"Valuables" as Valuable in Capital Formation in India

Deepika Chauhan

Research Scholar (Management) Noida International University, Noida

Abstract: According to UNSNA, valuables as a separate item had been shown in the Expenditure side of GDP. Since India is one of largest importer and user of gold for various purposes, this treatment resulted into higher share of valuables in capital formation in the Indian economy. Moreover, from conceptual aspect, these valuables are not related to capital formation in the economy and are kept as a store of value, thus, the paper argues against this recommendation of UNSNA (1993and 2008) for the Indian case. Secondly, from the compilation view, it may be stated that the base revision in 1999-2000 had resulted into drop in the quantum of 'errors and omissions' and 'statistical discrepancies' in the national account statistics. Thus, there is need to improve the estimates of 'valuables' on the basis of sound methodology. As per the latest round of 'Internal Comparison Practice' (ICP) by World Bank (2005), the world average of 'change in stock' and 'valuables' together constitutes roughly 2 per cent of GDP, while it is significantly higher in India than the global average, partly on account of huge preference for holding gold jewellery by households in India. This paper addresses some of these issues pertaining to the treatment of 'valuables' in the national accounts statistics. Furthermore, the study discusses the rationale of classification of valuables in the UNSNA (1993 and 2008) and points out the implications for the Indian economy which is one of the largest consumers of gold in the world.

Key words: saving, investment, UNSNA (United national system of national account), IPC (internal comparison practice, GDP.

1. Introduction:

The expenditure side of gross domestic product (GDP) measures the use of goods and services produced in the economy. It provides the details of consumption, investment, exports and imports of goods and services of a country. This paper argues against the present classification of valuables in the gross capital formation from the perspective of **United National System of National Accounts** (UNSNA) 1993 and 2008 which states that they are

held for store of value without any use for production and consumption in the economy. India is one of the largest importers and user of gold items for jewellery and other uses. Thus the present treatment of valuables has resulted into significant rise in capital formation activity. It may be highlighted that the Indian economy could be cited as a unique case Where the recommendation of UNSNA for estimation of valuables and its treatment in capital account of the nation have somewhat inflated the estimates of gross capital formation to the extent of 1.3 per cent of GDP. Moreover, over the period, the debate on the issue of treatment of non-monetary gold and its inclusion in the capital account unlike monetary gold, which is placed in the balance sheet of monetary authority has emanated among the countries like the UK and Japan. Thus, the study addresses some of technical details of the concept of non-monetary gold and its impact on measurement of 'value in India.

2. Concept of 'Valuables' and its treatment in UNSNA:

India being one of the member countries of UNSNA has adopted the recommendations of the UNSNA 1993 and placed estimates of 'valuables' in the expenditure side of GDP as a separate category of expenditure. The 'valuables' are broadly non-monetary gold and other precious metals and piece of art and antiques appearing as a separate category in gross capital formation (GCF) estimates. As per the UNSNA, 1993, the 'valuables' are defined as follows: Precious stones and metals such as diamonds, non-monetary gold, platinum, silver, etc., held by any unit including enterprises provided that they are not intended to be used as intermediate inputs into processes of production; Paintings, sculptures, etc., recognized as works of art and antiques; and Other valuables, such as jewellery fashioned out of precious stones and metals and collections. These all comes under the categories of valuables. In terms of sequence of national income accounts, acquisitions disposals of new or existing assets in the form of 'valuables' are recorded in the capital account. They are valued at the actual or estimated prices payable by the units acquiring the assets to the

units disposing of the assets plus any associated costs of ownership transfer incurred by the units acquiring the assets such as fees payable to expert values, agents and auctioneers. The prices of valuables payable to dealers include their margins. Disposals are valued at the prices payable by the units acquiring the assets to the units disposing of the assets minus any associated costs of ownership transfer incurred by the latter. On aggregation, therefore, acquisitions less disposals of valuables include dealers' margins and the costs of ownership transfer on new and existing valuables, whether the transactions consist of purchases and sales, barter or capital transfers in kind.

3. Shift in treatment of valuables from earlier practice:

The 1993 UNSNA recommends inclusion of expenditures on 'valuables' in the capital formation estimates (UNSNA93 Annex I paragraph 78). From the viewpoint of data users, the idea of including valuables in capital formation may not be readily apprehensible (OECD/ESCAP: Meeting National Accounts: 1998). In the earlier version of UNSNA (1968) valuables were treated in various ways for instance precious metals acquired by households were included in household final consumption expenditure. Moreover importantly, other institutional units/sectors were allowed to hold gold and other precious metals like gold. In the revised UNSNA 1993, gold was classified as

- (1) Monetary gold,
- (2) Gold held as store of value and
- (3) Gold used for industrial purposes.

A transaction in the first category was categorized as financial transaction, while the transaction of gold in the last two categories was classified as transaction in commodities. The rationale for monetary gold transaction as financial transaction is mainly built on the premise that this kind of transaction is allowed only between central banks two countries. In the UNSNA sequence of accounts, the accumulation accounts consist of the capital account, which records transactions in nonfinancial assets and capital transfers; the financial account, which records transactions in financial assets and liabilities; and the accounts for other economic flows, which record revaluations and other changes in the volume of assets. In the capital account, the balancing item is net lending/borrowing (NL/B). If an economy's saving and capital transfers exceed its net acquisition of nonfinancial assets, then it is a net lender to the rest of the world. Conversely, if its net acquisition of nonfinancial assets exceeds its saving and capital transfers, it is a net borrower from the rest of the The capital account records transactions—acquisitions/disposals of

nonfinancial assets and capital transfers (Table 1). The right-hand side of the account comprises saving and net capital transfers (that is, changes in net Worth owing to saving and capital transfers). The left-hand side shows transactions in nonfinancial assets. If in the capital account, the aggregate of saving and capital transfers exceed net acquisition of Nonfinancial assets, the balancing item is net lending (+), which measures the surplus an economy has lent to the rest of the world. On the other hand, if saving and capital transfers taken together are insufficient to finance the net acquisition of nonfinancial assets, the balancing item is net borrowing (-), which corresponds to the deficit the economy has been obliged to finance by borrowing from the rest of the world.

The financial account shows how an economy undertakes the NL/B through transactions in financial assets and liabilities. The account is classified by financial instrument, with the net acquisition of financial assets shown on the lefthand side, and the net incurrence of liabilities on the right hand side. The non-monetary gold held in anticipation of appreciation in value is termed as 'valuables' and recommended to be placed in the capital account of the nation. The conceptual logic for this treatment of non-monetary gold arises from the nature of transaction (commodity not financial) and long-tenn gain associated with it due to its store of value attribute. Despite the fact that this does not result into capital formation activity, it is placed in capital account of the economy. In other words, 'valuables' are treated as assets and included in investment and net wealth, even though they are not used primarily for the purposes of production.Andconsumption(Table 1).

Table 1: Capital and Financial Accounts of the Nation.

Changes in assets Gross fixed capital formation Consumption of fixed	Capital account Changes in liabilities and net worth Saving Capital transfers,
capital (-) Changes in inventories Acquisitions less disposals of valuables	receivable (+) Capital transfers payable (-)
Acquisitions less disposals of non- produced assets	
Net lending (+) / net borrowing (—)	Changes in net Worth due to saving and capitaltransfers
Changes in assets	Financial account Changes in liabilities

Vol-2, Issue-11, 2016

ISSN: 2454-1362, http://www.onlinejournal.in

Assets are owned by institutional units, from which economic benefits may be derived by their owners by holding them or using them for a period of time. In this regard, failure economic benefits usually mean that the asset will contribute in some way to the provision of services or other outputs. Assets can be financial (bank deposits, bonds, loans, shares, accounts receivables) or nonfinancial (land, buildings, vehicles, equipment, machines, right to use physical structures or information, goodwill and other intangibles, stocks and valuables). The most profound reason of treatment of non-monetary gold as non-financial asset looks weak. However, strong arguments can be given in favour of gold as a financial asset. Historically, gold has been used as a medium of exchange or directly as near money. Even today, during financial or currency crises, it is used for settlement of debt obligations. While describing the attributes of gold, once Columbus stated "Gold is a wonderful thing." Whoever possesses it is lord of all he wants. By means of gold one can even get souls into Paradise." Gold has a number of characteristics that can make it more like a financial asset than a commodity or valuable such as fine art, antiques or even other precious metals: It is traded round the clock on financial markets in a way similar to foreign currencies. At any time there is a quote and recognised international price based on standard definitions.

Gold is readily assayed and any form of gold can be re-processed into standard high quality bars for sale in the market. The gold markets are highly liquid. Average turnover in London, New York and Tokyo combined is in the region of 50 million Troyon per day (worth around \$20bn). Gold is traded not just in the spot market. There is a highly sophisticated market in secondary and derivative instruments just as would be expected for a financial asset. There is gold lending/deposit market and quoted interest rates. Gold traded as a commodity and bought for end or intermediate use in the production process, for industrial inventories or as a store of wealth. Therefore, treatment of nonmonetary gold as non-financial assets may not hold sound due to very basic nature and intrinsic value associated with gold.

4. Classification of gross capital formation:

Internationally all the national accounts offices follow same definition of gross capital formation where the net acquisition of valuables is shown as a separate category. In the UK national accounts, valuables are non-financial goods that are not used primarily for consumption. These precious metals do not normally deteriorate over time and are acquired and held primarily as stores of value. In internationally-accepted economic accounting practice, acquisitions and disposals of valuables by different entities are divided into: Financial intermediaries (including central banks) dealing in non-monetary precious metals;

Enterprises which do not trade in these products (and for whom they therefore do not count as intermediate consumption or fixed capital formation); Households (for whom they do not count finalconsumption expenditure).

The European System of National Accounts goes a step further by providing the details in respect of the following:

Jewelers and art dealers (though in principle their transactions in such items should count as changes in inventories);

Museums (though in principle their transactions should count as fixed capital formation). These additional conventions avoid the need for frequent reclassification between the three types of capital formation as goods change hands within the art and antiquities market. Production of 'valuables' is valued at basic prices and all other acquisitions at purchasers' prices (including agents' fees or commissions and dealers' margins). Disposals are valued at the prices received by sellers less fees and commissions.

Vol-2, Issue-11, 2016

ISSN: 2454-1362, http://www.onlinejournal.in

Table 2: Proportion of Gold in official reserves (June 2010)

Descriptio		Gold	Gol
n	Reserves(US\$bn	(tonnes	d as
))	%
US	424	8134	72%
Euro area	98	10793	58%
Switzerlan	260	1040	15%
d			
UK	75	310	16%
India	284	558	7%
Russia	475	726	6%
Saudi	444	323	3%
Arabia			
China	2577	1054	2%
Japan	1076	765	3%

Source: World Gold Council, IMF (World official gold holding as at the end of june2010, September 2010 report)

Monetary versus non-monetary gold Gold held by the monetary authorities (usually Central Banks) as pan 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.

Monetary gold is a financial asset by convention, because monetary authorities may use it in settling financial claims. Monetary gold is a financial asset not having a corresponding liability. The select countries' holding of gold as reserve assets is placed in Table 2. The non-monetary gold is, however, treated as a commodity either for intermediate consumption or additions inventories (for industrial use e.g. for electronics, dental or jewellery manufacture) or as a 'store of wealth' classified in the capital account as 'valuables' alongside precious stones and works of art etc. This practice has been followed in the UNSNA 1993 which had disbanded the earlier classification of financial gold. In the present set up, the entire gold holding is divided into monetary gold, which is placed in the balance sheet of a central bank while the non-monetary gold (after adjusting for the industrial use) is included in the estimate of 'valuables'. This treatment of 'valuables' has a critical significance for the countries like UK, Japan and India with large imports of bullion. Under the UNSNA 1968, gold was classified into two categories: financial (including monetary) and industrial (or commodity) gold and all sectors of the economy were permitted to hold gold as a financial asset. However, the Balance of Payment Manual-4 (BPM 4), in contrast, permitted only the monetary authorities to hold gold as a financial asset, as in the current standards of UNSNA 1993. The SNA expert group on external transactions agreed on the current treatment but with minority objections from the UK and Japan. In the IMF committee of expert group, it was found that only the US appears to have fully followed 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 of gold (Philip Turnbull: 2004).

5. Gold Demand and Valuables in India

Over the period, the valuables have started to account for a significant portion in the gross capital formation in India. During 2008-09, the valuables as per cent to GDP increased to 1.4 per cent which is the highest level so far since 1999-2000, the year from which the practice of dissemination of estimates of 'valuables' as a separate category started in India (Table 3).

Table 3: Expenditure Side of GDP

Item	(Amount in Rs. crore)			Percentage to GDP at market Prices	
	2007-08	2008- 09*	2009- 10#	2008- 09	2009- 10
Private Final Consumption Expenditure	2485554	2655533	2769769	59.5	57.6
Government Final Consumption Expenditure	438976	512216	565860	11.5	11.8
Gross Fixed Capital Formation	1414975	1471161	1576445	32.9	32.8
Change in Stocks	154033	59812	63327	1.3	1.3
Valuables	47456	58673	63503	1.3	1.3
Exports	917455	1094929	1022029	24.5	21.3
Less Imports	1113113	1369202	1269570	30.7	26.4
Discrepancies	-97417	-17672	-15860	-0.4	0.3
GDP at Market Price	4247918	4465360	4807222	100	100

^{*}Quick Estimate #Revised Estimates

Source." Central Statistics Office, GOI

According to CSO's Sources and Methods 2007, the 'valuables' are assets that are not used primarily for production or consumption, do not deteriorate over time under normal conditions and that are acquired and held primarily as stores of value, these are namely, gold, gems, ornaments and precious stones. Monetary gold is, however, not part of the valuables. The valuables also have industrial use. The nonns of 95 per cent and 10 per cent, respectively for gold and silver, have been used, to arrive at the estimates on acquisition of these items as a store of value.

The reason for such a high share of valuables in GDP emanates from the huge demand of gold in India. India has the World's largest gold consumer market. In 2009, total Indian gold demand reached US\$19bn, accounting for 15 per cent of the global gold market. Since the last ten years, the value of gold demand in India has increased at an average rate of 13 per cent per year. In India, gold is perceived as a symbol of security and as a sign of prosperity. The lack of financial education and relatively less developed financial system, purchases of gold jewellery are considered as a form of liquid and tradable investment for the accumulation of Wealth. Gold jewellery accounted for around 75 per cent of total Indian gold demand in 2009, the remainder being investment (23 per cent) and decorative and industrial use demand (2 per cent) for gold. Indian consumers also regard gold jewellery as an investment and are well aware of gold's benefit as a store of value (World Gold Council.2010).The 'valuables' are held expectation that their prices, relative to other goods and services, will not decline over time and possibly increase. In other words, 'valuables' are generally expected to hold their value in real terms in the long run. This practice followed in India is in accordance with the recommendations of 1993 UNSNA. The data on expenditures made on 'net acquisition of valuables' on precious items like gold, gems, ornaments and precious stones etc, has been included under gross capital formation, as a separate category under "produced assets"(separately from the gross fixed capital formation (GFCF) and change in stocks).

Table 4: Gross Domestic Products
Expenditure Side (as per cent of GDP)

(Base 1993-94)					
Item	1999-	2000-	2001-	2002-	2003-
	2000	01	02	03	04
Private final	65.5	64.8	65.4	64.3	63.8
consumption					
exp.					
Government	13	12.6	12.5	11.8	11.3
final					
consumption					
exp.				4.0	
Net Exports	-2.0	-0.9	-0.9	-1.0	-1.3
Gross	25.3	23.8	22.	24.8	26.3
domestic					
capital					
formation					
Errors and	1.7	1.2	0.4	2.1	3.3
Omissions					
Statistical	-0.1	0.9	0.8	2.2	3.1
Discrepancy					
Gross	100	100	100	100	100
Domestic					
Product					
market price					
'Gross	24.4	23.5	23.4	26.1	28.1
Domestic					

Saving					
'Household	10.3	1.3	11.4	13.0	13.0
Physical					
Saving					
	ı	ı	ı	ı	ı
Item	1999-	2000-	2001-	2002-	2003-
	2000	01	02	03	04
Private final	64.2	63.7	64.4	63.2	61.7
consumption					
exp.					
Government	12.9	12.6	12.4	11.9	11.3
final					
consumption					
exp					
Gross	25.9	24.3	22.8	25.2	27.5
domestic					
capital					
formation					
Valuable	0.8	0.7	0.6	0.6	0.9
Errors and	-0.2	0.2	-1.3	0.0	0.8
Omissions					
Net Exports	-1.9	-0.9	-0.9	-1.0	-1.3
Statistical	-1.3	0.4	0.0	0.7	1.6
Discrepancy					
Gross	100.0	100.0	100.0	100.0	100.0
Domestic					
Product					
market price					
Gross	24.8	23.7	23.5	26.3	29.8
Domestic					
Saving					
Household	10.5	11.4	11.3	12.6	12.7
Physical					
Saving					

Source: National Accounts Statistics (NAS), 2005 and 2009

At the time of revision in the base year of national accounts (from 1993-94 to 1999-2000 in 2006), the CSO had also implemented various recommendations of UNSNA 1993 including the treatment of 'valuables' separately as a part of capital formation. This practice of enlisting 'valuables' along with gross fixed capital formation and change in stock in the gross capital formation has raised some issues over the sanctity of this treatment as well as its impact on the gross domestic capital formation (investment). Before we tum to these issues, an attempt is made to examine the data released by the CSO in this regard. With objective of assessing the impact of incorporation of 'valuables' on the data on disposition of national income, a comparison of the data as per the old and new series (Table 4) has been attempted below. On a perusal of the Table 4, a few observations can be made as follows: 'Valuables' as a per cent of GDP at current market prices has moved in a narrow range of 0.6 to 0.9 per cent during the period 1999-2000 to 2003-04. In the recent years, the 'valuables' account for around 1.3 per cent. This is significant, being close to the saving-investment balance of India during the nominal years. Subsequent to the incorporation of 'valuables' as capital formation, the GDCF estimates have undergone upward revision while

the household physical saving estimates have undergone downward revision. At the same time, the estimates for private final consumption expenditure haveundergonedownwardrevision.

The net result of the above factors is seen in terms of a decline in the level of 'errors and omissions' in the capital formation as also a decline in the quantum of 'statistical discrepancy' in the national accounts. It may be mentioned that these two are summary measures of the efficiency of the compilation of the national accounts data. As regards the impact of inclusion of valuables in capital formation on private final consumption expenditure (PFCE), the reason could be that (to quote) "the estimated purchases of gold i.e.jewelers and ornaments by the households reported in the NSS 55th Round survey on consumer expenditure has been treated as 'valuables' and the same has not been accounted under PF CE in the new".

6. Treatment of non-monetary gold:

The treatment of non-monetary gold has raised debate over the measurement of unallocated gold in the national accounts. Some of the countries under the agencies of UNSNA which did not support the recommendations of Advisory expert group (AEG) have been listed in the Annex 1. 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 other words, the inclusion of all gold transactions between residents and nonresidents as imports and exports of goods would seriously distort the economic accounts of those countries with large international markets in gold such as Japan and the United Kingdom. As a solution to this problem, there was a proposal for the creation of a new financial instrument classification — Financial Gold — similar in nature to the current UNSNA concept of Monetary Gold but broader in its scope (Chris Wright and Stuart Brown: 2006). Under this, the physical gold would then be classified as: Commodity Gold if it is 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.

This proposal is nevertheless principally conceptual. A shared characteristic of financial instruments within the UNSNA 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 holder. Nevertheless, the global market in which gold is traded is highly sophisticated, exhibiting all of the characteristics of a financial

market. This issue has been nicely dealt with in the revised version of UNSNA 2008. Once India adopts the UNSNA 2008, this issue would be required to be addressed in the Indian national account statistics. Sanctity of placing 'valuables' in capital formation (investment).Capital formation may be defined as generation of goods that are used for at least a year in the process of production of other goods and services. It may be noted that dwellings are treated as fixed assets which is used, together with other inputs, to produce housing services for renting or own use. Owner occupiers do not consume the dwellings as such but rather the housing services produced by the dwellings. Thus, the valuables which have only store of value do not correspond to capital formation in the economy. In India, people hold jewellery for fashion, security against unforeseen eventuality, etc. Therefore, the behavioural aspect of keeping jewellery for both consumption and investment motives may suggest that 'valuables' be kept out of the purview of capital formation in the national accounts statistics. The systematically excludes "acquisitions less disposals of valuables" from the composition of gross fixed assets formation and locates the category after "changes in inventories" in the capital account. There are a number of other items in the capital account which do not form part of gross capital formation. It has been explicitly recognized that such net acquisitions of 'valuables' do not contribute to production nor any imputed earning or rentals for such assets.

7. Revision of ratios for measuring valuables:

As per 'Sources and Methods of National Accounts Statistics', in the new series (base 1999-2000) the coverage of valuables has been restricted to include the precious articles with HS codes 7102 (diamonds), 7103 (other gems and stones), 7106 (silver), 7108 (gold), 7110 (platinum), 71 13 and 7114 (gold and silver ornaments), keeping in view the data availability. The monetary gold was not regarded as 'valuables'. The total production of valuables and net imports has been taken into account for compiling the estimates of valuables. Since these valuables also have industrial use, none of 95 per cent and 10 per cent, respectively for gold and silver, have been used, to arrive at the estimates on acquisition of these items as a store of value. Suitable adjustments have been made on the export data on valuables to account for value addition done in the country (GVA and change in stock), so that imports and exports on valuables are on a comparative quantity terms. In this regard, the CSO does not provide the reason for using these ratios to measure the non-industrial use of gold and silver.

8. Valuables and its implication for savings:

If the 'valuables' are included as part of GCF, there ought to be a counterpart in savings to finance such investment. However, household saving in India is not directly estimated as the difference between household income and consumption; it is done indirectly with the estimates of saving in the form of financial and physical assets without taking into account 'valuables'. Hence, net acquisition of 'valuables' gets completely ignored in the CSO's estimation procedure. Finally, saving contradicts the UNSNA 1993 where 'valuables' ought not to be treated as part of consumption. To be consistent, an equivalent amount of 'valuables' has to be added to the domestic savings. Overall, both conceptually and from the point of view of its operational significance, it may not be appropriate to include "acquisitions of valuables" as part of GCF (EPW: 2006). More recently, the High Level Committee on Saving and Investment also discussed the issue. The report stated that the valuables were not treated either as intermediate consumption or as final consumption expenditure for the measurement of consumption expenditure in the economy. Thus, it should be treated as a part of gross capital formation but separately from the gross fixed capital formation and change in stock. The present treatment of non-monetary gold as 'valuables' may have somewhat inflated the estimates of gross capital formation in the national accounts in India. Internationally, experts have proposed to reintroduce the UNSNA68 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 considered as financial assets. Thus 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 UNSNA sector accounts, as is with monetary gold at present. Hence, 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. To sum up, the treatment of valuables may be looked at from the perspective of recent debate. Over the treatment of gold as a financial instrument. Furthermore, India is one of the largest importers and user of gold items for jewellery and other uses. Thus, the treatment of valuables as a part of gross capital formation is conceptually debatable when it has a significant share in GDP without resulting into capital formation activity. Hence, for policy purpose, the 'valuables' need not form part of capital formation in the economy as there is no corresponding rise in capital formation as such which would be useful for generating economic growth.

9. References:

- BalakrishnanPulapre and Suresh Babu (2007), "Trends and Savings, Investment and Consumption", Economic and Political Weekly, May 5, 2007.
- Brent R. Moulton (2003), "The System of National Accounts for the New economy: What Should Change"): Bureau of Economic Analysis U.S. Department of Commerce 1441 "L" Street, NW Washington, DC 20230, USA.
- Chris Wright and Stuart Brown (2006), "Non-Monetary Gold", fourth meeting of theAdvisory Expert Group on National Accounts 30 January — 8 February 2006.
- FrankfurtThe Report of the High Level Committee on Saving and Investment (Dr. C.Rangaraj an), MOSPI.
 "Higher Investment by Statistical Revision" (2006), Editorial of Economic and Political Weekly.
- IMF (2007), "The System of Macroeconomic Accounts Statistics: An Overview". IMF Pamphlet Series.
- 6. S. Venkitaramanan (2007), "CSO's data estimates in the economy New light onsavings and consumption", The Hindu Business Line, May 28, 2007
 - Sources and Method of National Accounts Statistics, CSO 2007.
- 7. Stephen Harmston (1998), "Gold as a Store of Value". Research Study No 22. WorldGold Council United National System of Nation Accounts Various Issues (1968, 1993 and 2008).
- 8. http://unstats.un.org/unsd/nationalaccount.
- World Gold Council (2010), "India: Heart of Gold".
 World Gold Council 10, OldBailey, London.14