value of the gold asset. Central banks hold all assets for either policy or operational purposes. Profit maximisation is not a central bank objective, though optimisation against a given benchmark may be a requirement for the foreign reserves management function. Central banks hold their foreign exchange reserves, including gold, on a strategic basis with an objective of maintaining the ability to intervene in accordance with the scope and scale of their foreign reserve policy guidelines.

Within this framework, the treatment of unrealised revaluations presents an ongoing issue across most central bank asset classes. Generally accepted accounting frameworks, such as IFRS, adopt a profit-oriented approach where the default expectation is for reporting realised and unrealised revaluations through profit and loss. This is particularly the case for the financial assets that provide a material share of most central bank's asset holdings. Exceptions do exist where the entity is not required to account for revaluations (amortised cost) or is able to allocate some revaluations directly to equity (financial securities classified as available for sale).

In addition to the changes in the asset's price is the effect of changes in the value of the currency in which the central bank reports that asset. This effect is likely to be bigger than the price movement. Functional objectives usually require central banks to hold material open foreign exchange positions. This mismatch in currency composition on different sides of the balance sheet results in considerable balance sheet volatility due to movements in exchange rates between national and foreign currencies.¹³ In this situation, the requirement to report all foreign currency revaluation adjustments through profit and loss, results in the reflection of balance sheet volatility through the profit and loss statement, thus creating considerable noise that impairs the reporting of functional outcomes.

⁹ IAS 39 IG B1. Defines gold bullion as a commodity. "Although bullion is highly liquid, there is no contractual right to receive cash or another financial asset inherent in bullion".

¹⁰ IAS 21 *Foreign currency* defines a foreign currency as a currency other than the functional currency of the entity.

¹¹ The US Federal Reserve does not strictly follow US GAAP as it diverges where it believes such departures will enhance transparency.

¹² Of the 100 sets of financial statements reviewed, 69 provided enough information to enable an assessment of their gold accounting policy. The remaining 31 provided insufficient information, did not publish audited financial statements, or did not publish them in English.

¹³ Central banks can reduce this mismatch by managing the reserves on an agency basis, thus keeping the assets off their books, or by holding off setting foreign currency liabilities from the ministry of finance (see Reserve Bank of New Zealand).

Unrealised revaluations present a problem for central banks in the foreign reserves function, due to the time inconsistency of the accounting cycle with the investment horizon. As noted, central banks seek to hold their assets through any business or currency cycle with the objective of maintaining their ability to intervene when required. Hence, the recognition of unrealised revaluations is not of any policy significance, unless distributed. Rather, their recognition provides noise in reporting functional performance. Unrealised revaluations provide a buffer to cover future reverse revaluation movements through the business or currency cycle. As such, any recognition of them as profit is inconsistent with the functional focus of central bank reporting.

Additionally, any distribution of unrealised revaluations to the stakeholder may be in direct conflict with the central bank's policy objectives, and, in most cases with the central bank's legal framework. Such a distribution reduces the real value of the central bank's net assets. From a policy perspective, the distribution of unrealised gains to the stakeholder, usually the government, represents the economic equivalent of free credit to government, an action generally explicitly forbidden in standard central bank laws. As the distribution of unrealised gains is not matched by a neutralizing withdrawal of resources from the domestic economy it results in an increase in broad money as the government starts to spend the distribution. Assuming the central bank is in an anti-inflationary stance [not a universal assumption in the current monetary framework] the bank will need to intervene to sterilize this distribution. Hence, the unrealised gains distribution can be inconsistent with the policy stance.

As a default starting position, most central banks base any distributions on a concept of realised profits.¹⁴ Central banks arrive at the concept of realised profits through two basic approaches. First, they report their profits using a recognized accounting framework, and then they adjust the reported profits to arrive at a definition of realised profits on which they base their distributions. Alternatively, the central bank will adopt an accounting standard that excludes unrealised revaluations to arrive at a measure of realised profit. The European System of Central Banks (ESCB) accounting guidelines offers the most comprehensive example of this approach. Some central banks adopt a hybrid combination of these two approaches. Although many central banks adopt IFRS as their reporting framework, there is a growing discussion on its appropriateness as a central bank framework, with the issue of the treatment of realised and unrealised revaluations being a key issue in the discussions.

Gold offers a particularly good example of the challenge in this situation. It is an asset that never matures and one that individual central banks trade infrequently. A key consequence is the accumulation of large unrealised revaluation reserves. It is also an asset that for all banks, except the US Federal Reserve, has a value that contains elements of asset price and exchange rate revaluations.¹⁵ The discussion on central bank accounting for gold will reflect the broader discussion and will relate observed central bank practices back to the issues involved in this discussion.

III. Observed Practices in Accounting for Gold

In the absence of satisfactory international accounting guidelines for gold, central banks have adopted a variety of responses when developing an accounting policy for gold. A previous article by PWC described the difficulties of accounting for monetary gold under IFRS and discussed possible reporting alternatives.¹⁶ The difficulties are associated with the IASB's explicit definition of gold bullion as a commodity, rather than as a financial asset, plus the requirement to report all foreign exchange revaluation gains and losses on monetary items through profit and loss. The PWC article remains relevant so this paper accepts its discussion and focuses on current central bank practices. These approaches have included treating gold as a commodity, as a foreign currency, as a financial fixed asset and, despite the prescriptions of IFRS, as a financial asset through profit and loss, as well as

¹⁴ The definition of realised profits is a technical issue. IFRS 13 BC 198, broadly discusses the distinction between realised and unrealised gains and losses, but central banks need to develop their own specific definitions of realised gains and losses. Several central banking operations, such as FX portfolio rebalancing and the use of FX swaps for monetary operations, produce realised accounting profits that central banks do not wish to include in distributions from a capital maintenance perspective.

¹⁵ The exception would also apply to any bank that adopts the US dollar as its reporting currency.

¹⁶ *Accountancy's Golden Puzzle*, Chris Sermon (PWC), Central Banking Journal, Volume XVI number 1 – August 2005

through other comprehensive income. The research for this paper has observed evidence of all these approaches but has also found an even wider variation of practices than those observed in the useful PWC article.

This paper accepts all the displayed approaches to the accounting for monetary gold as credible in that they all gained unqualified clearance from the relevant external auditors and were consistent with each central bank's disclosure framework. The discussion describes each practice and comments on its impact, and how it complies or diverges from the IFRS framework. The paper adopts the IFRS framework as a basis for comparison as this is the most widely understood framework, rather than the paper supporting it as the preferred framework for central banks in this instance.

The default approach for the recognition of gold is at its fair value at the time of acquisition, which in most cases equates to its original cost (i.e. the price paid to acquire the gold). Subsequent to acquisition, however, a central bank must decide whether to value its gold reserves at cost (either historic or modified/deemed) or at fair value (i.e. market value). Only a few central banks use the cost approach to value their gold, while the majority use fair value. Of the 69 banks reviewed, 9 used the cost method, while 60 favoured the fair value approach.

Under historic cost, the central bank reports the value of the gold at the U.S. dollar value adjusted for the exchange rate movement with the national currency at the purchase date. Some institutions, such as the US Federal Reserve, report gold under a modified historic cost basis in which the bank aggregated previous purchases over a period of time and restated the historic cost at the current value at that time and have not subsequently revalued. In the case of the Federal Reserve, the bank holds gold certificates against the physical asset that resides with the US Treasury. The certificates report the value of the gold at \$42/toz.¹⁷ In another case, a conflict situation destroyed the bank's gold records and so, on the reconstruction of its records the bank reported its gold, using the value of the gold at the date of the reconstruction, as a "deemed cost" basis.

More widespread is the use of fair value or modified fair value when accounting for gold. Strong reasons exist for central banks to account for gold at fair value, as it is consistent with their foreign reserves accounting and provides a closer approximation of the level of liquidity accessible as compared to cost. Central banks using full fair value will value their gold at the gold price on the reporting date (or last trading day) and translate this value to the national currency at the prevailing exchange rate to the US dollar. Typically, most central banks use either the morning or afternoon London Fix as the reference price of gold.¹⁸ Ideally, those whose gold is either not of London Good Delivery (LGD) quality or is not held close to a gold exchange should discount the valuation for the cost of refining the gold to LGD standard or transportation.¹⁹ For example the Central Bank of Argentina discounts the price of its gold by a "cost of sales" margin to reflect the cost of getting the gold to a saleable form in a recognised market.²⁰ Interestingly, a few central banks use the closing price adjusted for a price discount to provide a hidden reserve to cover small volatility. This use of discounted market value provides a modified fair value. For example, the Reserve Bank of India uses 90 percent of fair value.

The central issue for central banks regarding the accounting treatment of their gold, however, is less about whether to use cost or fair value, but on how to account for the unrealised revaluations arising from the use of fair value. Specifically, the reporting of unrealised revaluation gains (or losses) presents a problem. Rather than being income in the commercial sense of a profit-orientated entity, it is a buffer used to maintain the central bank's ability to use its asset to achieve its policy objectives. Strong financial reasons exist for central banks to retain these unrealised earnings, but the challenge appears to be how to account for these revaluations in a way that is transparent and consistent with their accounting framework, but results in their exclusion from reported income and distributable

¹⁷ Gold prices are quoted at USD per Troy ounce (12 troy ounces = 1 pound troy, 1 troy ounce = 31.1 grams)

¹⁸ The Central Bank of Peru disclosed that it uses the New York price.

¹⁹ See Appendix I for discussion on London Good Delivery.

²⁰ There are four major international gold exchange markets: London Gold Market, America Gold Market, Zurich Gold Market and Hong Kong Gold Market and around 40 smaller markets. Each market has an upper limit in the volume of physical gold it may transact in any single transaction.

earnings. This issue is not limited just to accounting for gold, but to the whole of the foreign reserves portfolio, of which monetary gold is just one element. It is part of a broader issue of what comprises a central bank's economic income. Two related asymmetries compound central banks' adoption of fair value. These are the imbalance between foreign assets and liabilities and the asymmetric application of fair value on the two sides of the balance sheet.²¹ A further asymmetry exists in the fact that central banks distribute profits, but enjoy no automatic reciprocal compensation for losses. This explains central bank's focus on their capital structure, the need to maintain appropriate buffers and the specific provisions for recapitalisation in their laws.²²

Central banks adopt a variety of approaches for accounting for unrealised revaluations for gold – research for this paper revealed seven distinct approaches, though several had variations within them. Of note, only those central banks who regarded gold as a fixed asset made any effort to separate the price and foreign currency effects of the revaluations.²³ Conversely, those valuing gold at cost made no subsequent translation adjustments, thus its value is the cost in national currency terms at the date of acquisition. Although procedurally different, most shared the same ultimate objective of excluding unrealised gold revaluations from distributable earnings in order to maintain capital buffers, either recognised or hidden.

The paper classifies the seven approaches as follows:

Method	Number of Central Banks
1. Cost	9
2. Fair Value through Profit and Loss (FVTPL)	3
3. Fair Value to Reserves via Profit	11
4. Fair Value to Reserves through Other Comprehensive Income (FVOCI)	14
5. Fair Value Direct to Reserves	7
6. Fair Value Direct to Non-Equity Revaluation Account	25
7. Fixed Asset	0 ²⁴

Cost

For those central banks reporting at cost, modified cost or deemed cost, there is no recurring impact in any of the financial statements as the gold is stated at the national currency value applying at the time of purchase. The use of cost means that any revaluations accumulate as “hidden reserves” that the central bank will only disclose through notes to the accounts, and then only if the bank follows a disclosure framework that requires these, or through the reporting of the gold at fair value through its IMF-mandated balance of payments disclosures.

IFRS Compliance

This approach is fully IFRS compliant. IAS 2 requires the recognition of commodities at the lesser of cost and net realizable value (unless the entity is an active trader in the commodity). Under IAS 21, gold as a commodity is a non-monetary item that IAS 21.23(b) states shall be translated “using the exchange rate at the date of the transaction.”

²¹ Central banks typically carry a large balance of foreign currency assets with no matching foreign currency liabilities. This creates a large open FX position that exposes the balance sheet to volatility on exchange rate movements. Also, under IFRS fair value applies disproportionately to the asset side of the balance sheet. Valuation of the bulk of central bank liabilities is at cost. So the asset side of the central bank balance sheet experiences much greater exchange rate and fair value volatility.

²² In this context, it is important to recognise that all distributions effectively increase the domestic money supply and so, to some extent, impact monetary policy and central bank policy expenses.

²³ Common discussion of this approach refers to treating gold as a financial fixed asset. This description is technically incorrect but the reference to gold as a fixed asset is made in the same sense as the popular discussion refers to it as a financial fixed asset.

²⁴ Although the author is aware of central banks that use (or have used) this approach, it has proven difficult to confirm specific examples due, in part, to the lack of financial statements available in English. Nonetheless, the author has chosen to include this method, as it has been a valid option used by central banks and because it illustrates the practice, employed by some central banks, of accounting separately for the asset price and FX components of the changes in the value of monetary gold.

A conceptual argument exists in support of a central bank using historic cost for its accounting as the central bank can influence both the exchange rate and interest rate that have a direct impact on the value of their balance sheet assets and reported income, should their accounting framework require recognition of unrealised gains as a component of income. The use of historic cost removes the incentives for gaming either the balance sheet or profit and loss. Indeed, the use of historic cost can be very effective, but also singularly non-transparent. However, most banks have found that the enhanced transparency on the asset side of the balance sheet through the use of fair value has better informational effects than the retention of historic cost.

Fair Value through Profit and Loss (FVTPL)

Although most central banks use fair value when accounting for gold, only three use FVTPL without a specific requirement to transfer revaluations from net income to specific revaluation reserves. In this approach, banks disclose their revaluations through the operating income section of the consolidated statement of profit and loss and comprehensive income, and aggregate it with realised income. Both the Swiss National Bank and the Central Bank of Argentina provide examples of banks that account for gold holdings at fair value through profit and loss and include these revaluations in the calculation of distributable earnings. This is equivalent to accounting for gold as a currency.

IFRS Compliance

This approach is non-compliant with IFRS in that IAS 39/IFRS 9 defines gold bullion as a commodity. As the central bank is not a trader in this commodity, the standard accounting is as inventory (IAS 2) at the lower of cost or net realizable value.²⁵ If monetary gold meets the definition of a currency, then the accounting for monetary gold as a currency complies with IAS 21 requirements to report fair value changes through profit and loss. However, if it doesn't then the monetary gold is a non-monetary item and the revaluation should go through Other Comprehensive Income (OCI).²⁶

In the situation where a central bank closely follows IFRS, and regards gold as a currency or financial asset at FVTPL, all elements of any revaluation would go through profit and loss as required under IAS 39/IFRS 9 or IAS 21. Central banks operating in mature economies where stakeholders have a sophisticated understanding of the nature of the central bank's economic income manage this situation without disruption to policy efficiency. They achieve this by transferring unrealised revaluations from reported profit to unrealised revaluation reserves, before determining earnings that are available for distribution either to realised capital reserves or as dividends to the government. In these situations, a good practice is for central banks to develop a statement of distributions that reconciles the reported IFRS-determined net profit to distributable earnings. The Reserve Bank of Australia provides a good example of this (see Box 1 below).

Box 1: Reserve Bank of Australia Annual Report (2014)			
Statement of Distribution – for the year ended 30 June 2014			
Reserve Bank of Australia and Controlled Distributed as follows:			
	Note*	2014 (\$M)	2013 (\$M)
Net Profit		9,392	4,333
Transfer from/(to) unrealised profits reserve	5	640	(3,796)
Transfer from asset revaluation reserves	5	-3	
Entity Earnings available for distribution		10,035	537
Transfer to Reserve Bank Reserve Fund	5	8,800	537
Payable to the Commonwealth –	3	1,235	

²⁵ IAS 39 IG B1.

²⁶ The issue is not clear cut as IAS 21 (30) states "When a gain or loss on a non-monetary item is recognised in other comprehensive income, any exchange component of that gain or loss shall be recognised in other comprehensive income. Conversely, when a gain or loss on a non-monetary item is recognised in profit or loss, any exchange component of that gain or loss shall be recognised in profit or loss."

The above statement should be read in conjunction with the accompanying notes. Comparative figures for the financial reporting period ended 30 June 2013 have been restated for the revised accounting standard AASB 119 – Employee Benefits (refer Note 1(l)).

*The notes refer to the notes to the accounts in the 2014 financial statements

Fair Value to Reserves via Profit

In this approach, central banks disclose their revaluations through the operating income section of the consolidated comprehensive income statement.²⁷ The unrealised revaluations are included in the reported net profit (loss) figure before the disclosures of other comprehensive income. Each of the eleven central banks in this group have requirements in their central bank laws that mandate the transfer of these revaluations to non-distributable unrealised revaluation reserves in equity before the central bank determines any distributions to government.

This approach seems to best match treating gold as a separate currency under IFRS. There is a single valuation for the item that combines the price and currency valuation movements that, as required under IAS 21, reports the revaluations through profit and loss.²⁸ If a central bank wishes to adopt this approach and avoid the requirement to distribute these revaluations it will require specific clauses in its law, or regulations that explicitly exclude these revaluations from inclusion in distributable earnings.

For central banks who apply IFRS, this non-distribution of unrealised revaluations would be consistent with their treatment of unrealised revaluations for other foreign exchange reserves. It is also consistent when accounting for financial instruments at fair value through profit and loss. The net effect of this approach will depend on the currency and instrument structure of other items on the balance sheet. In a situation where gold provides a hedge on currency movements (e.g. against the USD), an appreciation of the value of gold would offset currency losses arising from a strengthening of the USD. This can reduce net reported exchange rate volatility in the income statement.²⁹ However, if the gold holdings are materially larger than the USD exposure then the gold price movement will increase the reported profit volatility. This is less a problem of accounting for gold than it is an example of the larger problem facing central banks regarding accounting for unrealised revaluations.

IFRS Compliance

If the central bank is able to define monetary gold as a currency, then it complies with IAS 21 requirements to report exchange rate changes through profit and loss. However, it is problematic if monetary gold does not meet the IFRS requirement for a currency. The mandatory allocation from profit to reserves is a non-IFRS issue as IFRS is not definitive on profit distribution issues.

Fair Value to Reserves through Other Comprehensive Income (FVOCI)

Central banks adopting this approach avoid including the unrealised revaluations in reported profit by including it as an element of other comprehensive income (OCI).³⁰ As with all other items of OCI, the valuation gains from this approach reside in an unrealised revaluation reserve in equity. As such, the accounting approach excludes the unrealised revaluations from distributable earnings and thus does

²⁷ Statement of Profit and Loss and Other Comprehensive Income, as defined in IAS 1

²⁸ IAS 21 The Effect of Changes in Foreign Exchange Rates.

²⁹ How central banks account for unrealised revaluation losses will affect this outcome. The offset is most pronounced where central banks can net gains in one currency against losses in another or are allowed to accumulate debit balances in their unrealised revaluation reserves.

³⁰ The Consolidated Profit and Loss and Other Comprehensive Income Statement is structured to provide the two totals highlighted below

Income and expenses from continuing operations
NET PROFIT from continuing operations
Plus Other Comprehensive Income
TOTAL COMPREHENSIVE INCOME

not require any specific amendments to the law. This is not usually a major issue as central banks need such clauses to cover unrealised revaluations from other foreign currency portfolios.

This approach parallels the treatment of available for sale (AFS) financial instruments described under IAS 39.³¹ Gold is treated as a financial instrument in the national currency and the revaluation combines the commodity and currency elements of the revaluation as a single price change. Use of this approach becomes more restricted under IFRS 9, the replacement for IAS 39 from 2018 onwards.

IFRS Compliance

As with FVTPL, this approach is non-compliant with IFRS in that IAS 39/IFRS 9 defines gold bullion as a commodity.³² If the gold is considered as another currency then it is non-compliant with IAS 21 as it takes revaluations directly to reserves. However, if the gold is considered as a financial instrument denominated in the national currency then the treatment is consistent with IAS 39 treatment of financial assets classed as FVOCI. However, it is not compliant with IFRS 9, as the only instruments that may be classed as FVOCI are a limited holding of equities or debt instruments that have cash flows that are solely payments of principal and interest (SPPI).

Fair Value Direct to Reserves

In this approach, adopting central banks report their gold holdings at fair value, but allocate the revaluations directly in a revaluation reserve in equity. There is no equivalent IFRS treatment for financial instruments. It serves to directly remove revaluations from any considerations of distributions. Seven central banks report using this approach in their financial statements, with the disclosure appearing in their Statement of Changes in Equity, if they produce such a statement.

IFRS Compliance

IFRS does not sanction the direct allocation of any valuations to reserves. Disclosure through the statement of Changes in Equity is inappropriate as the valuation changes are not a direct transaction with shareholders.

The preceding three treatments all result in central banks reporting their monetary gold at fair value with the resulting revaluations ending up in a non-distributable revaluation reserve within equity. The differences lie in the path that the revaluations follow, one through net profit, one through other comprehensive income and the third directly to the reserves.

Fair Value Direct to Non-Equity Revaluation Account

Under this approach, the central bank reports its gold at fair value, but assigns the revaluations directly to an unrealised revaluation account that is not included in the equity section of the balance sheet. This treatment is subject to some interpretation for central banks aiming for IFRS compliance as the revaluation account does not meet the IFRS definition of a liability. In such situations, the central bank's accounting framework may consider the account as a quasi-equity account rather than as a pure liability and disclose it between the liabilities and equity sections of the balance sheet.

Due to the adoption of this approach by the European System of Central Banks (ESCB) it is the most widely practiced, covering 25 central banks, though not all belong to the ESCB.³³ Central banks show different levels of integration of this approach into their overall accounting frameworks. For the ESCB central banks, this approach is consistent with the accounting for other elements of foreign currency and financial instrument revaluation accounting, while others are less closely integrated.

The effect of this approach is for unrealised revaluations to bypass all elements of net profit and capital and is consistent with their ESCB accounting framework, which considers the provisions as

³¹ IAS 39 – Financial Instruments: Recognition and Measurement

³² IAS 39 IG B1. Defines gold bullion as a commodity. "Although bullion is highly liquid, there is no contractual right to receive cash or another financial asset inherent in bullion"

³³ Four banks are from outside Europe, and the remainder are within Europe, though not necessarily euro members

specific buffers for gold price valuation volatility.³⁴ This approach reflects a desire to prevent the distribution of unrealised revaluations. The South African Reserve Bank offers a slight variation. It values its gold at fair value, but allocates the revaluations to a GFECRA³⁵ account that is a government deposit, which has been non-distributable to date.

IFRS Compliance

This approach equates gold to a foreign currency, but it is non-compliant with IAS 21 in non-reporting of FX revaluations through P&L, and non-compliant with IAS 39/IFRS 9 in the allocation directly to non-equity valuation accounts. Also, IFRS has no concept of the quasi-equity accounts this approach adopts.

Box 2: European System of Central Banks

As discussed earlier, the European Central Bank and its member national central banks developed an approach that excludes most unrealised revaluations from the definition of income and reports all unrealised revaluations as accounts in a separate liability classification outside of a clearly identified core realised capital consisting of paid up capital from the members and dynamic realised general reserves.

ECB – 31 December 2014:

	Note*	2014	2013
Provisions	14	7,688,997,634	7,619,546,534
Revaluation accounts	15	19,937,644,696	13,358,190,073
Capital and reserves	16		
Capital	16.1	7,697,025,340	7,653,244,411
Profit for the year		988,832,500	1,439,769,100

*The notes refer to the notes to the accounts in the 2014 financial statements

The ESCB accounting guidelines cover those aspects of central bank accounting deemed to be inappropriately covered by national accounting guidelines due to consistency, comparability, or appropriateness for ECB reporting. This framework, developed before the international acceptance of the full IFRS framework, is conceptually sound and appropriate for the ESCB.

However, despite its internal consistency and relevance for central banks, this report does not recommend the widespread adoption of the ESCB accounting guidelines for several reasons. First, the ECB developed the ESCB framework to address the specific arrangement of multiple national central banks together with a supra-national central bank, in which the national central banks are shareholders. This creates difficulties in migrating the framework to single central banks. Secondly, while the ESCB framework is consistent, it involves a material departure from IFRS – a departure that results in major differences in financial statements that may seem lacking in transparency to readers trained in an IFRS framework. This paper will suggest that alternatives exist that require a less dramatic departure from IFRS. This treatment is perhaps more appropriate in the current environment where central banks are guided towards as close a compliance to IFRS or national standards as possible.³⁶

Treatment as a Fixed Asset

³⁴ The exception is the situation where insufficient revaluation balances exist to cover losses in which situation the bank reports excess revaluation losses in the profit and loss statement.

³⁵ Gold and Foreign Exchange Contingency Reserve Account (GFECRA) is a government account used for currency revaluation of gold and foreign assets.

³⁶ The author strongly supports central banks adopting reporting frameworks that enjoy international recognition. Experience has demonstrated that the use of IFRS has provided central banks strong protection from criticism of selective reporting. The drive for central bank specific alternatives to IFRS rests on the fact that in some circumstances IFRS may present perverse incentives and obstacles to optimal policy configurations. Alternate accounting options will only survive if the same set of variations enjoy consistent widespread endorsement and adoption from a wide set of central banks.

A final approach is to treat the monetary gold as a fixed asset. The author is aware of central banks that use (or have used) this approach, but it has proven difficult to confirm this fact, due in part to the lack of financial statements available in English.³⁷ Nonetheless, the author has chosen to include this method, as it has been a valid option used by some central banks and because it illustrates the practice, employed by some central banks, of accounting separately for the asset price and FX components of the changes in the value of monetary gold. This approach attempts to adopt IAS 16, the standard for property, plant, and equipment (fixed assets) to account for monetary gold.³⁸ This approach regards gold as a long term asset used to discharge the bank's functions over multiple periods. As it is not "consumed" during production or exercise of the reserves management function it does not require depreciation. In that sense it is like land and can be accounted for in a similar fashion. In the example observed, the central bank separated the asset price and the foreign exchange elements of the gold accounting, and assigned price movements to equity reserves and foreign exchange movements to profit and loss. The bank adopting this approach had clauses in their law to prevent distribution of the unrealised foreign exchange element. IAS 16 enables the exclusion of asset revaluation gains from distribution until realisation.

IFRS Compliance

If one accepts the fixed asset concept then the treatment of the price element of the gold revaluation is IFRS compliant by disclosing the asset price element through OCI, but the disclosure of the FX revaluations through Profit and Loss is in breach of IAS 21 (30) that states "When a gain or loss on a non-monetary item is recognised in other comprehensive income, any exchange component of that gain or loss shall be recognised in other comprehensive income".

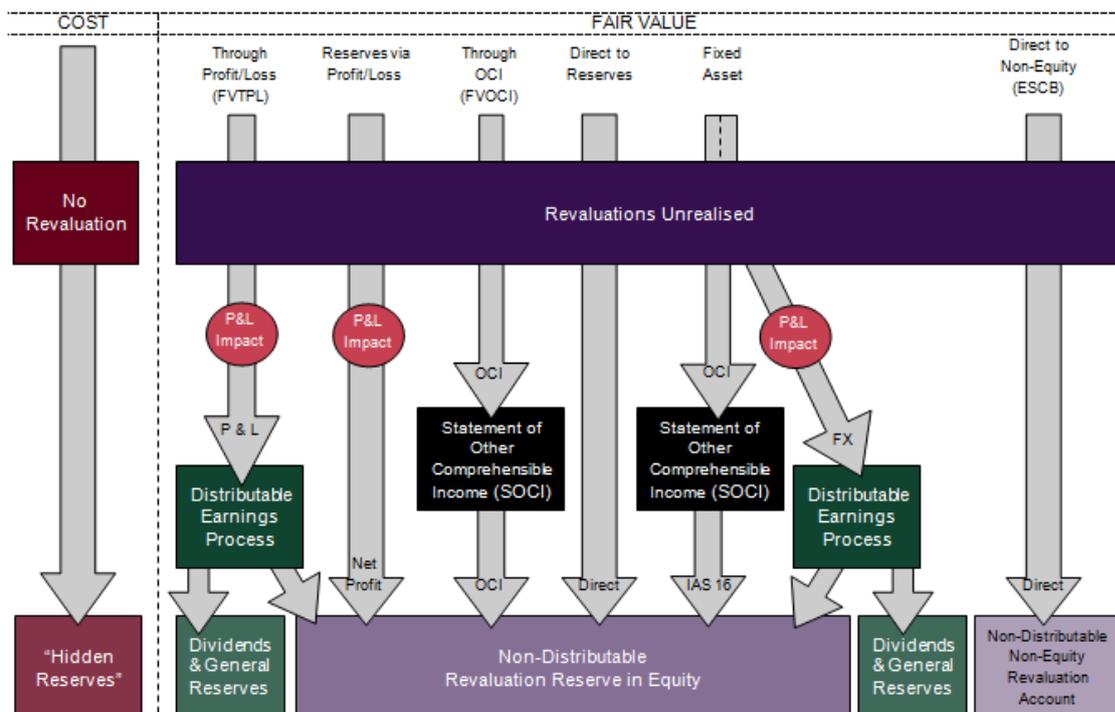
If a central bank wishes to account for its monetary gold as a fixed asset, then it should comply with IAS 21(30) and report both price and FX valuations through OCI. This will produce disclosures and flow of revaluations similar to the Fair Value to Reserves through Other Comprehensive Income (FVOCI) approach discussed above, but may better comply with IFRS as the central bank is treating the gold as a fixed rather than financial asset. The separation of the price and FX elements in the revaluation approach assigns unrealised revaluations to separate price and FX revaluation reserves both within equity. A central bank using this approach should try and treat revaluations in a manner consistent with IAS 16 and its internal policies on realised and unrealised revaluations.

Summary

The following graphic illustrates the impact on the financial statements of the various approaches. A table in Appendix II further describes these effects and provides a numeric example.

³⁷ The paper was able to survey 69 of the 100 central banks that hold monetary gold.

³⁸ IAS 16 Property, Plant, and Equipment.



IV. Towards a Common Central Bank Practice

For some central banks, the accounting for gold at cost will remain relevant and appropriate due to their specific legal, political or economic circumstances. As seen from the preceding discussion of the approaches, this is the only one that is fully compliant with IFRS. All of the other treatments involve a divergence from IFRS as each seeks to reconcile the demands of disclosure and compliance with IFRS. The internal logic of the ESCB accounting guidelines makes their current accounting for gold consistent with their financial reporting framework and thus excludes itself from the inclusion in any proposed common accounting approach for monetary gold. However, for the other central banks, agreement on a common accounting framework may assist them in defending the integrity of their accounting framework where they depart from recognised international frameworks in the search of more appropriate accounting treatment for their gold holdings.

Such an approach requires the establishment of a separate accounting policy for monetary gold that, by its very nature, will not be IFRS compliant, but may provide a common reporting framework to address the IFRS deficiencies in this area. This will require the disclosure of monetary gold as a separate item in the balance sheet as this will be the only item to which the accounting policy applies. The proposed policy seeks to minimise the departures from the spirit of IFRS, while resolving the issues this paper describes. The development of the concept of other comprehensive income (OCI) within IFRS provides a possible alternative to central bank accounting for gold that allows its recognition at fair value, but excludes the unrealised revaluations from recognition in profit and inclusion in distributions.

The proposed approach, largely consistent with one already followed by some central banks, will consider monetary gold as a financial asset denominated in local currency. The central bank recognises monetary gold at fair value and takes all revaluations through OCI to a dedicated gold revaluation reserve within equity. The statement of accounting policies and notes to the accounts will require disclosures of the gold accounting framework to differentiate between monetary and non-monetary gold and cover issues of recognition and revaluation.

The proposed recognition of gold as a financial asset denominated in local currency, accounted as FVOCI, continues the current departure from IAS 39/IFRS 9 that central banks already widely adopt. Under past and present behaviour, external auditors and the general body of readers of central bank

financial statements understand and endorse this departure from IFRS. As a financial asset at FVOCI, the central bank discloses the unrealised valuation changes in the Statement of Other Comprehensive Income (SOI), below the section determining net profit from continuing operations (see footnote 30) and assigns these to a dedicated revaluation reserve that the bank may only use for accounting for gold valuation changes. The proposal considers all value changes as price changes, thus avoiding the application of IAS 21 for foreign currency movements.

As with existing approaches, the proposed treatment does not comply with IFRS, but the paper believes the advantages of the proposed approach are:

- maintaining consistency of recognition and valuation of gold as a foreign reserve asset with other foreign reserves accounting
- although not technically IFRS compliant, financial statement readers will understand the gold accounting treatment within the IFRS conceptual framework³⁹
- presenting monetary gold at fair value as a separate asset on the face of the balance sheet
- disclosing unrealised valuation changes in the SOI
- ensuring the exclusion of revaluations from distributions
- creating non-distributable revaluation reserves as part of equity that are more consistent with the IFRS framework than quasi-equity accounts
- achieving transparency in the reporting of gold accounting.

As an asset at FVOCI, the revaluation reserve will differ from the traditional central bank foreign currency unrealised revaluation reserves. Instead, it will resemble the revaluation reserves created out of revaluations of financial assets classed as AFS or for fixed assets measured under fair value. That is because the accounting creates these reserves before arriving at net profit, rather than as allocations from profit. There can be no direct netting or offsetting with other revaluation accounts. Under IFRS these reserves may carry negative balances if the central bank judges that the negative balances are only temporary.⁴⁰ The paper discusses this issue further in Section V- Outstanding Issues.

Within assets classified as FVOCI, IFRS prescribes different treatments of realised gains and losses for those assets considered debt instruments and those equities not held for trading.⁴¹ This paper proposes that the gold accounting treats realised gains on gold in the same manner as for debt instruments, though a subsequent section discusses the alternative. This requires the reporting of all realised gains and losses through profit and loss. Thus when central banks sell gold they would disclose any revaluation gains or losses realised in the sale in their net profit where it becomes part of the basis for determining distributable earnings.

The concept of realised gains creates issues for central banks that require them to develop clear policies on realisation. The issues arise from central banks' policy actions that result in a nominal realisation of gains and losses that the bank does not consider should be net profit available for distribution. Examples of such transactions arise from portfolio rebalancing when the central bank undertakes strategic rebalancing between currencies in its foreign reserves portfolio. The accounting for the rebalancing may generate realised gains that the bank is not in a position to distribute. Another arises when the bank undertakes FX swaps as a monetary policy instrument. The accounting for this may also create nominal realised revaluations.

Central banks need a policy to address this situation. Some central banks exclude the nominal realisations arising from these transactions from their definition of realised gains and losses. An alternative is to include them in the reported realised gains and losses, but exclude them from calculations of distributable earnings. Resolution of this point is beyond the scope of the paper, but

³⁹ Although not technically IFRS compliant, the approach maintains the IFRS belief in measuring assets at economic value, disclosure of changes of value through the SOI, and requiring appropriate transparency through statements of accounting policies and notes to the accounts.

⁴⁰ This does not apply to assets accounted for under IAS 16 Plant, Property and Equipment.

⁴¹ For equities held as not for trading as FVOCI, any realised gains or losses on derecognition are not recycled through profit and loss, but pass directly to retained earnings.

the paper does recommend that a central bank's treatment of realised gold gains and losses is consistent with its policy of realised gains and losses for all financial instruments.

A remaining issue is the treatment of any debit balances in the unrealised revaluation reserve for monetary gold. As monetary gold does not normally suffer impairment losses (loss in the inherent quality of the asset), all losses on the asset are revaluation losses and will pass through to the revaluation reserve. Central banks will need to decide whether to carry debit balances in these unrealised revaluation reserves as temporary, or follow the IAS 16 requirement of forbidding debit balances. (Section V discusses this issue in more detail).

In summary, the paper recommends the following position for central banks to account for their holdings of monetary gold. Central banks:

- recognise gold as a financial instrument denominated in their national currency
- classify gold as an asset held at fair value through other comprehensive income
- report all fair value changes through the Statement of Other Comprehensive Income and assign them to a dedicated monetary gold unrealised revaluation reserve
- report all realised gains and losses through profit and loss
- develop a policy regarding the distribution of realised revaluation gains
- process any adjustment to a debit balance in the gold revaluation reserve as an allocation of distributable earnings.⁴²

Adopting this approach enables the reporting of gold at fair value, avoids reporting gold valuation changes through profit and loss, excludes unrealised revaluations from distributable earnings, allocates such revaluations to a dedicated revaluation reserve, and provides a transparent disclosure of the revaluation movement on the face of the principal statements. Although not fully IFRS compliant, the policy applies existing IFRS concepts to arrive at a treatment that is consistent with IFRS disclosure objectives.

Box 3: How Central Banks Account for Unrealised Revaluation Reserves

Underlying the paper's framework have been assumptions regarding the treatment of unrealised revaluations. Central bank capital frameworks follow a general structure of realised and unrealised capital elements. Realised capital elements (statutory capital as they are defined in the law) consist of authorised capital and general reserves (and the subsets of retained earnings) The unrealised revaluation reserves consist of those created from the application of accounting standards and those created from the allocations from reported profit when creating distributable earnings.

Central banks allocate revaluation reserves for gold accounted for at FVTPL and foreign exchange revaluations from reported profit to revaluation reserves. This may be a single omnibus reserve or individual reserves created according to financial instruments or currency. Neither IFRS nor any national accounting framework prescribes accounting for these post-profit reserves, but rather are a matter of central bank internal policy. Banks may allow netting of all the various balances or, as in the case of the ESCB, prescribe strict limits preventing credit balances in one reserve offsetting debit balances in another.

Under IFRS, those revaluation reserves created by reporting revaluations through FVOCI have strict rules limiting the use of the balances in these reserves to offsetting losses in the assets they cover. For example, those entities that apply fair value to fixed assets (IAS 16 Property, Plant, and Equipment) must maintain separate revaluation accounts for each asset rather than for the class of fixed assets.⁴³ Applying the

⁴² In the common central bank legal framework, the charging of a large debit balance to distributable earnings could consume all the available distributable earnings. In this situation, the framework allocates the residual distributable earnings debit balance against existing statutory capital (general reserves) that in turn may trigger the law's recapitalisation mechanism.

⁴³ Under IAS 16, realised gains and losses arising from disposal are allocated directly to retained earnings from where the bank may distribute them according to its earnings distribution policy. They are not recycled through profit and loss. As described in IFRS 9, debt instruments at FVOCI require the recycling of realised gains and losses through profit and loss. The different

recommended approach to monetary gold will result in the creation of a dedicated unrealised revaluation reserve for gold that will apply solely to gold valuation movements. Several central banks already follow this approach so it should offer no problems to auditors.

Given that central banks cannot offset this account with other revaluation balances presents a challenge to central banks. For disclosure purposes, probably the easiest approach is to maintain the separate revaluation reserves within the accounting ledger, but present them as a net figure in the financial statements. This will allow the central bank to present the hedging effect of valuation movements in gold prices against the currency(s) that it is hedging.

V. Outstanding Issues

Not Reporting Realised Revaluation Gains Through Profit And Loss

A limited alternative exists within IFRS 9 to reporting (recycling) realised revaluation gains and losses through profit and loss. This section examines this approach and its suitability for central banks use in gold accounting. IFRS 9 allows an entity to class equities not held for trading as FVOCI. Unlike debt instruments, any revaluation gains and losses on disposal of these items are not recycled through P&L, but rather allocated directly to retained earnings.⁴⁴ The common practice of long-term holding and low levels of trading offers a justification for classifying monetary gold as a strategic asset, and thus assigning realised revaluations directly to retained earnings. Although this approach would avoid the need to identify which of its realised profits the bank would need to report through P&L, it raises several issues concerning accounting consistency, transparency and distributions.

This approach would be difficult to justify for other elements of the foreign reserves portfolio and so would diverge from other aspects of foreign reserves accounting, if adopted. Being able to directly allocate realised gains and losses to retained earnings makes it easy for a bank to minimise the transparency of any realisation as, under the current IFRS reporting framework, it would only appear as a change in balances in the Statement of Changes in Equity. The paper believes that more transparent ways exist to report the realisation of potentially large gains, or losses.

The final issue with this alternative concerns distributions. This is less of an accounting than a conceptual issue regarding the nature of central bank financial independence and the composition of payments to government. Valid arguments exist as to why central banks should not have to distribute any realised gains to government, just as there are counter arguments regarding the government having a legitimate claim to surplus value from the central bank. Allocating realised revaluations directly to retained earnings would raise technical issues regarding determining the pool of distributable earnings if the law did deem them to be distributable.

The paper notes that this is an open question. If central banks elect not to recycle realised gains then it would enhance the importance of the statement of distributions discussed earlier. The substantive discussion this issue requires belongs within the broader study of accounting standards for central banks. At this stage, the paper supports the recycling of realised gains and losses back through the P&L because of the enhanced transparency this approach offers, and the ease of its integration with the majority of existing central bank capital frameworks. Also, it offers closer compliance with the central themes of IFRS. However, the paper acknowledges the merits of the alternative approach.

The Treatment of Debit Balances

Despite the practices advocated within this paper, one of the main issues outstanding is the treatment of debit balances in a monetary gold revaluation reserve. For example, a central bank that purchased gold at US\$1,800/toz would have a material unrealised revaluation debit balance in their gold revaluation reserve with gold at its current price near US\$1,200/toz. How should they treat this? IFRS

treatment probably reflects the fact that under IAS 16 the entity has been amortising the asset value through depreciation charges, a feature not applicable to financial assets.

⁴⁴ IFRS 9 5.7.1 requires that an entity shall recognize the gain or a loss on a financial instrument in profit and loss except for 5.7.1(b) when the instrument is an equity instrument not held for trading under 5.7.5.

requires that all revaluation reserves hold unrealised revaluations until the asset's disposal and only allows the writing off of long-term revaluation losses before derecognition in the event of impairment of the asset. Near the other end of the scale is the ESCB's model where the revaluation reserve can absorb revaluation losses until it reaches a zero balance, after which realised profit and loss absorbs further losses.⁴⁵

Central banks which maintain a single revaluation reserve that cannot have less than a zero balance maintain a hybrid system. Effectively, their policy allows the maintenance of debit balances in notional individual revaluation reserves until the sum of the debit balances exceeds the sum of the credit balances in the other revaluation reserves.

Resolution of this issue presents an outstanding challenge to central banks. All options present difficulties and different solutions will suit some central banks better than others. All are likely to require changes to bank accounting procedures or to the central bank law. A simple prohibition on debit balances in any revaluation reserve policy, as per the ESCB approach, is probably most appealing to central banks as it provides the strongest defence of its capital position. However, a policy that adopts a non-negative net revaluation reserve accounts' balance will reflect the current position of many central banks. The author believes a strong argument exists for accepting debit balances in the individual revaluation reserves through the life of the price cycle, though the discussion is beyond the scope of this paper.

Any solution to the question of debit balances should seek to be as consistent as possible with the central bank's accounting framework. For most, this would prevent recycling back through the profit and loss any debit balance to be written off. The appropriate treatment would be for the central bank to present the write off of any debit balance as a charge against distributable earnings that the central bank would disclose in a Statement of Distributions, such as the one presented earlier in Box 1. Under an IFRS framework, such an approach would preserve the central bank's generally IFRS consistent reporting of profit.⁴⁶

Disclosures Regarding Gold Holdings

Another outstanding issue regards the disclosures of central bank gold holdings. When reporting its gold holdings, a central bank needs to consider both the objectives of its disclosures and compliance with the relevant accounting framework. Generally, central banks report their assets on a foreign and domestic basis, or on a liquidity basis in compliance with IAS 1.⁴⁷ Under the currency split, treating gold as a foreign currency financial asset will see it disclosed with other foreign currency assets. This presentation provides the reader of the financial statements with an indication of gross foreign reserves holdings, along with a measure of the central bank's open foreign currency position. Both are useful information when understanding its function and performance. This presentation requires the separate reporting of monetary and non-monetary gold holdings.

On the liquidity basis of presentation, monetary gold may rank as less liquid than foreign deposits, and both domestic and foreign securities. As a strategic asset, the central bank may consider monetary gold illiquid, though this is not a characteristic of a foreign currency reserve asset. The author found a variety of locations for monetary gold's disclosure in balance sheets prepared on the liquidity basis. Where central banks account for monetary and non-monetary gold on separate bases it should disclose them as separate items on the balance sheet. Monetary gold requires disclosure as a separate financial instrument, while other domestic assets can contain non-monetary gold or other precious metals disclosures. The author found the disclosures of the National Bank of the Republic of Macedonia provided a transparent example of presentation within a foreign currency then liquidity hierarchy.

⁴⁵ The extreme end of this scale would be where the central bank has a policy of only allocating revaluation gains to the revaluation reserve with profit and loss absorbing all revaluation losses regardless of any credit balance in the revaluation reserve.

⁴⁶ The only divergence would be the original classification of monetary gold as a financial instrument.

⁴⁷ Upcoming amendments to IAS 1 provide more room for professional judgment in determining balance sheet presentation

**Box 4. National Bank of the Republic of Macedonia
Financial Statements for the year ended 31 December 2013**

Balance sheet extract

ASSETS	Note*	2013 MKD (000)	2012 MKD (000)
Foreign currencies	17	16 85,949	182,714
Foreign currency deposits		10,472,874	25,913,801
Foreign securities	18	100,157,657	91,809,082
Gold	19	11,722,686	16,974,141
Special Drawing Rights	20	204,253	75,050
Foreign assets		122,643,419	134,954,788

*The notes refer to the notes to the accounts in the 2013 financial statements

When researching information on central bank gold holdings, the author found disclosures surprisingly incomplete and inconsistent. IFRS mandates minimum disclosures (often incomplete in the statements), but for a reader to gain a full understanding of the nature of a central bank's gold holdings the statement of accounting policies and notes to the accounts should provide, or allow the calculation of, the following:

- purpose and intention of holding gold
- basis of recognition of gold holdings
- approach to gold revaluations (frequency, source of prices)
- classification of gold revaluation gains (profit, OCI, direct to reserves, or other)
- application of unrealised gold revaluations gains (retained earnings, dedicated gold reserve, general reserve or provision)
- treatment of gold revaluation losses when they exceed any previously accumulated gains
- basis for determining the cost of sales for any gold sold
- treatment of realised gains arising from gold sales.

Cost of Sales for Monetary Gold

Central banks should also have a clear logic for the cost of sales method used and should disclose the basis in the notes to the accounts. Central banks usually hold their monetary gold in bullion form making it easy to identify the specific items in any sale. Detailed inventories record the serial number, weight and cost of each bullion item. This makes it easy to adopt a process of specific identification when determining the cost of any sales. However, in other situations the holdings of monetary gold may be in many homogenous items, such as gold sovereigns, or as non-specific claims, as in unallocated gold holdings. In these situations a weighted average cost may be more appropriate.

As IFRS forbids the use of last-in-first-out (LIFO), this leaves first-in-first-out (FIFO) as the other alternative. As monetary gold has no time redundancy characteristics, no strong preference for using FIFO exists. Most central banks use a form of modified weighted average for determining the cost of their currency sales and a mixture of specific identification or weighted average for the sales of their financial instruments. Consistency suggests that these should be the preferred options.

How Central Banks Account For Non-Monetary Gold

A number of central banks have holdings of non-monetary gold that require an accounting and reporting treatment different from monetary gold. Examples of the variety of forms of these holdings include: gold dust, gold ingots of purity less than the four nines (99.99 percent), gold jewellery collected for re-refining, alluvial gold purchases, gold coins and gold artefacts.

These gold holdings do not meet the definition of monetary gold and so do not form part of a central bank's holdings of foreign exchange reserves and so do not qualify for disclosure as part of the foreign currency financial assets. They fail both tests of foreign and financial assets. In the balance sheet their classification is as other domestic assets. As their total is usually not material, the accounting issue is not significant and the usual approach is to value them at cost under IAS2 Inventories. The exception is the case of historic gold artefacts or works of art, in which case the central bank should use the same valuation criteria that it uses for other artistic or historic objects. This can make a significant difference where the central bank maintains a museum or art collection as a public good function.

VI. Summary

The paper has presented the range of current accounting practices for monetary gold and advocated a move to a common framework. The author believes this approach draws the valuable elements from a number of existing approaches, that if widely adopted would provide an internationally-recognised body of central bank practice on which auditors would be hesitant to provide a qualified opinion.

The paper attempts to place the discussion on accounting for monetary gold within the context of the broader issues affecting central bank accounting for financial instruments and foreign exchange and so should be consistent with any specific central bank reporting framework should it evolve. Certainly, the accounting for monetary gold has a valuable role to play in any broader discussion regarding the purpose of central bank financial statements and the accounting framework guiding their preparation.

VII. Appendix

Classification of Gold Holdings

Although central banks may hold gold in a variety of forms, holdings are typically classified as “monetary” and “non-monetary” gold. The IMF’s Balance of Payments and International Investment Position Manual (BPM6) defines monetary gold as “gold which includes gold bullion and unallocated gold accounts with non-residents that give title to claim the delivery of gold.” The manual goes on to state that “gold bullion takes the form of coins, ingots, or bars with a purity of at least 995 parts per 1,000, including such gold held in allocated gold accounts.” Discussions on gold frequently assume that monetary gold is synonymous with London Good Delivery (LGD), but the two differ in several ways.

Broadly speaking, LGD gold forms a subset of monetary gold since monetary gold can originate from a non-certified refinery, have different dimensions, have cracks and blemishes not allowed for LGD, and be in a form not recognised as LGD. Specifically, LGD gold consists of gold bars of a specific size and quality. Although LGD gold shares the same fineness as monetary gold (995 parts per 1,000) the gold must be of a certain form and bear distinguishing marks – serial number, refiner’s hallmark, fineness, and year of manufacture. The boundaries for form are a gold content of 350-430 toz, with the following recommended dimensions:

- Length (top): 210 – 290 mm
- Width (top): 55 – 85 mm
- Height: 25 – 45 mm

The other classification is non-monetary gold that consists of all the other gold holdings the central bank may possess and has not been classified as antiquities.⁴⁸ A variety of situations exist where central banks hold such gold and may include gold scrap, unrefined alluvial gold, gold leaf for coating religious icons, gold coins and gold jewellery. Some central banks purchase gold from local producers.

Importantly, the accounting and reporting for non-monetary gold differs from that for monetary gold. These gold holdings do not form part of a central bank’s holdings of foreign exchange reserves and so do not qualify for disclosure as part of the foreign currency financial assets. They fail both tests of foreign and financial. In the balance sheet, their classification is as other domestic assets. As their total is usually not material, the accounting issue is not significant and the usual approach is to value them at cost under IAS2 Inventories. The exception is the case of historic gold artefacts or works of art, in which case the central bank should use the same valuation criteria that it uses for other artistic or historic objects. This can make a significant difference where the central bank maintains a museum or art collection as a public good.

⁴⁸ Some central banks, such as the Bank of Mexico maintain national treasures of gold artifacts. These form part of the bank’s museum and are accounted for as works of art, rather than as part of gold holdings.

Summary of the Financial Statement Effect of the Seven Observed Practices

Effect of each approach on the Balance Sheet, Income Statements and Capital

Approach/ Element	Cost	FVTPL	FV to Reserves via Profit	FVOCI	FV Direct to Reserves	FV Direct to Non-Equity Revaluation Account	Fixed Asset
Assets	No effect	Reflects valuations	Reflects valuations	Reflects valuations	Reflects valuations	Reflects valuations	Reflects valuations
Profit/OCI	No effect	Profit reflects full revaluation	Profit reflects full revaluation	No effect on profit but valuations included in reported other comprehensive Income	No effect	No effect	Profit reflects foreign exchange elements of revaluations
Capital	No effect	Depends on profit distribution	Gold revaluation reserve affected	Gold revaluation reserve affected	Gold revaluation reserve affected	No effect	Revaluation split between FX and fixed asset revaluation reserves
Liabilities/ non equity	No effect	No effect	No effect	No effect	No effect	Revaluation held in non-equity section	No effect

Example of Each Operational Approach

The following example takes the same monetary gold holdings and shows the effects of accounting for it under the seven different accounting approaches. For all except the cost model, the opening and closing balance sheet positions are the same, but there are differences in disclosures in profit and loss and Other Comprehensive Income and the composition of the liability and equity components.

Accounting for Gold - applying the frameworks

Each bank holds 1,000 toz of monetary gold over the same period

	Cost	FVTPL	FV to reserves via profit	FVOCI	FV direct to Reserves	FV direct to non Equity reval account	Fixed Asset
Opening valuation	\$35	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500
Closing Price	\$35	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
Period Price Change	0	(500)	(500)	(500)	(500)	(500)	(500)

Valuation Effect of Change in Price of commodity

Gold Price Decreases \$500 - Effect with no exchange rate movement

	Cost	FVTPL	FV to reserves via profit	FVOCI	FV direct to Reserves	FV direct to non Equity reval account	Fixed Asset
Opening valuation	35,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000
	35,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Price loss for period	0	(500,000)	(500,000)	(500,000)	(500,000)	(500,000)	(500,000)
Change in Reported earnings							
Change in Profit	0	(500,000)	(500,000)	0	0	0	0
Change in SOCI	0	0	0	(500,000)	0	0	0

The “change in reported earnings” section demonstrates how central banks seek to avoid reporting gold valuations changes in profit and loss. Though this is understandable, transparency requirements support some disclosure on the face of the financial statements of revaluation movements. In that respect the FVOCI approach addresses the transparency requirements while avoiding including the changes in the calculation of net profit.

Balance Sheet Impact of Price Change

Impact on Balance sheet in USD - No exchange effect impact

	<i>Cost</i>	<i>FVTPL</i>	<i>FV to reserves via profit</i>	<i>FVOCI</i>	<i>FV direct to Reserves</i>	<i>FV direct to non Equity reval account</i>	<i>Fixed Asset</i>
Balance sheet							
Asset							
Gold	35,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Liability							
Non Equity Revaluation account	0	0	0	0	0	(500,000)	0
Capital							
Equity + retained earnings	35,000	1,000,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000
Revaluation Reserve			(500,000)	(500,000)	(500,000)		(500,000)
Total	35,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000

Cost No change

FVTPL Capital takes 100% of loss through P&L

FV to reserves via profit Allocation to revaluation reserve is in the law. The revaluation reserve takes the loss, assuming there is a sufficient credit balance. The law will define what happens if the revaluation reserve has a debit balance.

FVOCI Loss to dedicated monetary gold revaluation reserve. Under IFRS 9 the reserve can carry a debit balance but the law may define alternative treatments.

FV direct to Reserves Similar to FVOCI but no entry in Statement of Other Comprehensive Income

FV direct to non Equity reval account Loss to Reserve - can a credit balance absorb it?

Fixed Asset Reval takes full loss - can carry debit balance

Exchange Rate Effects

Local currency appreciates - reducing the value of the gold

Currency appreciates against the dollar 1.00 to 1.11

Gold price move

	LCU- USD	USD	LCU
Beginning of Year	1.00	1500	1500.00
End of Year	1.00	<u>1000</u>	<u>1000.00</u>
Gold Loss		-500	-500.00

EUR-USD move

	LCU- USD	USD	LCU
Beginning of Year	1.00	1000	1000.00
End of Year	1.11	<u>1000</u>	<u>900.00</u>
FX Loss		0	-100.00

Total Loss **-600**

Percentage Loss -33% -40%

Combined Effect

FX effect = \$100,000 decline in gold value

	<i>Cost</i>	<i>FVTPL</i>	<i>FV to reserves via profit</i>	<i>FVOCI</i>	<i>FV direct to Reserves</i>	<i>FV direct to non Equity reval account</i>	<i>Fixed Asset</i>
Profit and Loss							
From Gold	0	(500,000)	(500,000)	0	0	0	0
From FX	0	(100,000)	(100,000)	0	0	0	(100,000)
Net Profit Effect	0	(600,000)	(600,000)	0	0	0	(100,000)
Balance Sheet							
Asset							
Gold	35,000	900,000	900,000	900,000	900,000	900,000	900,000
Liability							
Non Equity Reval A/c						(600,000)	
Capital							
Equity + RE Revaluation Reserve	35,000	900,000	900,000	1,500,000	1,500,000	1,500,000	1,400,000
				(600,000)	(600,000)		(500,000)
Balance	35,000	900,000	900,000	900,000	900,000	900,000	900,000
Balance sheet change	0	(600,000)	(600,000)	(600,000)	(600,000)	(600,000)	(600,000)

Exchange Rate Effects

Local currency depreciates - increasing the value of the gold

Euro depreciates against the dollar 1.00 to 0.80

Gold price move

	LCU-USD	USD	LCU
Beginning of Year	1.00	1500	1500.00
End of Year	1.00	<u>1000</u>	<u>1000.00</u>
Gold Loss		-500	-500.00

EUR-USD move

	LCU-USD	USD	LCU
Beginning of Year	1.00	1000	1000.00
End of Year	0.80	<u>1000</u>	<u>1250.00</u>
FX Loss		0	250.00

Total Loss **-250**

Percentage Loss -33% -17%

Combined Effect

FX effect = \$250,000 increase in gold value

	<i>Cost</i>	<i>FVTPL</i>	<i>FV to reserves via profit</i>	<i>FVOCI</i>	<i>FV direct to Reserves</i>	<i>FV direct to non Equity reval account</i>	<i>Fixed Asset</i>
Profit and Loss							
From Gold	0	(500,000)	(500,000)	0	0	0	0
From FX	0	250,000	250,000	0	0	0	250,000
Net Profit Effect	0	(250,000)	(250,000)	0	0	0	250,000
Asset							
Gold	35,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000
Liability							
Non Equity Reval A/c						(250,000)	
Capital							
Equity + RE	35,000	1,250,000	1,250,000	1,500,000	1,500,000	1,500,000	1,750,000
Revaluation Reserve				(250,000)	(250,000)		(500,000)
Balance	35,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000	1,250,000
Balance sheet change	0	(250,000)	(250,000)	(250,000)	(250,000)	(250,000)	(250,000)

Central Bank Current Monetary Gold Accounting Practices.

Cost	FVTPL	Reserves via profit and Loss	FVOCI	Directly to Reserves	Fixed Asset	Direct to Non-equity (ESCB)
Bahrain	Argentina	Albania	Australia	Ghana	[Note: author unable to confirm specific examples, despite awareness that some central banks use (or have used) this method]	Austria
Canada	Mauritius	Brunei	Bangladesh	Indonesia		Belgium
IMF	Switzerland	Denmark	BIS	Peru		Cyprus
Japan		Iceland	Bosnia Herzegovina	Philippines		Czech Republic
Kuwait		Hong Kong	Brazil	Russia		ECB
Nigeria		Hungary	Iraq	Thailand		Finland
Singapore		Jordan	Kazakhstan	Turkey		France
Taiwan		Macedonia	Kyrgyz Republic			Germany
USA		Myanmar	Latvia			Greece
		Nepal	Pakistan			India
		Tajikistan	Papua New Guinea			Ireland
			Sri Lanka			Italy
			UK			Lithuania
			Ukraine		Luxembourg	
					Netherlands	
					Poland	
					Portugal	
					Romania	
					Slovakia	
					Slovenia	
					South Africa	
					Spain	
					Sweden	
					Trinidad & Tobago	
					Tunisia	
9	3	11	14	7	0	25
Total	69					

