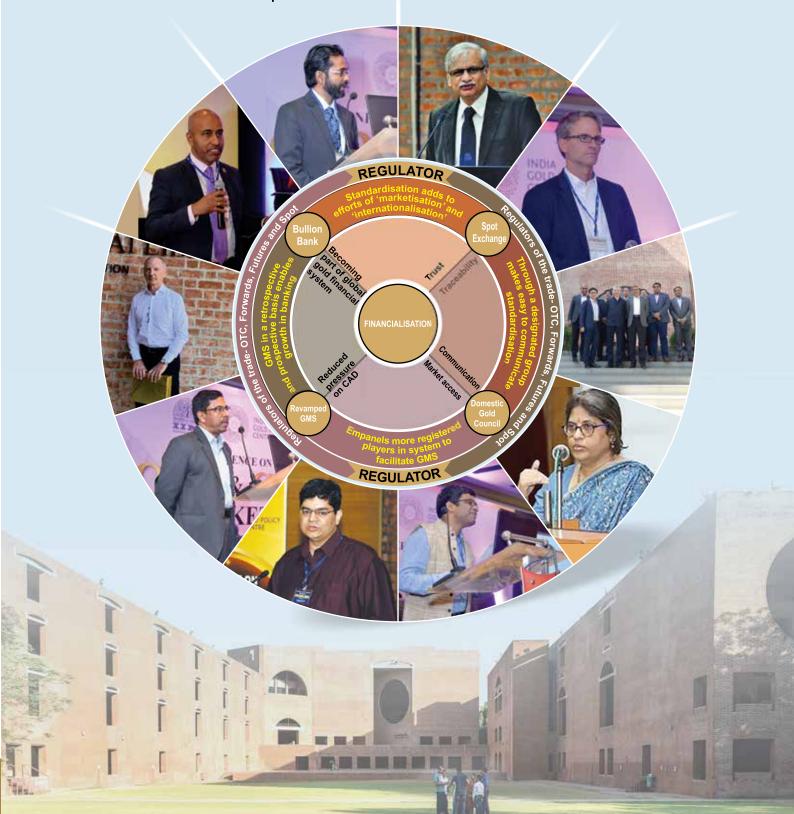


# 4 ANNUAL REPORT

April 2018 to March 2019





Harvard Steps, IIMA



New Campus, IIMA

Dignitaries on the cover page [Clock-wise]:

Prof. Errol D'Souza, Director, IIMA; Prof. Dirk Baur, University of Western Australia; Delegates from SGE; Prof. Rama Bijapurkar, Industry Representative; Prof. Joshy Jacob, IIMA; Prof. Sanket Mohapatra, IIMA; Shri K Rajaraman, Additional Secretary, DEA; Mr. David Tait, CEO, WGC; Mr. Sudheesh Nambiath, Head-IGPC; Prof. Arvind Sahay, Chairperson, IGPC

## 4<sup>th</sup> ANNUAL REPORT

April 2018 – March 2019





#### **INDIA GOLD POLICY CENTRE**

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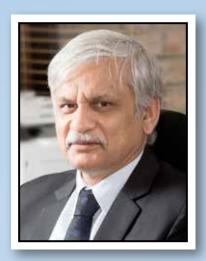


Louis Kahn Plaza, IIMA



New Campus, IIMA

#### IGPC GOVERNING COMMITTEE



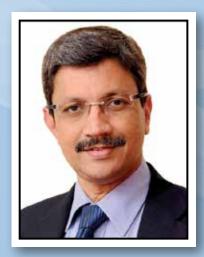
**PROF. ERROL D'SOUZA**DIRECTOR, IIMA



**PROF. ARVIND SAHAY** CHAIRPERSON, IGPC



**PROF. JOSHY JACOB**FACULTY REPRESENTATIVE, IIMA



MR. P.R. SOMASUNDARAM MANAGING DIRECTOR, WORLD GOLD COUNCIL



MS. RAMA BIJAPURKAR INDUSTRY REPRESENTATIVE









#### FROM THE DESK OF THE

### Director, IIMA



**Professor Errol D'Souza** Director, IIMA

It is my pleasure to present to you, on behalf of the Chairperson and staff of the India Gold Policy Centre @ IIMA, our Annual Report for 2018-19. The report presents a comprehensive review of the key developments in the gold markets, both locally and globally. How these developments are likely to shape policy and the outlook for the gold markets, is a key theme throughout the report. One of our most important goal as a policy think tank is to present and promote independent, unbiased views/opinions/information to the stakeholders, policymakers, industry, academicians and researchers. This is our progress report on the same.

On the macroeconomic front, weak US dollar, faltering economic growth in Europe and fears of trade wars due to trade tensions between the US and China have had a significant bearing on the demand for gold in the year gone by. Uncertainty with respect to the Brexit outcome and the US Federal Reserve's neutral stance on interest rates also impacted the global economy and the demand for gold in particular. Several factors were thus at play with respect to the 'safe haven' demand for gold. One of the most important developments was the significant rise in central bank demand for gold which went up by 74 percent as compared to the previous year. Such an unprecedented demand signals a structural shift in the way central banks perceive gold. I believe that these factors will continue to have a bearing on the gold markets in the year ahead. Additionally, emerging markets which account for over 70 per cent of



consumer demand, led by China and India, are likely to significantly influence the gold markets over the long run.

Sharing my vision in the last year's annual report, I had highlighted that integrating gold with India's broader economic vision is the touchstone for India's gold policy and gold markets. Several steps have been taken in that direction on the policy front. With continuity of government at the centre, we expect faster implementation of policy reforms and newer initiatives for the long term development of the gold ecosystem in India that fosters employment and supports development of the entire gold value chain.

The India Gold Policy Centre (IGPC) has worked closely with the government and the industry for providing meaningful policy advisory for mapping all segments of the gold value chain for a uniform reform impact. With the accentuation of deliberations in global conventions, proactive stance of policy makers and stakeholders in the value chain, the winds of change have become significant ingredients deliberated on at the Centre. Striving to transform India's gold market is central to the vision of IGPC.

India Gold Policy Centre was created as a think tank with the vision to impact policies and practice in the gold ecosystem through research, engagement, policy recommendations and training. It is now four years since the inception of the IGPC. A lot more is to be accomplished for designing a novel landscape of India's gold sector and carve out a niche in the global gold industry. IGPC shoulders the responsibility of functioning as a beacon for India's gold industry but this is possible only with collective efforts of all stakeholders to transform it into a sustainable transparent ethical ecosystem.

## Chairperson, IGPC



Prof. Arvind Sahay
Chair, India Gold Policy
Center at IIMA
Professor of Marketing and
International Business, IIMA
Prof. MN Vora Chair
in Marketing and
Entrepreneurship
Chair, Marketing Area
Chair, Asia-Pacific,
Partnership in International
Management

When we started chalking out the plan for need to create a revamped gold policy, much of the focus or discussion was centered on Gold Monetization Scheme, gradually moving to Spot Gold Exchange for India, standardization, bullion banking and retail investment products. It has been an exciting journey so far of exploring and understanding the subject much more in detail. IGPC acknowledges the generous guidance and the financial grant of World Gold Council (WGC) for the organic growth of the Centre and support it to work as an independent thinktank. Also thankful to the governing committee members who have helped chart the way forward

Last year, we culminated our thoughts into a policy report as "Defining a new era for Indian gold trade", which largely was about defining the five key pillars of the policy and explained how each of these are integrated. This was followed by various one-to-one deliberations with the policy makers, re-working and detailing specifically on the regulatory aspects of the reforms. Not limiting to it IGPC was added to the High Level Committee on Spot Exchange by the Department of Economic Affairs, Ministry of Finance. We are thankful to industry associations viz., India Bullion and Jewellers Association, Gem and Jewellery Council, Gem & Jewellery Export Promotion Council, Bullion Federation, Association of Gold Refineries and Mints for providing a platform to discuss the subject in detail at both formal and informal forums.



At IGPC policy is at the forefront and creating a positive impact on economy through formalizing the gold trade is the principle goal. In addition to these we continue to increase our reach in the academic world with MoUs having been signed with over five institutions in India and overseas together to work on various research projects. Last year with these collaborations we were working on some seven academic and policy papers simultaneously.

The Gold and Gold Markets into its second year was organized at Delhi, that's a shift from the IIMA campus. We had a wider participation from industry represented by stake holders across the value chain in addition to the academia. It was an honour to have Mr. Rajaraman K., Additional Secretary, Department of Economic Affairs (DEA) who has been spearheading most of the work related to reforms in gold policy since his joining in July 2018. Mr. Rajaraman's opening speech further paved the direction for our research as he put forward various research ideas that the centre needs to focus on. Additionally, the thoughts on the way forward for the policy brought in clarity on the objective. The conference was also attended by Mr. Vijay Kumar Tyagi, Director at the DEA who shared his views on the bullion banking.

India Gold Policy Centre is thankful to Multi Commodity Exchange of India Ltd to support our initiative to recognize researchers for their outstanding contribution in research on gold with monetary award. This will be an award we would continue to give out each year at our annual Gold & Gold Markets conference.

Last year we decided to go for a subject matter expert with good connects in the industry to Head the Centre. This has helped deliver policy inputs to government with deeper insights. Our endeavor to explore data, deep dive into a subject is unrelenting and we look to get it better with each year. This year we aim to kick off the first ever nationwide household survey on gold consumption covering not less than 40,000 households conducted in two waves. Knowledge dissemination is our key focus area for this year and in the process we aim to organize sessions on gold markets to policy makers and regulators in this financial year. Further to that we are already in process to induct an officer from Indian Economic Service on deputation which would give them a global exposure and build expertise on the subject.

The year ahead is going to be significant as we expect see visible changes with respect to implementation of the policy. Moreover a stable government at the centre only adds to our confidence. We are confident this could be the year when world starts looking into the immense opportunity that Indian gold market is going to throw wide open to.

My best wishes to my colleagues from academia, friends at industry and government for a more interesting and fruitful times ahead in the Indian gold industry.

## India Gold Policy Center (IGPC)

The India Gold Policy Center at the Indian Institute of Management Ahmedabad (IIMA) sponsored by World Gold Council is a center of excellence, conducting cutting edge applied research on the Gold Industry in India that provides insights and suggest ways the findings can be put into execution.

IGPC is sponsored by World Gold Council. It was set up as a result of a collaboration between the World Gold Council and the Indian Institute of Management, Ahmedabad.

#### **Activities of Centre**

- Carry out high quality research
- Produce an annual India gold policy report
- Oisseminate research through a variety of channels including media outreach, participation in industry conferences, roundtable discussions and/or authored articles
- Engage with government and policy makers about the role of gold in the financial architecture and gem and jewellery industry.
- Develop business case studies on gold's role in the financial system and society
- Build relationships with other leading management institutions and global institutions on gold industry research, including WGC's other global research initiatives.

#### Themes of Research

The Center shall focus on multi-disciplinary, thematic, applied research in several key areas relating to the use of gold as a fungible financial asset in India. The themes of research undertaken by the Center shall be outlined by the Governing Body of the Center and shall illustratively include, but not be limited to, the following topics:

- Policy on gold industry in India and internationally, including policy frameworks and effective implementation of policies.
- Role of gold in the Indian and global economies; India's role in the global and regional gold markets; India's response to China emerging as a major player and price influencer in the



gold market; and gold's role as an asset class in relation to the financial system, including households, banks, and financial companies.

- ♦ Consumption patterns and consumer behaviour across geographies and commitments and inflexion points based on cultural attachment of households to gold.
- Putting gold to work for the economy developing the required framework and incentives to increase domestic supply of gold through recycling and other forms.
- ♦ Setting world class standards and creating a robust gold ecosystem in India.
- Desensitising the current account deficit from gold.
- Gold marketing, including demand analysis, branding opportunities, professional marketing, purchase triggers, and other socio-economic aspects.
- Employment in the gold industry; organized and unorganized parts of the industry; and the industry's evolution overtime.
- ♦ Identifying the institutional infrastructure underlying and needed to strengthen the India Gold industry, including a gold exchange. a gold bank. accredited refineries. vaulting facilities and hallmarking.

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#### **CHAPTER 1:**

## Gold Market: Demand and Supply

#### Introduction

The global gold demand in the financial year 2018-19 was at 4,468 tonnes, the highest in three years and increased year-on-year by 9%. If one is to look for a short answer to this increase, we could attribute it the rise of populism, a result of which is the mismanaged policies and finances, and this is possibly making institutions and individuals take measures to protect against wealth erosion driven by a strong dollar. This has in a way given rise to increase in demand from high net worth individuals and the central banks globally, although gold price declined year-on-year by 1.8%. The result of which has been an increase in gold reserves held by central banks, where they increased their annual purchases by 88% year-on-year (FY) by 715.7 tonnes and the demand for coins and bars increased by 9% to 1,093 tonnes. However, for the same period, the demand for jewellery decreased by 2% to 2,290 tonnes.

4600 375.6 **Tonnes** 4467.8 334.3 4500 4400 4300 89.5 7.9 4200 4092.2 4100 -3.3 -52.7 4000 3900 2017-18 Central Banks Total bar and Jewellery Technology ETFs and similar 2018-19 Net change and other coin demand products 2018-19 vs 2017-18 institutions

Figure 1.1: 9% growth in annual demand driven by highest central bank buying in 50 years

Source: Metals Focus; World Gold Council, Global Demand Trends Q1 2019





**Table 1.1: Global Demand Highlights** 

	2017-18	2018-19		Year-on-year % change
Gold demand	4,092.2	4,467.8		9.2
Jewellery	2,236.9	2,244.8		0.4
Technology	335.6	332.3	•	-1.0
Investment	1,138.2	1,174.9		3.2
Total bar and coin	1,002.9	1,092.4		8.9
ETFs and similar products(net addition)	135.3	82.6	•	-39
Central banks & other inst.	381.4	715.7		87.6

Source: World Gold Council

Looking back at the demand for gold in 2018-19, we understand that the physical demand and investment demand (particularly in gold-backed ETFs) was resilient. The key development was the significant rise in central bank demand for gold which went up by 87 percent as compared to the previous year. Such an unprecedented demand signals a structural shift in the way central banks perceive gold, and going forward, will be a key factor in determining the demand for gold. According to the World Gold Council<sup>1</sup>, "around 20 central banks have added gold to their reserves since the start of 2017 and today, this is one of the most interesting trends in the gold market". Such a buying spree which is the largest net purchase on record, along with buoyant demand for gold-backed ETFs, led to gold prices climbing to their highest level in a year in February 2019 at \$1346 an ounce.

On the supply front with a record mine production of 3,3472 tonnes in 2018, the total supply was up marginally to 4,655.5 tonnes in 2018-19 compared to 4,645.7 tonnes in 2017-18. However, the momentum in annual mine production growth has slowed to around one per cent in both 2017 and 2018, after having grown at 2 per cent in the preceding three years. The total supply was also supported by a three per cent rise in gold recycling for the FY 2018-19 as compared to a year ago when it dropped by 5.5 per cent.

**Table 1.2: Global Supply Highlights** 

Tonnes	2017-18	2018-19	Year-on-ye % change	
Total supply	4,645.7	4,655.5	<b>A</b>	0.2
Mine production	3,473.5	3,512.0	<b>A</b>	1.1
Net producer hedging	26.5	-37.6	<b>A</b>	-
Recycled gold	1,145.6	1,181.1	<b>A</b>	3.1

Source: World Gold Council, Gold Demand Trends Q1 2019

<sup>&</sup>lt;sup>1</sup> Source: World Gold Council, "The gold perspective – 10 years after Lehman Brothers failed" by John Reade, Gold Investor,

<sup>&</sup>lt;sup>2</sup> Source: WGC, Gold Demand Trends Full Year and Q4 2018, February 2019

Globally, there are a number of factors which will continue to be drivers of investment demand for gold in the current year as well. First, the US Federal Reserve in its recent FOMC meeting in March has not taken any rate hike and has signaled no further rate hikes for this year. According to the World Gold Council, Fed pause/no hike is a driver of investment demand. Second, the uncertainty with respect to Brexit is a Damocles Sword hanging making investors jittery and thus dampening 'animal spirits'. Investment demand for gold is seen to go up in such uncertain times. Third, trade tensions between United States and China are likely to weigh significantly on investors mind thus propelling the demand for gold in a risk-averse environment. Fourth, in Europe, the ECB has sharply reduced the growth forecast for the Eurozone economy. Against the backdrop of such dovish chatter, the German 10-year real rates are likely to remain negative in the near term. European listed Gold ETF investments will therefore remain strong as witnessed in 2018, the last quarter of 2018 in particular. Additionally, emerging markets which account for over 70 per cent of consumer demand, led by China and India, will continue to be long-term drivers of demand.

#### **Global Demand Trends**

#### 1. Investment Demand

#### Exchange Traded Funds (ETFs)

North America: Inflows into global gold-backed ETFs increased by 3.5% year-on-year to 2,480.8 tonnes. The highest gains were largely driven by demand from ETFs listed in Germany and United Kingdom (refer table below).

Table 1.3: Top 10 physically-backed gold ETFs by AUM in tonnes

	Fund	Country	Holdings as of end-Mar		Year-on-year % change
1	SPDR Gold Shares	United States	784.0	•	-7
2	iShares Gold Trust	United States	301.5	<b>A</b>	11
3	Xetra-Gold	Germany	192.4		12
4	ETFS Physical Gold	United Kingdom	164.2	<b>A</b>	11
5	Invesco Physical Gold ETC	United Kingdom	124.3		9
6	iShares Physical Gold ETC	United Kingdom	106.1	<b>A</b>	37
7	Gold Bullion Securities Ltd	United Kingdom	78.9	<b>V</b>	-4
8	ZKB Gold ETF	Switzerland	63.3	<b>A</b>	0
9	Xtrackers Physical Gold ETC EUR	Germany	58.9	<b>A</b>	152
10	Sprott Physical Gold Trust	United States	49.3	<b>V</b>	-9
	Global total		2,480.8	<b>A</b>	3

Source: Respective ETP providers, Bloomberg, ICE Benchmark Administration, World Gold Council

Gold prices also remained weak during the early part of 2018, in Q1 and Q2 of FY 2018-19. Therefore, inflows into gold-backed ETFs remained subdued (see Figure 1.2) till the third quarter. However, concerns over US economic conditions emerged in the fourth quarter and in a risk-off environment of heightened equity market volatility, gold-backed ETFs benefited.





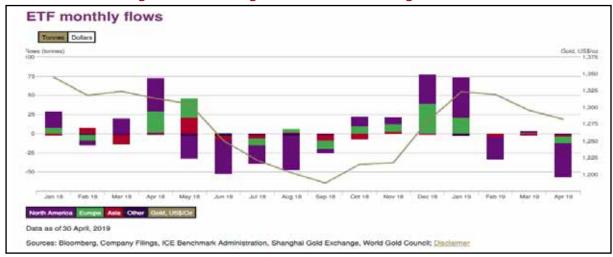


Figure 1.2: Global gold-backed ETF holdings and flows

Source: World Gold Council<sup>3</sup>

**Europe:** The economic and political conditions remained fragile in Europe throughout the year. This led to risk-averse behavior amongst investors, therefore, driving sizeable inflows into European-listed gold funds. In the backdrop of rising risks of trade wars and the ensuing stock market volatility, rising gold prices led to even thicker inflows in December. For the year as a whole, total assets under management (AUM)<sup>4</sup>, for European-listed funds, rose by 12 per cent to 1,116.7 tonnes. With German 10-year real rates likely to remain negative in the near term, investments in European ETFs will continue to be strong, outpacing US investments.

#### **Bars and Coins**

According to the World Gold Council, bars and coins demand was strong in 2018-19 rising by 9 per cent to 1,092.4 tonnes from 1,002.9 tonnes in the previous year. In China, the investment demand for bars and coins was higher by 9% to 302 tonnes. It is noteworthy that China is the world's biggest market for bars and coins. Notable rise was in Iran with demand increasing 147% year-on-year, largely attributed to the increased risks related to trade sanctions.

#### 2. Central Banks Demand

Central bank gold buying world over reached an unprecedented high last year, with central banks for the first time buying 651.5 tonnes (up by 74 per cent as compared to last year) of gold, highest ever since the removal of the gold standard. This central bank buying was largely led by Russia, Kazakhstan and Turkey which collectively bought 376 tonnes of gold in 2018. (Refer Appendices Table 8.A for gold reserve holdings by top 50 countries)

<sup>&</sup>lt;sup>3</sup> Source: WGC, https://www.gold.org/goldhub/data/global-gold-backed-etf-holdings-and-flows, accessed on May 21, 2019.

<sup>&</sup>lt;sup>4</sup> According to the World Gold Council, "At the end of 2018, North American-listed funds represented 50% of global holdings in gold-backed ETFs, with a collective AUM of 1230.4t (US\$50.7bn)." Source: WGC, Gold Demand Trends Full Year and Q4 2018, February 2019

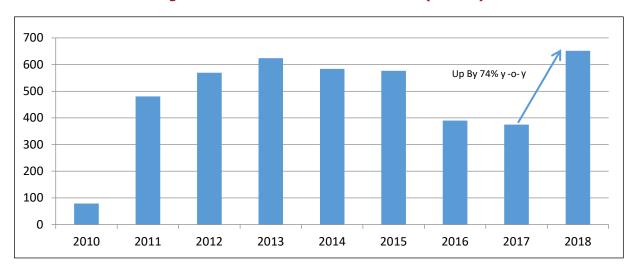


Figure 1.3: Central Banks Gold Demand (Tonnes)

Source: WGC; IGPC

**Asia:** In Asia, China increased its gold reserve during the financial year by 42.9 tonnes, that said it is important to note that China has been largely boosting its gold holdings only recently after being largely inactive for the past few years, and its share to total reserves is only 2%. It's pace of buying further increased with purchase of 33 tonnes only in the March ending quarter. Likely that China's demand would keep up with the pace for rest of the financial year given the trade tensions with the US and their recent selling of US treasuries.

India added 48.5 tonnes (see Figure 1.7) to its reserves in last FY 2018-19, thereby lifting the total reserves in gold to 608.8 tonnes; it's share to reserves stands at 6%. Given the macro conditions a similar trend is likely to continue for this financial year as well.

**Russia** has been the biggest buyer of gold since 2014, it's holdings (along with Kazakhstan) increased last FY by 277.5 tonnes to 2,168.3 tonnes. The increasing political drift with the United States followed by sanctions have been the major driver for it to increase its holdings.

**Europe:** In Europe, countries like Hungary and Poland boosted their gold holdings in 2018. Hungarian central bank increased its gold reserves tenfold to 31.5 tonnes last year. This brings the central bank's reserves, which now stand at 4 per cent of foreign exchange reserves, at par with regional peers in Eastern Europe. The central bank governor Gyorgy Matolcsy said the decision was of "economic and national strategic importance<sup>5</sup>". The purchase has meant that its gold holdings are now the highest in almost three decades. Poland was another country in Easter Europe which boosted its gold holdings by 25.7 tonnes during 2018, taking its reserves to 128.6 tonnes as at December 2018.

Central banks demand<sup>6</sup> for gold which soared to a multi-decade high in 2018 is a clear reflection

<sup>&</sup>lt;sup>5</sup> Source: https://www.ft.com/content/bcc1a0ac-d137-11e8-a9f2-7574db66bcd5

<sup>&</sup>lt;sup>6</sup> According to the World Gold Council, around 20 central banks have added gold to their reserves since the start of 2017.





of uncertainty which prevailed in the both the geopolitical and economic front prompting investment in safe and liquid assets. However, the breadth of purchases and the participation from diverse central banks in gold buying signals a long-term structural shift in the way central banks regard gold as a tool for long-term stability and "de-dollarisation". Even Kenneth Rogoff, leading economist and Professor of Economics and Public Policy at Harvard University, opines that "Emerging market central banks should hold fewer dollars and more gold as a way of diversifying their portfolio. It's a simple question of diversification. At the moment, most emerging market central banks hold 1–2% of their reserves in gold, with 70–80% in dollars and the rest in euros and other currencies. I think a 5% allocation seems a natural position to take as part of an effective diversification policy – although it could be higher. After all, the US share of the global economy is shrinking, power is being centralized and we don't know what the future holds,".

#### **Global Supply Trends**

In China, gold production fell by 9 per cent in 2018 as compared to a year ago. Stricter environmental regulations have had a significant impact on Chinese gold output which is expected to further drop given the strict implementation. According to the China Gold Association<sup>7</sup>, "The downward trend of gold output is result of the sector responding to the country's ecological civilization construction. Some mines located in natural reserves have been suspended, while other mines with out-of-date technical equipment have also been suspended or reduced their output in recent years." China being the world's largest consumer and producer of the metal, any significant downward shift in gold output can lead to "plateauing" in global gold output.

Table 1.4. Gold Production in 2018

Country	Growth/Decline (year-on-year)
Papua New Guinea	23
Russia	10
Canada	9
Australia	4

Country	Growth/Decline (year-on-year)
Indonesia	-24
South Africa	-18
Peru	-9
China	-9

Source: World Gold Council (Gold Demand Trends Full Year and Q4 2018, February 2019); IGPC @IIMA

The other significant gold producing countries that witnessed fall in output in 2018 were Indonesia (-24%), South Africa (-18%) and Peru (-9%). See table 1.4 for data on growth/decline in gold production in 2018. Amongst producer countries, Russia, Canada, Australia and Papua New Guinea saw output increase which supported overall supply. The weakness of the Australian dollar against the US dollar saw record high local gold prices during 2018, pushing producers

Source: World Gold Council, "The gold perspective – 10 years after Lehman Brothers failed" by John Reade, Gold Investor,

Source: China Daily, http://www.chinadaily.com.cn/a/201901/31/WS5c529caba3106c65c34e791a.html

to capitalize on high prices by increasing production. As a result, the output increased to 3178 tonnes in 2018, the highest ever. The year 2018 also saw Russia's output rise by 10 per cent (y-o-y) due to supportive policies for miners.

#### **India: Demand & Supply Trends**

#### **Demand Trends**

#### 1. Jewellery Demand

Indian gold jewellery demand in FY 2018-19 was at 604.2 tonnes, the highest since 2014-15 however growing year-on-year only by a percentage. The gains compared to previous years is largely attributed to higher price expectations and purchases during periods of low volatility in domestic gold prices. Further to that the price decline in the September and December quarter created a pent up demand from retailers followed by promotional offers during festive and wedding season during Diwali and Dhanteras. Although this helped increase in sales however it is important to note that two of the quarters posted negative growth in last financial year.

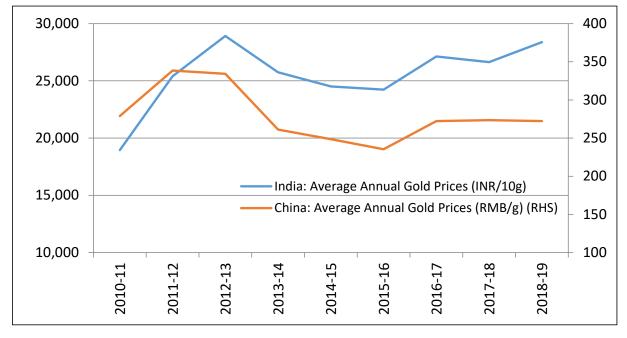


Figure 1.4. Gold Prices: India & China

Source: WGC; IGPC

The forecasts for a below normal monsoon by private forecasters, who have over the years largely been correct, indicates that this year might be the third consecutive year of drought. This can potentially impact the consumption at rural level, however with reducing dependence on agriculture as the main source of income; the impact of below average monsoon may be limited to fewer regions.

<sup>&</sup>lt;sup>8</sup> Source: <u>http://www.mining.com/australias-gold-production-hits-new-high/</u>





#### 2. Investment Demand

#### Exchange Traded Funds (ETFs)

Gold ETFs in India saw a sixth year of consecutive outflows; registering INR412 crore of net outflows with asset base dropping by 7% year-on-year. While higher gold prices were the primary reason behind weaker inflows, there is a structural shift in the direction of financial savings which has consistently caused outflows over the last six years. Higher equity market returns have had investors disillusioned with gold as an asset class. Inflows into equity and equity-linked schemes have seen stronger inflows mainly on account of stronger returns. In addition, there has been an apparent shift to Sovereign Gold Bonds by long term investors.

Table 1.5: Gold ETF in India, total asset under management

Year	Total AUM (Rs. Crores)	Net Inflow or (outflow) Rs. Crores
2018-19	4,447	(412)
2017-18	4,806	(835)
2016-17	5,480	(775)
2015-16	6,346	(903)
2014-15	6,655	(1,475)
2013-14	8,676	(2,293)
2012-13	11,648	+1,414
2011-12	9,886	+3,646
2010-11	4,400	+2,250

Source: AMFI9

#### **Bars and Coins**

In India, the investment demand for bars and coins slipped by a percentage to 163.7 tonnes, the lowest in recent years. India is the second largest bar and coin market in the world with seasonality driving the investment demand. Despite a strong fourth quarter, the overall demand still remained weak on an annual basis. Government-owned MMTC Ltd sold 9,269<sup>10</sup> Indian Gold Coins equivalent to 73 Kgs and worth 25.48 crore rupees in the 2018-19.

A look at India's investment demand data for bars and coins reveals that the demand is undergoing a structural change. The figure below shows an undergoing structural downward shift in bars and coins buying by Indian households; the demand has more than halved since 2010.

Source: AMFI; https://www.livemint.com/market/stock-market-news/gold-etfs-register-rs-570-crore-outflowin-2018-1548588910090.html

<sup>10</sup> Source: MMTC Ltd

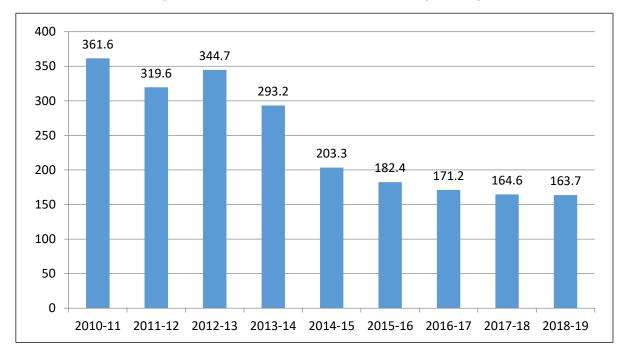


Figure 1.5: India: Bar and Coin Demand (Tonnes)

Source: World Gold Council11; IGPC @ IIMA

#### **Central Banks Demand**

India's central bank also added gold to its reserves in 2018 after a gap of almost ten<sup>12</sup> years. As per the Word Gold Council data, India's central bank purchased 48.5 tonnes of gold in 2018-19 (see figure 1.7),. As a result of these purchases, the Reserve Bank's gold holdings have gone up to 607<sup>13</sup> tonnes which is 6.4 per cent of total reserves. It is worth a note that the Reserve Banks's gold holdings have gone up from 35814 tonnes at end of 2008 to 607 tonnes at end of 2018-19, a rise of 67 per cent. As a result, gold's share in total reserves has gone up from 4 per cent at end of 2008 to 6 per cent.

<sup>&</sup>lt;sup>11</sup> Global Demand Trends Q1, 2019.

<sup>12</sup> A small purchase of 0.3 tonnes was made in 2017 as per the World Gold Council data. (Source: https://www.gold.org/ goldhub/data/monthly-central-bank-statistics)

<sup>&</sup>lt;sup>13</sup> Source: WGC & IMF International Financial Statistics, March 2019

<sup>&</sup>lt;sup>14</sup> Source: Metals Focus, Gold Focus, 2019



Feb 2019 1.9 Jan 2019 6.5 Dec 2018 1.9 Nov 2018 6.5 Oct 2018 5.6 Sep 2018 6.5 Aug 2018 6.8 Jul 2018 6.8 Jun 2018 May 2018 0.9 Apr 2018 0.6 CY 2018 = 42.3 tonnes Mar 2018 2.2 FY 2018-19 = 48.5 tonnes Feb 2018 Jan 2018 0 1 2 5 7 8

Figure 1.6. India: Central Bank's Recent Gold Purchases (Tonnes)

Source: WGC; IGPC

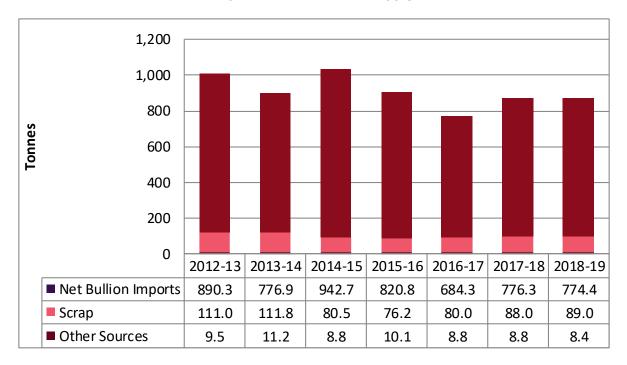
#### **Supply Trends**

India is the world's second largest gold consuming nation but the demand in India is largely met by imports. This is because gold mining in India is very limited. The domestic demand is therefore met by non-domestic supply, which comprises of official and unofficial imports.

India in 2018 produced 281.3 tonnes of fine gold from both gold and silver dore that were imported to the country. It was the highest on record and its share to gross gold imports touched 37 per cent and it share of total imports for domestic consumption (net imports) touched 55 per cent. Banks supplied 218.4 tonnes of gold to the domestic market, compared to 345.7 tonnes in 2017, down by 37 per cent. Nominated agencies also imported much lesser gold compared to last year, owing to weak domestic demand. Nominated agencies imported 60 tonnes of gold in 2018 compared to 266.7 tonnes in 2017, down by 77 per cent.

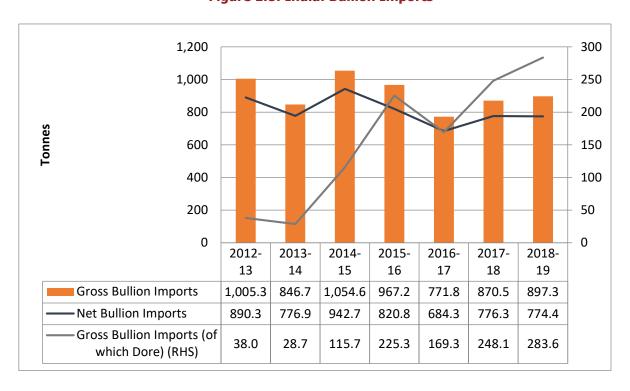
<sup>&</sup>lt;sup>15 & 14</sup> Source: https://economictimes.indiatimes.com/markets/commodities/views/the-growth-dilemma-for-indian-gold-refiners/articleshow/68618743.cms?utm\_source=whatsapp\_wap&utm\_medium=social&utm\_campaign=socialsharebuttons&from=mdr

Figure 1.7 India: Total Supply



Source: WGC; IGPC

Figure 1.8: India: Bullion Imports



Source: WGC; IGPC

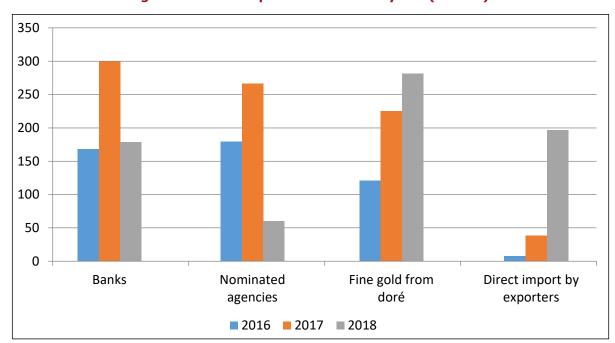


**Table 1.6. Indian Official Gold Bullion Imports in 2018 (Tonnes)** 

Switzerland	326	Bolivia	18
Ghana	70	Hong Kong	16
Peru	61	Burkina Faso	16
USA	60	UK	15
UAE	54	Australia	14
South Africa	26	Tanzania	13
Thailand	19	Dominican Republic	11

**Source:** Indian Ministry of Commerce, Metals Focus

Figure 1.9: Gold Imports for last three years (Tonnes)



Source: IGPC

#### **CHAPTER 2**

## Key Policy and Market Highlights

#### Global Macro Outlook

We consider prices of financial assets (primarily stocks and bonds), liquidity in the financial markets, savings and debt levels in the personal and corporate sectors and the associated volatilities as inputs into thinking about the possible direction of gold prices over the next 12-18 months.

The benchmark Dow Jones Industrial is year-to-date up by 15% after ending 6% negative last year. The volatility index of some of the major benchmarks, S&P 500, DJIA and Nasdaq are way lower from the 52-week high. Stock markets in India, UK, China and Japan are also up by varying degrees. However, so far as the US market is concerned, the cyclically adjusted PE ratio for S&P 500 as at December 2018 was around 27 – which is very close to the average over the last 28 years. The rise in equities since 2009 has been driven by increasing P/E ratios aided by the increased liquidity from the quantitative easing.

So far as liquidity is concerned consider the ripples caused by a small stone when thrown into a large lake and a small puddle. Liquidity is the water: if it is deep and plentiful the ripples tend to be small. If on the other hand, it is shallow the ripples tend to be large. Deutsche Bank has a report that shows that financial conditions in the US have become markedly tighter in recent months.

Liquidity to an economy is akin to grease in an engine. More liquidity (up to a point) helps the engine run more smoothly, while less liquidity acts to reduce the engine's efficiency. Like the grease in an engine the difference between optimum and sub-optimum is often very fine and dependent on many variables. Too much grease will not significantly enhance engine performance, but too little grease can lead to disastrous consequences. Similarly, too much liquidity will not enhance growth, but too little liquidity can cause a significant short term drag. One needs to look no further than India's economy growth shortly after demonetization. While liquidity due to QE has declined; however, there is still sufficient left in the tank in global markets though the exact numbers are disputed.

Currencies of some of the developed and emerging economies are all in green. The Credit Default Swaps market for both developed and emerging countries show the level of risk is by



and large low but for some outliers like Greece, Italy, and in the East-Asian markets Indonesia is concerning.

In United States the personal savings as a percentage of disposable income as of end 2018 was 6.8% according to Bureau of Economic Analysis, it is down from 2012 peak of 10.2%. This is amidst the personal disposable income growing at an average rate of 5% in last five years after a 2% decline in 2013 and last decade's average year-on-year growth of 4%. In absolute value terms the savings as percentage of disposable income is the highest since 2012, second highest on record and on a relative basis the amount is equivalent to the total disposable personal income in 1973. The majestic "Under Pressure: The Squeezed Middle Class" by OECD shows that "middleclass households feel left behind and have questioned the benefits of economic globalisation. The costs of some goods and services such as housing, which are essential for a middle-class lifestyle, have risen faster than earnings and overall inflation". In many OECD countries, middle incomes have grown less than the average.

Trying to relate this with US macro-economic numbers it is hard to find a reason that would indicate a slowdown in American consumption; rising tariffs could be one, though, if the Trump led trade wars are not called off. The household debt is now at the record highest of \$13.54 trillion but as a percentage of GDP it is only 68% as compared to approximately 88% in 2008. But then isn't it the debt that helps the economy run, especially the US and Chinese economies?! What should be of concern is the leveraging on this debt and whether the Federal Reserve and Treasury department has ammunitions in hand to shoot down systemic risks in the market. The US debt to GDP is at 107%; the Chinese debt to GDP is estimated at more than 300% though one is unsure of the latter number. That makes us refer to the IMF's Global Financial Stability Report, the highlight of which is rise of non-banking financial institutions and the fact that they hold \$1.1 trillion of leveraged loans in United States, double the pre-crisis levels. The report was released in October and market seems to have shrugged it for now apparently. But the temptation to take profit off the table from high risk assets could become the priority and might see a shift to low yield assets.

This increased saving and the risks of leveraged loans is reflected in the increase in demand for 5-year US treasury over the 2-year, leading to inverted yield curve. We compared the prices of treasury yield and DJIA on a weekly close. Our observation is it's been consistently holding since first week of December 2018, which has been the reason for worry. Last time the yields were inverted for 77 weeks (2<sup>nd</sup> week of 2005 to 1<sup>st</sup> week of June 2007) and DJIA hit peak in Dec 2007 before turning sharply lower. And before that from March 2000 to Dec 2000 yields were inverted but DJIA was range bound through after hitting a peak in Jan 2000 and falling subsequently in the following year. Further rewinding, from July 1978 to April 1980 yields were inverted, DJIA reversed from 1020 in April 1982 falling by more than 20% over next 18 months. So as you see here 2008 was sub-prime, 2001 was Y2K and 9/11, and 1982 was contractionary monetary policy. We are confident of not a repeat of severity as seen in 2008 but yes the geopolitical risk and US Federal Reserve's monetary policy are where we have our bets placed.

All the recent economic evidence is pointing to a slowdown. So there is little reason to expect a rate hike from a data driven Fed. The "dot plot" that makes up the members' projections showed 2019 year-end expectations for the fed funds rate at 2.375%, lower than a previous expectation for 2.875%. Fed's neutral stand is perceived to be supportive for gold (see Figure 2.1) as strong growth in emerging markets will lead to weaker US dollar which should help the gold price. In the main, it feels like Central Banks are done with this tightening cycle. They have a weaker arsenal at their disposal to deal with a recession (and one is coming!).

Was the Fed trying to stave off an impending recession? As investors analysed the information, two weeks ahead of the last rate cut announcement in December 2018 the 2 to 5 year spread started showing signs of a possible move into inverted term structure followed by a dovish statement in March 2019 FOMC meeting. Two points to note: first, any recession does not immediately follow an inverted term structure. Historically, a recession takes between 12-24 months after the spread gets inverted. Second, the 2-5 and 3-10 year spread are a pretty reliable indicator that a recession will happen - but says nothing about precisely when!

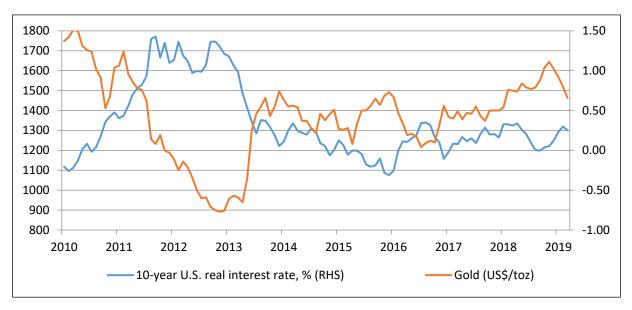


Figure 2.1 Gold Prices and interest rates

Source: World Bank, Commodity Markets Outlook, April 2019.

Our conviction also stems from the volatility of gold both in dollar and non-dollar currencies, which for many countries incidentally are the lowest since 1995/ 1996 and for some of them the lowest from the period we calculated (that's 1980). Volatility dropping to more than two decade low levels that too when gold in dollar is languishing at lower range, could be an indicator of a sharp move waiting to happen. We also looked at the LBMA price forecast for last ten years to judge sentiment of some well regarded 30 analysts who regularly provide their annual forecast at beginning of each year to LBMA. An interesting observation was narrowing down of the forecasted range between high and low in last eight years from \$1300 to \$325, while the lows have reduced over the years however higher range has remain consistent.





Factors that concern dollar for next two years is President Trump's trade policies and the impact of Mueller report on Trump's regime. Fed's recent outlook on interest rates shows their dovish stand, a sharp shift from last year's four consecutive interest rate hike. The volatility of some major currencies are near multi year lows, this coincides with Citi Macro Risk Index which is near a point of U turn, the volatility of benchmark equity indices are also only few points above the 52-week lows, and so is the volatility of gold prices in various currencies.

The demand for gold also remains robust. An important bullion bank supplier of gold in Asia says that as at March 31, 2019, central bank uptake of gold remained at a run rate that could match the annual central bank purchase of gold in 2018.

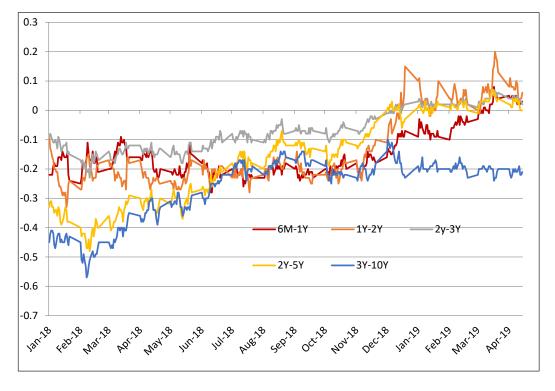
All of which would suggest that gold prices are likely to rise. By how much and when? Over the period 12-18 months a 10% increase is not unlikely. Even the World Bank, in its Commodity Markets Outlook for April 2019, forecasts gold prices to be higher by 3.2 per cent in 2019 (see Table 2.1). If the recession portended by the inverted yield curve becomes more likely or is seen to be closer, the rise could happen more quickly. And be higher.

Table 2.1. Gold prices forecasts in nominal U.S. dollars

Commodity	Unit	2019	2020	2021	2022	2025	2030
Gold	\$/toz	1310	1360	1354	1348	1330	1300

Source: World Bank, Commodity Markets Outlook, April 2019.

Figure 2.2: Term structure of US treasuries: Money managers and investors trying to protect from short-term headwinds



Source: US Treasury; IGPC@IIMA

#### **Domestic Economy**

On the domestic economy front, there are increased chances of risks associated with external sector vulnerabilities coming to the fore once again. This is primarily due to the recent surge in crude oil prices, something which has caught little attention in the market. In India, oil and petroleum products continue to be the biggest item in India's trade basket, constituting around 25 per cent of total imports. Given that oil imports are paid in dollars, any rise in crude prices exerts downward pressure on the rupee and further leads to widening of the current account deficit.

India is the second largest consumer of gold and is heavily reliant on bullion imports. Gold imports are the third biggest item in India's trade basket. Therefore, in order to control the deteriorating current account deficit (CAD), the government often looks to curtailing import of non-essential items - like gold<sup>17</sup> in the past. For example, in 2012, government had raised the import duty on gold to 10 per cent in order to rein in the CAD which had risen to 4.2 per cent of GDP. It is important to note that in FY12 & FY13, CAD was at 4.2 per cent and 4.8 per cent, respectively, owing to the higher crude oil price. Several measures taken by the government saw CAD remaining below 2 per cent for most part of the period between FY14 and FY17. However, currently, the external account is not quite comfortable with CAD at 2.5 per cent of GDP (2.9 per cent in Q2, FY 2018-19, see Figure 2.3) in the third quarter of FY 2018-19.

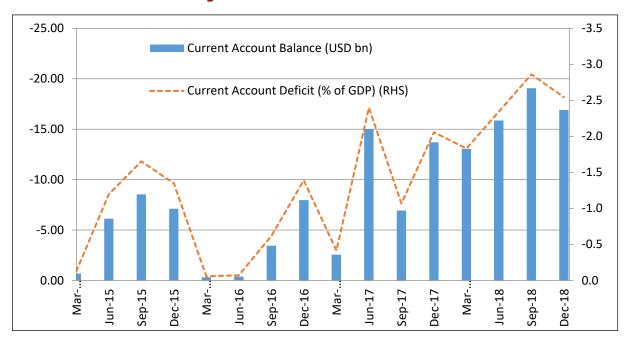


Figure 2.3: India's Current Account

Source: CMIE; IGPC

A higher current account deficit exerts downward pressure on the currency. It has also been the reason for the volatility seen in the rupee recently. Over the medium term, an unsustainable CAD

<sup>&</sup>lt;sup>17</sup> Source: https://www.telegraphindia.com/india/axe-on-non-essential-imports/cid/1668715





results in a savings-investment imbalance in the economy. Restrictions on gold imports have been crucial for building a resilient external sector in this regard. Since imports are paid in dollars, higher gold imports means higher demand for dollars hence increased pressure on the currency. An unsustainable current account deficit hugely increases the external sector vulnerabilities for the economy. With a lower CAD, the downward pressure on the currency and the volatility in the Indian rupee will moderate.

Due to cultural affinity and gold's long term store of value, gold demand in India is unlikely to come down. Policies that manage the demand and supply issues will have to be coherent with the evolving macroeconomic uncertainties. An economy that is exposed to such external sector vulnerabilities cannot sustain growth and will be exposed to recurring periods of volatility.

**Table 2.2: Indian Economy: Statistic at a glance** 

Indian Economy: Statistics at a Glance

	Unit	03.2019	02.2019	01.2019	12.2018	11.2018	10.2018	09.2018	08.2018
Real GDP: YoY	%				6,6			7,0	
Industrial Production Index: YoY	%			1,7	2,6	0,3	8,4	4,6	4,8
Consumer Price Index: YoY	%		2,6	2,0	2,1	2,3	3,4	3,7	3,7
Wholesale Price Index: YoY	%		2,9	2,8	3,5	4,5	5,5	5,2	4,6
Exports: YoY	%		2,4	3,7	0,4	-0,4	16,6	-2,7	19,0
Imports: YoY	%		-4,2	1,0	0,6	5,6	19,2	12,7	26,8
Money Supply: M2: YoY	%		16,5	15,0	13,9	16,5	15,4	15,0	18,0
Bank Rate: Monthly	% pa	6,5	6,5	6,8	6,8	6,8	6,8	6,8	6,8
Government Securities Yield: 10 Years	% pa			7,3	7,4	7,7	7,8	8,0	8,0
Gross Fixed Capital Formation	INR mn				14 100 519,1			13 301 965,9	
Government Fiscal Deficit	INR mn		806 540	693 880	-151 680	680 420	538 510	34 410	510 340
Investment: % of Nominal GDP	%				31,6			30,7	
Foreign Direct Investment: % of Nominal GDP	%				1,6			1,5	
Automobile Production	Unit		2 475 110	2 405 592	1 916 101	2 370 141	2 921 926	2 944 510	2 816 161
Crude Steel: Production	Metric Ton th		8 738	9 180	9 011	8 959	8 770	8 520	8 840
Consumer Confidence	Unit				96,7	93,9		94,8	
Current Account Balance: % of Nominal GDP	%				-2,5			-2,9	
Electricity Generation	kWh mn	106 990,5	91 206,6	100 848,8	100 841,3	99 777,0	113 507,4	108 327,4	105 792,8
Manufacturing PMI	NA	52,6	54,3	53,9	53,2	54,0	53,1	52,2	51,7
Services PMI	NA		52,5	52,2	53,2	53,7	52,2	50,9	51,5

Source: CEIC; CSO; SIAM; Ministry of Commerce & Industry; Ministry of Finance; RBI; Joint Plant Committee; Central Electricity Authority; Markit

#### Highlights: Key statistics, impact of regulatory changes and NITI Aayog recommendations

#### **Imports**

India is the second biggest importer of gold in the world, this demand from the jewellery industry is primarily met by gold imports. Gold is the third biggest item on India's imports list (see Table2.3) after "Petroleum crude & products" & "Electronic goods". As per the data from the Ministry of Commerce & Industry, the share of gold in total imports was 7.2 percent in 2017-18, whereas electronic goods were 12 per cent and petroleum crude & products were 23.3 per cent. India's gold imports dipped about 2.6% in value terms to \$32.7 billion during financial year 2018-19, total imports in the corresponding period of 2017-18 stood at \$33.6 billion.

**Table 2.3. India's Imports from World (% of Total)** 

Year	Petroleum crude & products (POL)	Electronic Goods	Gold
2007-08	31.9	8.1	6.7
2008-09	30.6	7.8	6.9
2009-10	30.2	7.3	10.0
2010-11	28.6	7.2	11.0
2011-12	31.7	6.7	11.5
2012-13	33.4	6.4	10.9
2013-14	36.7	8.0	6.1
2014-15	30.8	9.0	7.7
2015-16	21.7	11.4	8.3
2016-17	22.6	11.9	7.2
2017-18	23.3	12.0	7.2
2018-19	27.4	11.7	6.4

Source: CMIE; DGCI&S, Ministry of Commerce & Industry





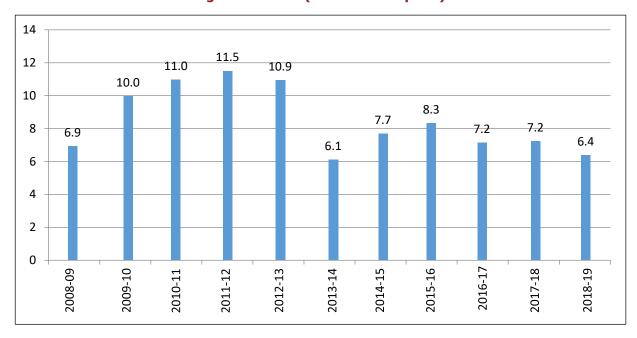


Figure 2.4. Gold (% of Total Imports)

Reduction in gold (non-essential item) imports has been one of the methods used by the government to rein in its current account deficit. The primary tool used in this context is the import duty that is levied on gold. However, on the contrary, the domestic jewellery industry looks for reduction in import duty and for relaxation of norms to boost the supply of gold. Last year, the industry had demanded a reduction in import duty on the metal. The government, however, did not consider the proposal because the gold imports were still high. The Minister of State for Commerce and Industry, Mr. C R Chaudhary, said in a written reply to the Lok Sabha that "At present, there is no proposal to review the gold import policy" 18.

#### Goods and Services Tax (GST)

The gold industry has had to grapple with a few issues with respect to the Goods and Services Tax since its introduction. The government has undertaken initiatives to address these issues and to improve the ease of doing business for importers and jewellery manufacturers. However, some of the issues still need to be addressed. Some of these are discussed below.

GST refund mechanism - One of the issue which has dampened tourists demand for gold & gold jewellery made in India is the absence of a GST refund mechanism. Under the Integrated Goods and Services Tax Act (2017), any foreign national or Non-resident Indian who stays in India for less than six months is entitled to claim refund of the GST when he/she leaves India. An absence of such mechanism has hit gold demand from foreign nationals and Non-resident Indians. The industry has expressed concerns over this issue - Nitin Khandelwal, chairman at All India Gems & Jewellery Trade Federation (GJF), says<sup>19</sup> that "The tax component is significant on

 $<sup>{}^{18}</sup> Source: \underline{https://economictimes.indiatimes.com/news/economy/policy/no-proposal-to-review-gold-import-policy-says-governous-gold-import$ ernment/articleshow/63368155.cms

<sup>&</sup>lt;sup>19</sup> Source: https://economictimes.indiatimes.com/news/economy/policy/absence-of-gst-refund-mechanism-hits-golddemand-from-tourists-nris/articleshow/63372101.cms

account of the high value of the commodity and that becomes one of the decisive factors for a tourist to buy jewellery or not," and further goes on to add that "The absence of the refund mechanism is dampening sales to tourists under GST."

**GST exemption on warehoused gold** – The Central Board of Indirect Taxes and Customs (CBIC) exempted the warehoused gold from the Goods and Services Tax. The CBIC amended the Customs Tariff Act (to come into effect from March 31, 2018) and according to the new directive "The supply of goods before their clearance from the warehouse would not be subject to the levy of integrated tax and the same would be levied and collected only when the warehoused goods are cleared for home consumption from the customs bonded warehouse,". The relief also applies to the jewellery which comes into India for job work and is then sent back, or say, re-exported. This has been received as a much welcome relief by banks and jewellery exporters who import gold on behalf of exporters for export purposes. Earlier, the introduction of GST was having an adverse impact on the working capital of the exporters. However, industry experts like Surendra Mehta, National Secretary, Indian Bullion and Jeweler's Association, see this relief to be extended to bullion refineries as well. Mr Mehta opines<sup>20</sup> that "This amendment of job work does not favour dore refiners as gold is produced from dore is refined in India. Thus, if the gold is purchased from refiners, GST on job work would still be payable. We have requested the government to include GST exemption on job work on gold purchased from refiners and jewellery exported out of the country."

Exemption from 3% IGST for Gem and Jewellery Exporters – The GST council ceded to the demands of the industry and exempted gold supplied by Nominated Agencies to exporters of articles of gold jewellery from the Goods and Services Tax (GST). Under the new GST regime rolled out in 2017, 3 per cent IGST was imposed on gold. However, the industry was clearly not happy and had requested for exemption. The government, in October 2017, exempted specific banks and public sector units (that is, nominated agencies) from 3% IGST on gold import. This still did not help the exporters who were facing problems with respect to blockage of working capital and claim of refunds. The industry requested for exemption on supply of gold to exporters by nominated agencies. Pramod Kumar Agrawal, Chairman, GJEPC, says that - the upfront payment of IGST and import duty in the form of bank guarantee had led to huge working capital blockage for various small and medium jewellery exporters, increased interest cost, and hassles of compliance to claim refund, consequently impacting their business operations and global competitiveness.<sup>21</sup>

**Monthly Deposit Schemes for Gold Jewellery -** The central government through an ordinance issued on February 21, 2019, banned unregulated deposit schemes to clamp down on the various Ponzi schemes. This was done in order to save investors who often fall prey to such illegal deposit

<sup>&</sup>lt;sup>20</sup> Source: https://www.business-standard.com/article/economy-policy/gst-exemption-on-warehoused-gold-a-major-reliefto-jewellery-exporters-118072300758\_1.html

<sup>&</sup>lt;sup>21</sup> Source: https://www.thehindubusinessline.com/markets/gold/gem-jewellery-exporters-exempted-from-3-igst/article25891036.ece



taking schemes. Fearing a clamp down on the deposit schemes run by some of the top jewellers in the country, these jewellers discontinued their deposit schemes soon after the ordinance was issued and switched customers to a scheme where the customers are offered discounts on making charges at time of redeeming deposit (these deposits are being treated by jewelers as advance sales).

According to some media reports<sup>22</sup>, jewellers have re-started the monthly deposit schemes after discontinuing soon after the ordinance was issued. Ambiguity still persists with respect to the deposits that are taken by the jewellers. Abhishek A Rastogi, Partner, Khaitan & Co, is of the view<sup>23</sup> that "By definition, all deposits accepted by jewellers will fall within the purview of the Ordinance. Hence, there is a need for the government to look at instances where intent is not to cover them within the definition of deposits. There should be a schedule prescribed to carve out exceptions or some monitory limit to be fixed for instances like loans accepting from friends or jewellery schemes". Jewellers having re-started the deposit scheme are now showing deposits as advance sales to the customers as one of the method to escape the ambit of the ordinance. Surendra Mehta, National Secretary, India Bullion and Jewellers Association (IBJA), describes<sup>24</sup> how jewellers are treating these deposits now, "All deposits settled within one year without accompanying interest are legal. Following the new Ordinance, jewellers have changed their strategy for treating such deposit schemes. Jewellers now adjust the interest by giving away discount largely towards making charges".

#### **Gold Monetisation Scheme**

Gold monetization scheme was announced in the Union Budget Speech of 2015-16 and formally launched by the Honorable Prime Minister on 5<sup>th</sup> November, 2015. The scheme thus announced, replaced the existing Gold Deposit and Gold Metal Loan schemes. Following are the key features of the scheme:

- 1. To mobilize the idle gold lying with households, trusts and various other institutions and put it to productive use.
- 2. To provide gold loan to the small and medium enterprises in the gems and jewellery sector through loan from banks.
- 3. To provide benefits to gold depositors by providing interest on their gold holdings through their Gold Savings Account.
- 4. To reduce the demand for import of gold in the long run.

According to the Department of Economic Affairs, Ministry of Finance, "Till November, 2018 a

<sup>&</sup>lt;sup>22</sup> Source: https://www.business-standard.com/article/finance/jewellers-re-start-monthly-deposit-schemes-after-two-weeks-of-suspension-119032700379\_1.html

<sup>&</sup>lt;sup>23</sup> Source: <a href="https://www.business-standard.com/article/finance/jewellers-re-start-monthly-deposit-schemes-after-two-weeks-of-suspension-119032700379">https://www.business-standard.com/article/finance/jewellers-re-start-monthly-deposit-schemes-after-two-weeks-of-suspension-119032700379</a>\_1.html

<sup>&</sup>lt;sup>24</sup>Source: https://www.business-standard.com/article/finance/jewellers-re-start-monthly-deposit-schemes-after-two-weeks-of-suspension-119032700379\_1.html

total of Approximately 15433 Kg of gold is deposited under the Gold Monetisation Scheme<sup>25</sup>." Table 2.4 also gives the sales data of Indian Gold Coins since the launch of the scheme. A total of 712.985 Kg of Indian Gold Coins have been sold as per the data. It is worth a

Table 2.4. Indian Gold Coin Sales under the Gold Monetisation Scheme

I	Indian Gold Coin SALES DETAILS (5 NOV 2015 TO 12 NOV 2018)					
	TURNOVER (IN CRORES)	WT. SOLD (IN KGS)	QTY. SOLD (IN NOS.)		MINATION DETAILS I NUMBERS	
				5G	10G	20G
GRAND TOTAL	231.81	712.985	76729	30,309	36,696	9,724

Source: Ministry of Finance, Summary Report, Calendar Year 2018

NITI Aayog, in its February 2018 report, has recommended a revamp of the Gold Monetisation Scheme to further strengthen it. The recommendations<sup>26</sup> of the NITI Aayog committee are as follows:

- 1. Ministry of Finance may review and revamp the GMS scheme, with time bound targets that may be set through a comprehensive gold policy.
- 2. Encourage more branches of banks to accept gold deposits under the GMS and also to extend the GML (of gold received under the GMS).
- 3. Banks to engage with the state endowment departments to encourage greater participation of the religious institutions in the GMS. The Committee suggests formulation of a standardized process guidelines along with an automatic approval route for endowment departments or representatives of religious institutions to start depositing gold under GMS
- 4. Permit deposits as low as 1 gram, and multiples thereof.
- 5. The transfer of gold collected under the GMS should be exempt from the purview of GST
- 6. Deposits mobilised under GMS may be considered for CRR
- 7. Number of CPTCs should be increased and they should be provided with certain tolerance limit for purity approval.
- 8. Consider jewellers meeting the prescribed norms as primary points of collection for GMS. This network through its association can work with banks to enhance reach of GMS.

India Gold Policy Centre also believes that a revamped Gold Monetisation Scheme is critical to achieve its stated objectives. Prof. Arvind Sahay, Chairperson, India Gold Policy Centre says that "Getting the GMS right is critical to addressing the CAD issue. I believe that the earlier GMS did not take a systemic approach: it catered to only one aspect of the challenge, and, therefore, didn't work. There is an estimated 24,000 tonnes of idle gold in the country." Prof. Sahay has

<sup>&</sup>lt;sup>25</sup> Source: https://dea.gov.in/sites/default/files/Summary%20Report 2018-English.pdf

<sup>&</sup>lt;sup>26</sup> Source: <a href="http://niti.gov.in/writereaddata/files/document\_publication/Report\_GoldMarket.pdf">http://niti.gov.in/writereaddata/files/document\_publication/Report\_GoldMarket.pdf</a>



outlined three areas<sup>27</sup> which are critical for the revamped Gold Monetisation Scheme to succeed - "The retail buyer should feel inclined to deposit gold in GMS, or the government has to make it a default option. One part of this is giving consumer the comfort that they will not be questioned for deposits of less than 500 gm, and for which the CBDT needs to reassure consumers about what is already available in the law. Second, banks have to have a reason to solicit, accept and use gold deposits in a manner that works for them. And third, a certification process (India Good Delivery Standard) that is acceptable to consumers and banks has to be in place."

In order to make the Gold Monetisation Scheme more attractive, The Reserve Bank of India amended the Gold Monetisation Scheme on 7<sup>th</sup> June, 2015<sup>28</sup>. The revamp of the scheme was done with the aim to enable people to open a gold deposit account in a hassle-free manner.

The Reserve Bank of India further amended the Gold Monetisation Scheme on 9th January, 2019 with regard to the eligibility criteria for those willing to make deposits under the scheme. The amendment<sup>29</sup> thus made is as follows:

### The existing sub-paragraph 2.1.1 (iv) shall be amended to read as follows:

"Persons eligible to make a deposit - Resident Indians [Individuals, HUFs, Proprietorship & Partnership firms, Trusts including Mutual Funds/Exchange Traded Funds registered under SEBI (Mutual Fund) Regulations, Companies, charitable institutions, Central Government, State Government or any other entity owned by Central Government or State Government can make deposits under the scheme. Joint deposits of two or more eligible depositors are also allowed under the scheme and the deposit in such case shall be credited to the joint deposit account opened in the name of such depositors. The existing rules regarding joint operation of bank deposit accounts including nominations will be applicable to these gold deposits."

# **Sovereign Gold Bonds**

Sovereign Gold Bonds (SGBs) are government securities issued by the Reserve Bank of India (RBI) on behalf of the central government and are denominated in grams of gold. The SGBs were launched in 2015 with a view to shift retail investment from physical gold to paper gold. One of the primary objective behind launching this scheme is to reduce the pressure on Current Account Deficit. Retail investors who prefer to invest in physical gold are primary targets for migration to paper gold through the Sovereign Gold bonds.

The bonds carry tenure of eight years, with provisions of premature redemption option after five years as well. These bonds are issued at the prevailing price, as notified by the India Bullion Jewellers Association to the RBI. Even early redemption and redemption on maturity is at the

<sup>&</sup>lt;sup>27</sup> Source: https://economictimes.indiatimes.com/markets/commodities/news/gold-monetisation-can-help-reduce-widening-cad/articleshow/65866327.cms

https://www.rbi.org.in/Scripts/NotificationUser.aspx?Id=10084&Mode=0

<sup>&</sup>lt;sup>29</sup> Source: https://rbi.org.in/Scripts/NotificationUser.aspx?Id=11450&Mode=0

prevailing price on that date. The bonds carry an interest of 2.50 per cent per annum paid semiannually. Retail investors can invest only up to a certain amount in SGBs. The table below provides data on Sovereign Gold Bonds since the time of first issuance in 2015.

Table 2.5: Data on Outstanding of Sovereign Gold Bonds (Tranche wise) as on 13.06.2019

S No	Series	Issue price/unit	number of units
1	2015-I	2,684	913,571
2	2016-I	2,600	2,870,808
3	2016-II	2,916	1,119,741
4	2016-17 Series I	3,119	2,953,025
5	2016-17 Series II	3,150	2,615,800
6	2016-17 Series III	2,957	3,598,055
7	2016-17 Series IV	2,893	2,220,885
8	2017-18 Series I	2,901	2,027,695
9	2017-18 Series II	2,780	2,349,953
10	2017-18 Series III	2,956	264,815
11	2017-18 Series IV	2,987	378,985
12	2017-18 Series V	2,971	174,024
13	2017-18 Series VI	2,945	153,356
14	2017-18 Series VII	2,934	175,121
15	2017-18 Series VIII	2,961	135,666
16	2017-18 Series IX	2,964	105,512
17	2017-18 Series X	2,961	107,380
18	2017-18 Series XI	2,952	81,614
19	2017-18 Series XII	2,890	111,218
20	2017-18 Series XIII	2,866	131,958
21	2017-18 Series XIV	2,881	327,434
22	2018-19 Series I	3,114	650,337
23	2018-19 Series II	3,146	312,559
24	2018-19 Series III	3,183	409,398
25	2018-19 Series IV	3,119	207,886
26	2018-19 Series V	3,214	243,606
27	2018-19 Series VI	3,326	207,388
28	2019-20 Series I	3,196	459,789
	TOTAL		25,307,579

**Source:** https://rbi.org.in/Scripts/BS\_SwarnaBharat.aspx

It is important to note that there is a market risk involved with SGBs since the redemption price of gold is linked to the prevailing price of gold. The government recognizes this commodity/price risk and has taken measures to deal with this risk to a certain extent. This has been explained



in a Ministry of Finance paper on Government Debt<sup>30</sup> – "It may not be possible to quantify the price risk linked to issuance of these bonds; it is not possible to estimate the market rate that will be prevailing at the time of redemption. To take care of the commodity price risk to certain extent, a Gold Reserve Fund has been created wherein an amount equal to the difference in interest rate on SGBs and weighted average interest rate of dated securities issued during the relevant year, is transferred." That being said, the government at the time of the launch of the SGBs expected to garner INR 15,000 crores, it has nevertheless mopped up only about INR 7,000 crores since the launch of the scheme.

Apart from being a key instrument for financialization of gold, the Sovereign Gold bonds are also one of the sources (although miniscule) of financing fiscal deficit (see Table 2.6) of the central government. Sovereign Gold Bonds are thus an important tool for the government for current account and budgetary management purposes.

Table 2.631: Sources of Financing Fiscal Deficit

		(Rs in crore)
	April-Sept, 2018	April-Sept, 2017
Fiscal Deficit	594,732	498,938
Sources of Financing		
1. Internal Debt	376,080	372,458
(a) Market Loans & Short Term Borrowings	350,380	380,664
(b) Treasury Bills (14 days)	-15,393	-30,302
(c ) Compensation and Other Bonds	1,430	13,094
(b) AMW	23,411	0
(e ) Cash Management Bill	0	0
(f) Sovereign Gold Bond Scheme 2015	232	1,242
(g) Others	16,020	7,760
2. External Assistance Including Revolving Fund	-7,282	5,428
3. Cash Draw Down Decrease(+)/Increase(-)	1,035	4,857
4. Investment of Surplus Cash(-)/redemption(+)	162,555	69,119
5. Borrowings(-)/Surplus(+) on Public Account*	62,344	47,076

Source: Controller General of Accounts, \*Includes Suspense & Remittances

#### **Gold Metal Loan**

In India, gold leasing is popularly known as a Gold Metal Loan (GML). This facility was launched in 1998 for jewellery exporters. It was only in 2005 that it was extended to domestic jewellery manufacturers. Jewellery manufacturers & exporters can avail Gold Metal Loan from the authorized bullion banks which charge a lease rate. These banks, however, lend to the Indian

<sup>30</sup> Source: https://dea.gov.in/sites/default/files/Status%20Paper%20on%20Govt%20Debt%20%20for%202017-18.pdf

<sup>31</sup> Source: https://dea.gov.in/sites/default/files/H1%202018-19%20FRBM%20English.pdf

manufacturers & exporters at rates much higher than what they borrow at. These interest rates have traditionally ranged anywhere between four to six (see Table 2.7) per cent, offering short term loans with a maximum maturity of 180 days for jewellery manufacturers and 270 days for jewellery exporters.

**Table 2.7: Rate of interest for Metal Gold Loan (%)** 

Scheme	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Metal Gold Loan										
(Security Wise Rate										
of interest)										
A (Cash)	5.00	5.25	4.50	4.50	4.00	4.00	3.75	3.00	3.00	2.20
B (Bank Guarantee)	5.75	5.50	4.75	4.75	4.50	4.50	4.25	3.75	3.50	2.75
C (CCA & Above)	6.00	6.50	6.25	6.25	5.00	5.00	4.50	4.00	3.50	3.50

Source: SBI and other banks

Under the GML facility, a gold jewellery manufacturer borrows gold from the bank and settles the metal loan in rupees. The borrower is required to square off the GML at any time during the loan tenure; however, the loan is squared off at the prevailing market price. The GML thus tends to be a natural hedge. Also, GML is a very good product for small manufactures who cannot afford an interest rate of 12 to 14 per cent on working capital loan.

Faced with the challenge of a rising current account deficit (CAD), the government abruptly stopped the Gold Metal Loan facility in May 2013. The jewellers had no option but to borrow from the normal marketplace with interest rates as high as 11 per cent to 14 per cent. For jewellers & manufactures, the Gold Metal Loan has been the only efficient source of low-cost finance available.

Moreover, it has also been observed that banks have a different lease rate curve as compared to the benchmark. Also, the jewellery manufacturing industry reckons that there is a vast interest rate differential between the Gold Metal Loans available domestically compared with those available in the international markets. Reeling under the effect of such market distortions, the leasing market requires an anchor benchmark rate for parity and stability across the marketplace. Clearly, there is a need for a market gold lease rate, discussed briefly in Box 1.

#### **Box 1. Benchmarking the GML interest rate**

An internal group constituted last year in July by the RBI, has recommended that the banks should use external benchmarks for setting interest rates rather than any internal benchmarks. The Reserve Bank opines that the internal benchmarks using the marginal cost of fund based lending

rate (MCLR) is based on bank's internal cost of funds and is thus a weak tool for monetary transmission. Banks are also likely to adjust the base rate to protect their cost of funds. RBI thus recommends its policy repo rate as one of the external benchmarks for this purpose.





This has implications for the Gold Metal Loan market as well. Gold Metal Loans linked to a stable external benchmark, like the repo rate, will have numerous benefits. Some of these are discussed below and need to be studied further for any policy recommendation.

Stable Interest Rate Regime: By benchmarking the Gold Metal Loan rate to the repo rate will render stability to the loan market from any regulatory changes or financial market distress situations.

Elimination of Gold Price Risk: Gold price risk is likely to get eliminated for manufactures and lenders. Manufactures will have control over long term contracts and lenders will also see improvement in the quality of their credit risk.

Strengthening of Competitive Intensity of Manufacturers: Manufacturers are likely to become competitive in the international market as gold (raw material) will be available at internationally cost competitive rates.

Availability of Cheap Working Capital: Working capital funding requirements at competitive rates will improve the financial profile of the manufacturers. This is likely to benefit the entire Gems & Jewelry sector which is dominated 90-95% by micro small and medium enterprises (MSMEs) and employs close to 6.1 million people.

The gold metal loan market in India is poised to seize a vast opportunity from a sector that has traditionally been starved of low-cost finance. The government recognizes the challenges faced by the industry with respect to lease rates. A recent report by the government's think tank NITI Aayog recommends linking gold metal loans with international lease rates. This would serve to correct the practice adopted by some bullion banks of borrowing from the international banks at lesser rates and lending to the Indian jewellers at much higher rates. However, we need a domestic benchmark for the lease rates so that the policy pass-through is more direct with respect to these loans.

As discussed earlier, the RBI is now recommending repo rate as one of the external benchmark for banks to set interest rates. This has clear implications for gold metal loan rates as well. The RBI repo rate can be the most reliable and transparent benchmark for gold metal loans. With repo rate as the benchmark, the transmission of the repo rate changes will be real-time and efficient. And since most of the gold metal loans tend to be of a shorter tenure, the reporate stands to be the most comprehensive benchmark since it is based on the MPC's assessment of 91-day T-bill rate and 3-month CD rate.

Revamped Gold Metal Loan Scheme - The Reserve Bank of India revamped the GMS - linked Gold Metal Loan (GML) Scheme in January 2019. The amendments<sup>32</sup> to the scheme are listed below.

<sup>&</sup>lt;sup>32</sup> Source: https://www.rbi.org.in/Scripts/NotificationUser.aspx?Id=10084&Mode=0

- 1. The gold mobilized under STBD33 may be provided to the jewellers as GML. The designated banks can also purchase the gold auctioned under MLTGD34 and extend GML to the jewellers.
- 2. The jewellers will receive the physical delivery of gold either from the refiners or from the designated bank, depending on the place where the refined gold is stored.
- 3. The existing Gold (Metal) Loan (GML) Scheme operated by nominated banks in terms of paragraph 2.3.12 of the RBI Master Circular on Loans and Advances - Statutory and Other Restrictions dated July 1, 2015 will continue in parallel with GMS-linked GML scheme. All prudential guidelines for the existing GML Scheme as prescribed in the Master Circular as amended from time to time will also be applicable to the new Scheme.
- 4. The designated banks other than the nominated banks shall be eligible to import gold only for redemption of the gold deposits mobilised under the STBD.

## Interest to be charged

The designated banks are free to determine the interest rate to be charged on GMS-linked GML.

#### **Tenor**

The tenor of GMS-linked GML will be the same as under the extant GML scheme.

Various concerns still remain with respect to the scope and ambit of the GML facility.

- 1. There is a need for an increased vigil by the banks as low cost GML funds tend to get diverted for other purposes.
- 2. Dore imports have been on the rise in recent years. Allowing refiners to lend gold can bring huge advantages.
- 3. The role of GML in the proposed spot exchange regime will need to be clearly outlined.
- 4. As discussed above, the benchmarking of GML interest rate will go a long way in the success of GML scheme.

# **Market Highlights**

### **Commodity Derivatives Trading**

India's gold ecosystem would not have been called fully developed if it were not for a vibrant derivatives market. Multi Commodity Exchange (MCX) launched the first gold contract in 2003; currently it offers an array of gold futures contracts. Table 2.8 gives a history of gold futures contracts traded at MCX since 2003. In order to introduce new products in the commodity derivatives space, the Commodities Derivatives Advisory Committee (CDAC), formed by SEBI,

<sup>33</sup> Short Term Bank Deposit (STBD) - The deposit of gold made under the GMS with a designated bank for a short term period of 1-3 years.

<sup>34</sup> Medium and Long Term Government Deposit (MLTGD) - The deposit of gold made under the GMS with a designated bank in the account of the Central Government for a medium term period of 5-7 years or a long term period of 12-15 years or for such period as may be decided from time to time by the Central Government.





recommended introduction of Options of Commodity Futures in India. On October 17, 2017, MCX launched India's first commodity options on Gold Futures on its trading platform. According to MCX, Open Interest in MCX Gold Options touched an all-time high of 4.64<sup>35</sup> tonnes in March. Table 2.9 gives a history of Options on Gold Futures since inception.

Table 2.8: Trading in Commodity Futures (GOLD) at MCX

Instrument Type	Year	Commodity	Traded Contract(Lots)	Total Value (Lacs)	Avg Daily Turnover (Lacs)
FUTCOM	2003	GOLD	2013	12,268.75	350.54
FUTCOM	2004	GOLD	632,843	3,940,704.99	14,226.37
FUTCOM	2005	GOLD	2,600,407	17,551,330.18	57,170.46
FUTCOM	2006	GOLD	9,957,351	89,636,572.52	291,975.81
FUTCOM	2007	GOLD	7,604,891	71,977,660.21	235,992.33
FUTCOM	2008	GOLD	14,024,217	171,474,191.96	558,547.86
FUTCOM	2009	GOLD	1,214,4967	184,997,191.41	606,548.17
FUTCOM	2010	GOLD	12,052,225	219,874,783.77	716,204.51
FUTCOM	2011	GOLD	12,655,760	314,713,353.71	1,018,489.82
FUTCOM	2012	GOLD	10,287,609	305,672,442.56	995,675.71
FUTCOM	2013	GOLD	8,944,603	256,385,614.60	832,420.83
FUTCOM	2014	GOLD	3,971,634	110,666,518.87	412,934.77
FUTCOM	2015	GOLD	3,947,175	104,039,990.01	403,255.78
FUTCOM	2016	GOLD	4,093,572	121,083,681.78	467,504.56
FUTCOM	2017	GOLD	2,296,957	66,468,954.87	260,662.57
FUTCOM	2018	GOLD	2,256,202	69,353,299.63	270,911.33
FUTCOM	2019	GOLD	864,244	28,001,705.22	378,401.42

Source: MCX

Table 2.9: Trading in Commodity Options (GOLD) at MCX

Instrument Type	Year	Commodity	Traded Contract (Lots)	Total Value (Lacs)	Avg Daily Turnover (Lacs)
OPTFUT	2017	GOLD	25,036	743,884.01	2,917.19
OPTFUT	2018	GOLD	372,697	11,536,679.52	45,065.15
OPTFUT	2019	GOLD	52,686	1,719,261.96	23,233.27

Source: MCX

The year 2018 has been particularly significant in terms of development of the commodity derivatives market in India. India's top two exchanges, the BSE and NSE, commenced trading in commodity derivatives during the month of October. Both the exchanges today have active gold contracts with significant open interest. These developments will enhance competition which will make the market deeper and stronger, thus to leading to more financial innovation.

<sup>&</sup>lt;sup>35</sup> Source: https://www.mcxindia.com/docs/default-source/comm-news/english/mcx\_commnews\_march2019.pdf?sfvrsn=-e2c8df90\_2

**Table 2.10. Gold Deliveries on MCX** 

	Table 2.10. Gui
Year	Total Delivery (Kgs)
2004	397
2005	2,551
2006	7,167
2007	5,674
2008	4,892
2009	10,259
2010	12,819
2011	7,556

Year	Total Delivery (Kgs)
2012	8,447
2013	14,814
2014	11,187
2015	5,902
2016	5,643
2017	4,797
2018	3,575
2019*	335

Source: MCX \* Till February 2019

There were other significant measures taken by SEBI in the year gone by. SEBI opened up the commodity derivatives market to foreign participants. Foreign entities having actual exposure to Indian commodity markets have been allowed to participate in the domestic commodity derivatives markets. How this development is likely to influence trading in gold futures and options is something that will be closely watched.

In another significant step towards integration of spot and commodity derivatives, SEBI has laid a roadmap wherein all commodity derivative contracts need to be converted into compulsory physical settlement mode. Hence as soon as a gold spot exchange is set up, with the regulatory structure in place, the integration of gold derivatives trading with the spot market will be seamless.

# Mining

India's history of gold mining goes back to almost 200 years. The production of gold through mining is however miniscule. India is the second largest consumer of the precious metal and this demand is largely met by imports. There is therefore a need to encourage gold mining to reduce the burden of import. Also, according to the NITI Aayog, the mining sector has the potential to generate considerable employment opportunities in India.

As per the Indian Bureau of Mines, gold ore reserves/resources have been estimated at 501.83 million tonnes as of 1.4.2015. Out of these, the total reserves/resources for gold (primary metal) have been estimated at 654.74 tonnes. Largest resources of gold are located in Bihar, that is, 44 per cent of the entire resources in the country. This is followed by Rajasthan (25%), Karnataka (21%), West Bengal (3%), Andhra Pradesh (3%), and Jharkhand (2%). Karnataka gold mines are on top in terms of the metal content accounting for 99 per cent of the total production of primary gold.

In India, production of primary gold is very low, just under two tonnes (1.59 tonnes<sup>36</sup>) in 2016-

<sup>&</sup>lt;sup>36</sup> Source: Indian Minerals Yearbook, 2017, Indian Bureau of Mines



17. The production was however up by 20 per cent in 2016-17 as compared to the previous year. Table 2.11 gives the gold production trend in India from 2012-13 to 2016-17.

**Table 2.11. Gold Production Trend** 

Quantity	2012-13	2013-14	2014-15	2015-16	2016-17 (p)
Ore (Th. Tonnes)	503	421	447	563	582
Gold Bullion (kg)	1,588	1,564	1,441	1,323	1,594
Gold Bullion Value (Rs. '000)	5,172,517	4,225,317	3,602,722	3,214,623	4,362,410

Source: Statistical Profile of Minerals, 2016-17, Indian Bureau of Mines

Public sector mining accounts for the lion's share (99 per cent) in primary gold mining. The 2016 amendment to the Mines and Minerals (Development and Regulation) Act 1957 (MMDR) has allowed private companies to bid for mining leases through a competitive auction process. However, not much progress has happened on the ground, with only Vedanta Resources having successfully bid for the Baghmara Gold Mine in Chattisgarh. During the 12<sup>th</sup> five-year plan period, gold production was projected at 44<sup>37</sup> tonnes; however, the actual production is just 7.5 tonnes. Clearly, the role of the private sector will be very crucial in developing the mining sector in India.

Gold mining is important not just from the point of view of easing the burden of import but also from the economic, social and infrastructure development of India. Infrastructure development in mining region will not only lead to significant development but will also create considerable employment opportunities in rural areas. The Indian Bureau of Mines provides data on the number of persons employed per day in the gold mining sector. According to this data, the average daily employment of labour in 2016-17 was 3,382, compared with employment of 3,426 in the previous year.

Following are the key policies<sup>38</sup> related to the mining sector.

- 1. Foreign Direct Investment (FDI) up to 100% in Mining Sector in respect of gold is eligible for automatic approval.
- 2. Gold being a specified mineral, Mineral Concessions, viz, reconnaissance permits (RP), prospecting licenses (PL) and mining leases (ML) for gold are granted by the State Governments after prior approval of the Central Government.
- 3. In the revised Export-Import Policy, comprised in the Foreign Trade Policy (FTP), 2015-20, gold ores and concentrates are under freely importable category.

# Hallmarking & Assaying

Hallmarking is the process which determines the accurate content of gold in the gold jewellery. Hallmarking is done in India by the Bureau of Indian Standards (BIS) which certifies the purity of gold through its stringent processes. Hallmarking has advantages both for the consumer and

<sup>&</sup>lt;sup>37</sup> Source: Indian Minerals Yearbook, 2017, Indian Bureau of Mines

<sup>38</sup> Source: Indian Minerals Yearbook, 2017, Indian Bureau of Mines

the manufacturer/retailer. Through hallmarking, the consumer is protected from any kind of cheating. For the manufacturer/retailer, hallmarking is a testament of the capability, quality and consistency of his gold jewellery. Hallmarking is a voluntary scheme that is being operated by BIS through its widespread network of regional/Branch offices all over the country.

Gold hallmarking consists of the following:

- 1. BIS Mark
- 2. Purity in Carat and Fineness (it can be any of the following)
  - ♦ 22K916 Corresponding to 22 Carat
  - ♦ 18K750 Corresponding to 18 Carat
  - 14K585 Corresponding to 14 Carat
- 3. Assaying/Hallmarking Centre's identification Mark/Number
- 4. Jeweller's Identification Mark/Number

Earlier, jewellery purchased before 1 January, 2017 used to have a fifth component, that is, year of hallmarking of jewellery. This component was discontinued after the rules were revised, effective, 1 January, 2017.

The WGC Report – The World Gold Council launched a report on Mandatory hallmarking: Global practices and road map for India<sup>39</sup> on 7 December 2017. This report covers key stages in the hallmarking journey in order to ascertain what works best in other jurisdictions and how India can maximize the benefits of mandatory hallmarking.

The government is also very keen on making hallmarking mandatory for gold jewellery. According to media reports, "The Bureau of Indian Standard has submitted rules under the amended BIS Act enacted two years ago, to the law ministry, which is understood to have cleared them. The matter now lies with Ministry of Consumer Affairs. Jewellery hallmarking was also recommended by the Niti Aayog panel on comprehensive gold policy, and sources say the government is likely to go ahead with the measure irrespective of when decisions on other aspects of the policy are taken. Consumer affairs minister Ram Vilas Paswan had said on several occasions in the past, that hallmarking would be implemented soon."40

However, there are two prominent issues which need attention before hallmarking is made mandatory throughout the country.

1. Lack of infrastructure – There are currently 741<sup>41</sup> hallmarking centres in the country. (See

<sup>&</sup>lt;sup>39</sup> Source: World Gold Council. (2017, December 07). Mandatory hallmarking: Global practices and road map for India. https:// www.gold.org/goldhub/research/mandatory-hallmarking-global-practices-and-road-map-india

<sup>&</sup>lt;sup>40</sup> Source: Mandatory hallmarking of gold jewellery in phases, BIS rules to be notified. https://www.business-standard.com/ article/markets/mandatory-hallmarking-of-gold-jewellery-in-phases-bis-rules-to-be-notified-118031300645 1.html

<sup>&</sup>lt;sup>41</sup> Source: BIS





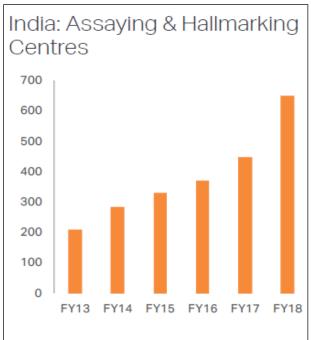
Table 2.12 for the number of hallmarking centres in each state. Also, see Figure 2.6 for region wise distribution of hallmarking centres in India). These are believed to be far less than what is required. Moreover, the bigger cities have more hallmarking centres as compared to the smaller cities. Also, the southern region accounts for the maximum number of hallmarking centres in India. The infrastructure has however steadily grown since 2013, see Figure 2.5.

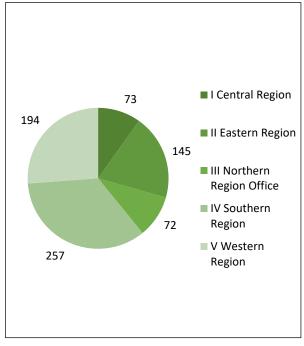
**Table 2.12. Statewise Hallmarking Centres** 

S. No.	States	Number	S. No.	States	Number
1	Delhi	33	21	Uttar Pradesh (East)	37
2	Uttar Pradesh	4	22	Chandigarh	3
3	Rajasthan	21	23	Jammu Kashmir	3
4	Madhya Pradesh	10	24	Himachal Pradesh	1
5	Haryana	5	25	Uttarakhand	1
6	West Bengal	88	26	Tamil Nadu	85
7	Odisha	17	27	Andhra Pradesh	41
8	Jharkhand	7	28	Telangana	21
9	Bihar	22	29	Puducherry	2
10	Sikkim	0	30	Kerala	63
11	Chhattisgarh	6	31	Karnataka	45
12	Arunachal Pradesh	0	32	Lakshadweep	0
13	Assam	4	33	Andaman & Nicobar	0
14	Nagaland	0	34	Maharashtra	117
15	Meghalaya	0	35	Gujarat	75
16	Manipur	0	36	Goa	2
17	Tripura	1	37	Daman & Diu	0
18	Mizoram	0	38	Dadara & Nagar Haweli	0
19	Punjab	17			
20	Haryana	10		Total	741

Figure 2.5. Assaying & Hallmarking Centres in India – Steady Growth

Figure 2.6. Region Wise Hallmarking
Centres





Source: India Focus Monthly, MF, November 2018

Source: BIS

2. Demand for different cartage – The industry believes that there is demand for 19 carat, 20 carat, 23 carat and 24 carat jewellery in rural areas in particular. Since jewellers have never officially claimed selling jewellery under these cartages, the government believes that such demand does not exist. For instance in Maharashtra 23 to 24 carat jewellery are very popular, similarly 20 carat is popular in Uttar Pradesh.

The Bureau of Indian Standards launched an awareness campaign on gold hallmarking last year in November. Speaking at the event, the Union Minister of Consumer Affairs, Ram Vilas Paswan said, "BIS has set standards for hallmarking of gold jewellery in three grades of 14 carat, 18 carat and 22 carat. We are going to make it mandatory soon"<sup>42</sup>. Also speaking at the event, H L Upendar, Deputy Director General, Consumer Affairs, BIS said "The benefits of hallmarking are widely recognised in India's gold industry. Hallmarking has a direct correlation with consumer trust, and confidence. However, the awareness among consumers is still not high which makes them susceptible to under-caratage. Since launch of hallmarking in 2001, gold hallmarking has been voluntary. We would prefer consumer purchase only hallmarked gold from BIS licensed outlets to ensure guarantee of purity or fineness which is consumers' right. We aim to usher a time where consumers walk into any jewellery store and demand for only hallmarked gold.

<sup>&</sup>lt;sup>42</sup> Government plans to make gold hallmarking mandatory soon: Ram Vilas Paswan. Source: <a href="https://economictimes.indiatimes.com/news/economy/policy/govt-plans-to-make-gold-hallmarking-mandatory-soon-consumers-affairs-minister-ram-vilas-paswan/articleshow/66635278.cms">https://economictimes.indiatimes.com/news/economy/policy/govt-plans-to-make-gold-hallmarking-mandatory-soon-consumers-affairs-minister-ram-vilas-paswan/articleshow/66635278.cms</a>



We want consumers to look for the four symbols of hallmark and make informed purchases. In a country where millions invest their life savings into gold purchases; they deserve pure and certified gold. Through this campaign, we aim to catalyze a mass consumer movement to drive preference for hallmarked gold."<sup>43</sup>

Assaying – The World Gold Council and MMTC-PAMP launched India's first "Precious Metals Assay and Training Institute" on 12 November 2018, to develop a new generation of skilled assayers. The institute is a not for profit company, an industry driven body, that provides certification courses in assaying at its world class training facility.



Source: PMATI

The institute has been set up with the following objectives:

- 1. Providing training and certification in the field of assaying
- 2. Standardizing and promoting best practices for gold and precious metals industry
- 3. Providing learning opportunities, acquiring new techniques and upgrading existing skills

Commenting on the launch of PMATI, Aram Shishmanian, Chief Executive Officer, World Gold Council said, "As leaders of the industry, we have the responsibility to ensure gold's integrity and reputation; the institution will give consumers and investors confidence in the product they buy, and create a cadre of talented and qualified assayers, who will pave the way to eliminating under-caratage in gold. PMATI will play a key role in improving trust and transparency in the Indian gold market."

Commenting on the launch of PMATI, Arjun Raychaudhuri, Managing Director of MMTC-PAMP said, "Making world class products in a world class way is our core philosophy at MMTC-PAMP. India is witnessing significant innovation in how consumers engage with gold. It is imperative that customers receive the highest purity and complete traceability of the metal. We are committed as an institution to build infrastructure that allows every customer assurance of both quality and source of the metal. The Precious Metals Assay Institute is a step in this direction and is supported by all major industry bodies."

<sup>&</sup>lt;sup>43</sup> BIS launches gold hallmarking awareness campaign. Source: <a href="https://economictimes.indiatimes.com/industry/cons-products/fashion-/-cosmetics-/-jewellery/bis-launches-gold-hallmarking-awareness-campaign/article-show/66460948.cms">https://economictimes.indiatimes.com/industry/cons-products/fashion-/-cosmetics-/-jewellery/bis-launches-gold-hallmarking-awareness-campaign/article-show/66460948.cms</a>

PMATI is supported by all of the leading trade associations in India including the India Bullion Jewellers Association (IBJA), Gem and Jewellery Promotion Export Council (GJEPC), Bullion Federation of India (BFI), All India Gem and Jewellery Council (GJC), Indian Association of Hallmarking Centres (IAHC) and Association of Gold Refineries and Mints (AGRM).

## Refining

PS: This is a shorter version of an article<sup>44</sup> published in The Economic Times by Prof. Arvind Sahay and Sudheesh Nambiath on March 28, 2019.

India in 2018 produced 281.3 tonnes of fine gold from both gold and silver dore' that were imported to the country. It was the highest on record and its share to gross gold imports touched 37%, and it share of total imports for domestic consumption (net imports) touched 55%. As noted by a refiner recently, at this pace in five years 100% of the domestic supplies are going to be from gold refined by domestic refiners.

Is this something that is achievable and / or desirable? It may be an achievable target given that at least 130 tonnes of dore' are from large and medium scale mines, while rest are from artisanal and small-scale gold miners (ASGM). The estimates of production from ASGM have varied with agencies and are likely to be in range of 500 to 650 tonnes a year. Out of these Indian refiners imported approximately 150 tonnes. Further, we calculated the share of India's imports to total production by the mining countries from which India imported last year. Going by these numbers if Indian refiners imported all of the gold produced in these countries then India's total supply would emerge from dore' refined in India, our estimate is approximately 786 tonnes of fine gold could be recovered by Indian refiners (see Table 2.13 below).

Table 2.13: Source of Dore Imports into India and Total Potential Imports as Dore

Mining country	Share of total production imported to India	Gold that could be imported to India (units in tonnes)
United States	22%	180
Peru	34%	108
Brazil	14%	69
Papua New Guinea	0.1%	62
Congo	1%	59
Philippines	3%	47
Colombia	18%	42
Tanzania	26%	36
Chile	2%	35
Burkina Faso	32%	34

<sup>&</sup>lt;sup>44</sup> Arvind Sahay & Sudheesh Nambiath, March 2019, "The growth dilemma for Indian gold refiners". Source: https://economictimes.indiatimes.com/markets/commodities/views/the-growth-dilemma-for-indian-gold-refiners/articleshow/68618743.cms?utm\_source=whatsapp\_wap&utm\_medium=social&utm\_campaign=socialsharebuttons&from=mdr





Mining country	Share of total production imported to India	Gold that could be imported to India (units in tonnes)
Ghana	71%	30
Dominican Republic	36%	23
Cote d Ivoire	8%	21
Guinea	33%	15
Ecuador	0%	14
Bolivia*	75%	6
Laos	5%	6
		786

Source: Mine production numbers from GFMS, Refinitiv.

It is easy to arrive at a number but in practical it may not be possible due to two reasons. The first is the contracts that miners may already have with various large refiners in the world. The second is the issue of responsible sourcing that could be a concern in quite a few of the countries that dore' is imported from. With India being a part of FATF and the government committing to OECD responsible sourcing, there will be challenges ahead.

Nevertheless, the optimism stems from countries where the mining is largely unorganized, and the lack of large or medium scale mines in those countries has opened an opportunity for Indian refiners to source more gold. This and supplies from large scale miners could help add at least another 250 to 300 tonnes over the years. Thereby increasing total supply by Indian refiners to approximately 550 tonnes of gold refined from dore'; this is as against total import of 512 tonnes (refined bullion by banks and nominated agencies + dore' by refiners) for domestic consumption in 2018. Assuming on average a refiner imports at \$1 discount to LBMA price, India could have approximately saved \$10 million. Is this worth it?

The answer would depend on a larger strategic vision that the government may have. It is no secret that Central Banks have been accumulating gold. The year 2018 saw a 45 year high of 651 tons. There is also the possibility that at some time in the next 5-10 years, the dollar's status as the reserve currency will be challenged. Under these scenarios, it would be logical to not only increase refining, but also increase mining of gold in the country.

It is time the contours for operation of the refiners in India is better defined, and the sourcing guidelines are made mandatory in line with OECD's five-step framework at least by creating a guideline that fits Indian refinery, their financing and remittances models need to be reviewed by the RBI as only two out of the sixteen countries from where refiners import are FATF member countries and more importantly avoid a situation where a shutdown of one refiner can create a potential supply squeeze in the market. When one entity controls 25 to 30% of the refining market locally, systemic risks will increase.

<sup>\*</sup>Bolivia production as provided at Global Gold Dore Forum by Bolivian Government.

Increasing incentives to refiners and increasing refining capacities are not going to help achieve the goal of India as refiner for the world. When it comes to gold to have a global outreach adherence to OECD's due diligence guidelines is the key and then comes the fineness, quality and designs. Our industry has till now put its efforts on only fineness and quality by mandating license from BIS to import dore.

# **NITI Aayog Recommendations**

NITI Aayog under the Chairmanship of Shri Ratan P. Watal formed a committee on "Transforming India's Gold Market" to make recommendations for transforming the gold market ecosystem in India. The committee had representations from amongst all the stakeholders of the gold market ecosystem, that is, from the concerned Ministries/Departments of the Government of India, Reserve Bank of India, industry associations, academia and India Gold Policy Centre. The recommendations were submitted last year and according to the committee "The major recommendations focus on measures to boost the domestic supply of gold to reduce dependence on gold imports, by streamlining policies on gold mining, refining and monetisation. The Committee highlights the need to have greater financialisation of gold for both the investors and the industry."

The recommendations<sup>45</sup> structured into five key focus areas are as follows:

Category	Recommendation	Implementing Institution
I. Make in India in Gold	R1.1 Creation of Jewellery Parks by Cluster Development, along with Common Facility Centres	Department of Commerce
	R1.2 Boost Exports through Value Addition and opening up of B2C	Department of Commerce
	R1.3 Make Gold Mining viable and attractive to investors - including Gold in the Tier I List of Make in India industries	Ministry of mines
	R1.4 Create India Good Delivery Standard to boost Refining	NABL
	R1.5 Address industry concerns and ensure necessary infrastructure on Hallmarking before making it mandatory	Ministry of Consumer Affairs

<sup>&</sup>lt;sup>45</sup> Source: http://niti.gov.in/writereaddata/files/document\_publication/Report\_GoldMarket.pdf





Category	Recommendation	Implementing Institution
II. Financialisation of Gold	R2.1 Ensure greater participation by banks in the GMS and GML	- Ministry of Finance / - RBI -
	R2.2 Increase Point of Contact for Collection of Gold Deposits by involving the Jewellers	
	R2.3 Introduce New Gold Savings Account	
	R2.4 Sale of India Gold Coin may be permitted through the proposed Bullion Exchange	
	R2.5 Incentivise Digital Transaction	MeitY
III. Tax	R3.1 Rationalize and reduce the Import Duty on gold and gold dore	Ministry of Finance
	R3.2 Remove CTT on gold derivatives	
	R3.3 Review provisions of GST to support the MSME sector	
IV. Regulatory Infrastructure	R4.1 Set up Gold Board of India	- Ministry of Finance
	R4.2 Creation of Bullion Exchange / s	
	R4.3 Creation of Gold Domestic Council, linked to State Gold Forum / s	Ministry of Commerce
V. Skill Development and Employment Generation	R5.1 Encourage MSMEs to shift to clusters by offering incentives	MSME
	R5.2 Integration of institutes of repute such as NID and NIFT to provide courses on innovation, creativity and new ways of marketing	MSDE / Ministry of Commerce / Textiles
	R5.3 Identify and tie up with leading international jewellery designing and training centres	
	R5.4 Provide a 50 percent grant for obtaining technology and machines from the international markets	MSME

# Defining new era for Indian Gold Trade: Policy Recommendations by IGPC

India Gold Policy Centre @ IIMA submitted its recommendations to Department of Economic Affairs for revamping the gold industry through comprehensive a report titled "Defining a new era for India gold trade". This section we have provided synopsis of the report.

# The Need for A Policy:

At the Union Budget (2018-19) it was announced that

- 1. Government would prepare a comprehensive Gold Policy to develop gold as an asset class.
- 2. The Government will also establish a system of consumer friendly and trade efficient system of regulated gold exchanges in the country.
- 3. The Gold Monetization Scheme will be revamped to enable people to open a hassle-free Gold Deposit Account.

The need for a comprehensive policy stems from the vision of creating an ecosystem that shall go on to increase the contribution to the Gross Value Addition to economy while having at least a current account neutral approach and promoting the industry. There is a need to create a robust ecosystem that automatically enables the trade to move into a formal structure, bring traceability and make the value addition to economic activity become more evident. This is possible only by expanding the scope of activity of various stakeholders in value chain and with regulations that incentivizes the market to operate within the framework. For example, scrap gold trading in India is a highly fragmented market, completely opaque and it could, with the appropriate regulatory interventions it can help develop a more fluid and transparent way to trade gold.

At the India Gold Policy Centre @ IIMA we thus summarised the goal as "Create an ecosystem" that has an incremental effect in growth of economic activity."

# **Policy Objectives**

- 1. CAD neutral approach
- 2. Formalization and transparency in the trade





- 3. Increasing exports
- 4. Unlock private gold and increase its circulation in the system
- 5. Financialisation of gold

The **process** envisioned for successfully meeting the goals includes these points:

- 1. A revamped GMS including a Gold Deposit and Savings Account (that is not linked to "normal deposits," and that provides the necessary incentives to the relevant stakeholders like banks and refiners to participate actively in mobilization of gold deposits and also, therefore, indirectly in the spot exchange).
- 2. India Good Delivery Standards that are based on internal mechanisms but are accepted internationally which support the Spot exchange and the revamped GMS.
- 3. Create opportunities to develop an Indian bullion bank that would play critical role not just in India but internationally as well.
- 4. Making India a gold refining and jewellery manufacturing hub for exports
- 5. A Spot Exchange (that has participation by the international bullion banks, domestic banks and other market players) regulated by a Gold Board

# **Key Action Area Pillars of a Gold Policy**

A policy action designed to improve and scale the industry needs to have a certain minimum number of areas of intervention in a holistic and systematic approach to maximize the probability of success. Tinkering at the margins with a small change in one area is not likely to be effective because of the inter-linkages with other areas.

The figure 3.1 below represents the landscape on which the gold policy we think is to be drawn, points A, B, C, D, and E represents the five pillars. Standardisation is the key and thus we identified that accreditation of the refiners and creating India good delivery standards as the pre-requisite before bringing about various initiatives to modernise the trade.

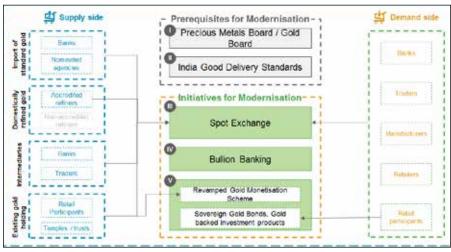


Figure 3.1: Gold Policy Landscape

Source: India Gold Policy Centre @ IIMA

A. Precious Metals Board / Gold Board: The new policy framework covers broader aspect of gold markets and is not limited to just one part of the value chain. The complex structure would require an independent regulator to oversee not just the trading on spot exchange but also to implement standardization with respect to gold refining, vaulting requirements, responsible sourcing guidelines and various investor education activities. Not limiting to it, this would also work closely with other regulators.

While it may be an easy solution to consider existing regulators to regulate the spot exchange, it would remain outside their purview to regulate the ancillary services, which is equally important given the objective of new gold policy framework.

The new regulator could be set up through a new act without transition provision or a new act with transition provision under existing regulator or through ordinance route.

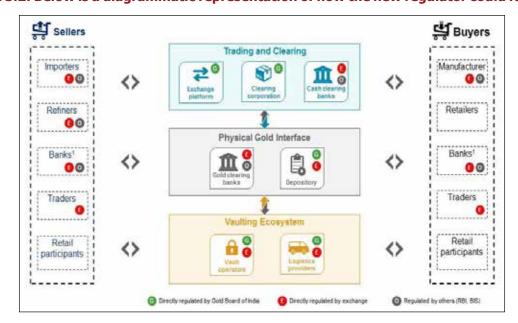


Figure 3.2: Below is a diagrammatic representation of how the new regulator could function

B) India Good Delivery Standards: Various structural changes are required to bridge the gap in the current Indian accreditation policies and practises. There are reportedly wide gaps in the processes within the Indian gold refining industry starting with the sourcing of gold, ensuring traceability of the origin, refining process, and even the final refined metal. It is easy to agree upon that a brand can be priced higher or lower not just basis demand-supply dynamics but because of the reputation it holds in the market.

As the industry moves to a unified platform for trading the homogeneity of gold is necessary specifically when banks are going to be one of the major stakeholders in the value chain. For most jewellers in India more often it hasn't mattered whether the gold is a LBMA or domestic refined as long it is 995 or 999 purity.

The discussion on developing Indian standards is on for nearly two years now, trade has prepared a draft document following industry consultation. We are currently in the second





stage of acting on the recommendations and implementing. However, the focal point is who regulates it and this is where we talk about Precious Metal Board.

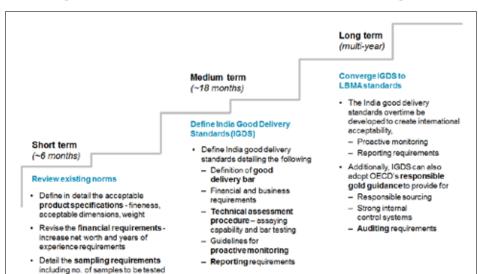


Figure 3.3: Evolution of India Standards for refined gold.

C) Gold Monetization Scheme: A successful Gold Monetization Scheme (GMS) needs to have interventions from the viewpoint of a taxation, cultural, marketing, good delivery standards, design and operational aspects of a collection centre, jewellers, refiners and the banks who ultimately take the price exposure. Making changes in 2-3 areas would be ineffective, as indeed has proved to be the case with the Gold Monetization Scheme where the total gold collected since launch is only 15.5 tonnes, which is less than 0.2% of the total estimated private gold in the country.

Action points: Due to absence of records for inherited gold, depositors fear that they may be questioned by income tax authorities regarding the source of funds. Thus the foremost is to clarify the individual and household level holding of gold allowed as per income tax rules, this should be part of the mass awareness campaign. The incentives for the customer should be able to match near a savings account deposit. This would mean the cost of raising the gold deposit would increase for the banks, this needs to be countered by reducing the operational and hedging costs for banks. To reduce these costs the nominated banks would have to be allowed sell GMS gold outright and not only lease, they should be able to source locally and do inter-bank dealing, not limiting to the GMS transaction. It would automatically incentivise more CPTC centres to start at multiple locations and refining could get widespread and not centralised. Nevertheless, it would require standardisation of domestically refined bars.

GMS shouldn't be seen as just sourcing gold on retrospective basis but also on prospective basis. This would require awareness campaigns and multiple bank branches that would facilitate retail level consumers to buy gold.

**D) Spot Exchange:** A Spot Exchange helps create a common platform for purchase and sale of standard gold bars. It acts as a pooled account for both imported gold and domestically refined gold, the pricing of which will be based on domestic demand and supply. However, to make it successful liquidity in the official physical market is one of the critical success factor as it shouldn't get to a point where gold is imported through a spot exchange and finds its way into the unorganised market. This requires creating a strong incentive mechanism to attract all the physical trade into the spot exchange. Some of these incentives can take the form of tax, bank financing, lower transaction costs, inter-operability amongst registered vaults, to name a few.

Spot Exchange is seen to bring the following benefits:

- i. Quality assurance: Offers quality assurance by ensuring that only gold of accredited refiners can trade on the exchange
- ii. Price transparency: Both bid and offer prices across India are displayed on the trading platform
- iii. Easy purchase and deployment of gold: Easy and equal access to all the market participants
- iv. Increased market access: Increased access to banks and bullion traders on the exchange
- v. Reduced risk of settlement: The central counterparty of the exchange bears the settlement risk for both parties

**Action points:** A clearly defined regulatory architecture is a pre-requisite for the spot exchange to deliver on its objective of reforming the gold market. A spot exchange regulator must be capable of delivering the following key objectives

- I. Market supervision: Regulate the organised trading activities in the gold market and supervise the activities of all the participants in the market
- II. Ecosystem development: Promote systematic growth and development of the organised gold ecosystem
- III. Investor and consumer protection: Protect the interest of investors and consumers of gold and provide a platform to address their grievances.

Given the nature of the objectives and the nationwide presence of the exchange, central oversight of the exchange, its components like contracts, tradability and stakeholders participating will be critical for the success of the exchange. Additionally, deciding on the regulator of a spot exchange required looking into the remits of various other regulators thus the choice was being limited to either expand the scope of current regulators, for example by amending the Securities Contract Regulation Act or create a new regulator which can if required in future also regulate the OTC trade and not limit itself to Spot Exchange.

The decision on ownership of the spot exchange is another critical success factor; our bias is towards having an independent agency operating the spot exchange as we see this more as a technology platform with greater emphasis to infrastructure like vaulting, logistics, financing and standards, while the derivative exchanges should be supporting its growth. A centralised



operation with equal stake from all derivatives exchanges should be the way forward to make it a success. This further helps tight controls on information flow between Spot and Derivatives Exchanges with any human interventions.

E) Bullion Banking: The foremost requirement while we discuss about building the market infrastructure is developing liquidity in the physical market. This requires upping the game for banks from being a nominated agency by RBI to import gold on behalf of industry to that of a bullion bank. This would mean enable banks source locally, finance bullion and refining business, allow hedging in Indian exchanges, create gold backed products that helps reduce dollar outflow<sup>46</sup> for investment gold while managing the same funds circulate in the economy, and allowing banks export refined bullion. These are also integral to the success of Gold Monetisation Scheme. Nevertheless, the execution needs to be in a phased manner which has been detailed in Figure (3.4).

Action points: To develop robust bullion banking, amendments and clarifications in the Banking Regulation Act is required that enables banks to source locally, do inter-bank dealing, export bullion, transfer ounces to the counter party international bullion bank, allow opening of unallocated accounts, trading in dematerialised gold, hedge in domestic and international exchanges and finance refiners by sourcing dore. While these are allowed equally important to create clearing system, push through standardisation of physical gold that are to be traded, increase vaulting infrastructure.

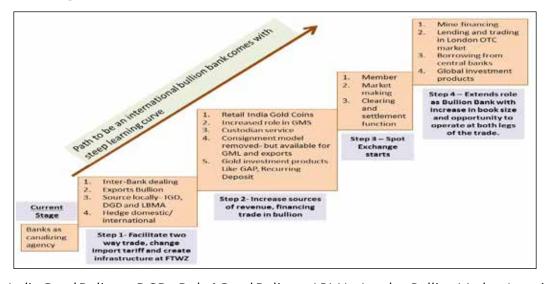


Figure 3.4: How nominated banks need to evolve as bullion banks

IGD=India Good Delivery, DGD=Dubai Good Delivery, LBMA=London Bullion Market Association

In essence our **vision** talking gold policy for India is paving path to be a net bullion exporter.

The model we have visualised is comprehended in what we termed as the gold policy wheel. As

<sup>&</sup>lt;sup>46</sup> Working Paper - A Concept Paper: Gold Savings Product with Deferred or Reduced Dollar Outflow https://www.iima.ac.in/web/areas-and-centres/research-centers/igpc/research-and-publications

much the wheel's alignment and balancing is a necessary function to run in all weather conditions, and for various terrains, the policy we have envisioned and recommended is on similar lines.

Representing the goal figuratively, we envision the market to change from figure 3.5 to figure 3.6 over the years on a phase wise implementation of policy.

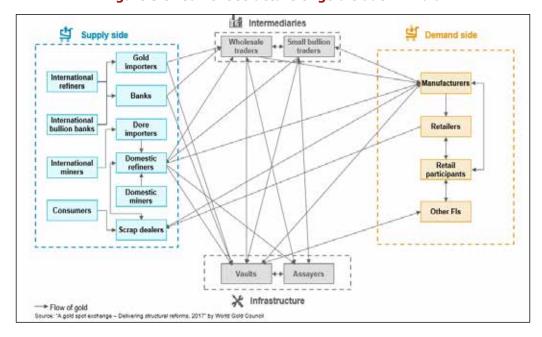
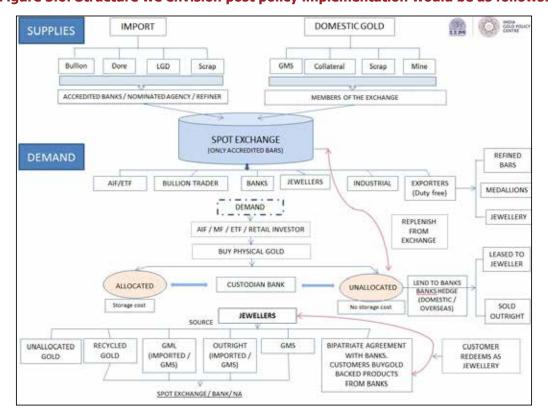


Figure 3.5: Current structure of gold trade in India

Figure 3.6: Structure we envision post policy implementation would be as follows:







As we drew upon earlier, the reforms success rests upon an architecture where each part of the value chain is interconnected and the regulatory machinery works in a way such that it helps the industry evolve over a period of time and add value to economic activity. We have displayed this in what we described as Gold Policy Wheel.

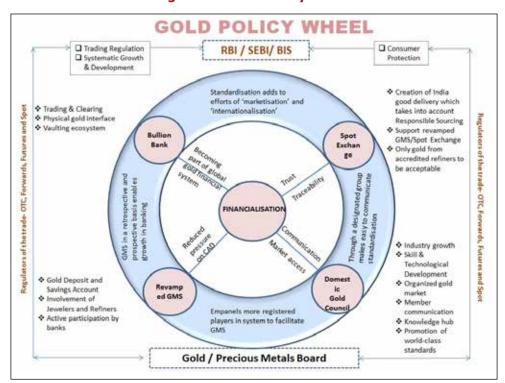


Figure 3.7: Gold Policy Wheel

#### **CHAPTER 4:**

# IGPC's Gold & Gold Markets Conference, February 2019





Prof. Arvind Sahay, Chairperson India Gold Policy Centre, lighting the lamp

# A. Address by Shri K Rajaraman, Additional Secretary, DEA, Ministry of Finance

The GGM 2019 was felicitated by Shri K. Rajaraman, IAS, Additional Secretary at Department of Economic Affairs, Ministry of Finance. According to Mr. Rajaraman, the gold industry has a great potential to create jobs and contribute for the overall economic growth. For this there is a need for a sound policy framework that is systematic in structure. A systematic gold policy framework shall align the interest of different stake holders fulfilling the objectives of the policy.



A need has been felt to create more research on the consumer behaviour related to gold, as well as on product design, spot exchange and how banks can include gold in their options.

More emphasis needs to be given on research areas that can help the policy makers with the decision making process and taking corrective measures.

Some of the research ideas that Mr. Rajaraman suggested were as follows –

- Understanding the incentives for people to purchase and hoard gold
- Know the triggers that encourages them to deposit under the GMS
- Incentives that are essential for gold financialisation and the regulatory changes to help the gold flow through the system like a currency.
- ♦ Comparative analysis on gold based investment products globally and domestically
- Regulatory / infrastructural modifications that are vital to introduce similar products in India
- Steps to create transparency in gold trade
- Understand on policy options to explore how Indian banks can treat gold as yet another retail investment product
- ♦ Gold as a reserve asset and strategies to manage same.
- India's existing gold mining policy, the opportunities and regulatory changes needed
- Research on how gold is to be treated in context to international trade agreements and its potential impact on the industry



Address by the Chief Guest Shri K. Rajaraman, Additional Secretary, Department of Economic Affairs

## B. Conference highlights

Panel Discussion 1: The way forward for gold policy



Panel Discussion 1 – The way forward for gold policy and the next steps (L to R): Prof. Arvind Sahay, Chairperson IGPC, Mr. P.R. Somasundaram, Shri Rajaraman K, Additional Sec., DEA, Mr. Mrugank Paranjpe, CEO, MCX Ltd.

The discussion tries to identify what are the immediate action points following the NITI Aayog report on gold policy framework, and whether gold's impact on the economy needs to be considered at the same level as it was five years back.

The issue of gold as a financial asset has been looked into on wider basis and not only for a specific objective. The policy aims at addressing the issues related to setting up of Gold Spot Exchange, Bullion Banking, and Incentives for consumers and banks to be in the business.

The policy needs to apprise on issues related to CAD, taxation, organized markets, increasing exports value of added jewellery and consumer's inclination for gold.

The proposal of Gold Spot Exchange seems to bring massive opportunities due to the gold demand in India. It can target for approx. 900 tonnes of gold deposits subject to CBDT's clarification on tax front.

**Price transparency, investor's safety and regulatory monitoring** are the key components for a robust gold spot exchange market. Gold price has to be judged on nationwide basis.

The panel concludes that gold is now **no more a luxury**. More emphasis has been towards designer jewellery and gold craftsmanship. A huge amount of gold is used as a collateral in India, for raising funds. Hence there is a need to look beyond GMS and quantify the value addition that gold creates for the economy.





Further, there is a need to create a strong mining policy like in countries like China, Australia and Canada. This will not only increase the employment opportunities but also allow two-way trade in gold.

Need to have standard operating procedures for gold vaulting was also discussed.

## Notable quotes:

Mr. Rajaraman K., "Efforts has been to look at the problem of gold as a financial asset in system wide basis and not on a specific issue. The issues related to setting up Gold Spot Exchange, Bullion Banking, incentives for consumers, incentives for banks to be in the business are the larger issues policy is looking to address"

Prof. Sahay, "the key focus areas of policy need to ensure that it takes into cognisance issues related to CAD, issues related to taxation, steps for moving from a fragmented to organised market, how to increase export of value added jewellery, and study the consumer attachment towards gold."

Mr. Somasundaram PR., "Value addition in the gold jewellery is an undersold concept although there is excellent craftsmanship." "There is a need to look beyond GMS and quantify the value addition that gold creates to the economy for every dollar spent."

Mr. Mrugank Paranjpe, "the three fundamental requirements to create a robust market place: Transparent price discovery, investor protection and regulatory oversight"



## Panel Discussion 2: Bullion Banking in India: challenges and opportunities

Panel Discussion 2 – Bullion Banking in India: Creating Opportunities and developing a sustainable model (L to R): Mr. Manish Padhye, DGM Treasury, ICICI Bank, Mr. Neville Patel, Head of precious metals, HDFC Bank, Mr. Vikram Mehrotra, Asia Head of Metal Sales, ANZ Bank, Singapore, Mr. Vijay Kumar Tyagi, Director, Department of Economic Affairs, Mr. Manish Goel, Director, Scotiabank India, and Mr. Jeremy East, Industry Consultant

The scope for starting **bullion banking in India** was discussed very comprehensively touching upon the challenges and the opportunities. The broader discussion points were on regulation, compliance, clearing system, standardisation, risks, products, knowledge resource, price discovery, capabilities and limitations of banks currently, benefits to refiners, bullion dealers and jewellery retailers, and more importantly the positive impact on the economy. There was consensus among policy makers and the bankers about the need to develop a strong and sustainable bullion banking infrastructure in India.

The discussion started with the introduction of **bullion bank operations in London**, which although is the biggest hub of gold trading, however is not regulated and is rather the players of the market that are regulated. Its success has been primarily driven by allowing banks to operate across the value chain of the gold business. Although they are well regulated but have the freedom to trade anywhere in the world as per bank's global compliance policy, can give advisory services, take exposure on their books, hedge, transfer ounces globally, they all trade on standardised bars due to which the trust in the ecosystem is high. In this context the role unallocated gold in the system was discussed which is more than 90% of the daily trade at London OTC market.

It was discussed that allowing operation of **unallocated account** should be the ideal way thereby helping reduce pressure on CAD. Walking that path will automatically lead to creation of a robust clearing system and can have retail customers buying gold without even importing the gold, eventually leading to net dollar payout of only the margin money to buy gold in the unallocated account. In a similar breadth, this also helps bullion trading activity. Another opportunity for the Indian banks is financing the Indian refiners. Banks could finance unallocated ounces locally, and these unallocated ounces could be transferred to miners when refiner imports dore. This would not only help financing refining business it can increase compliance in the sourcing.

With regards to **risk management** the three key areas identified were on counter party risk, KYCs and operational risk. Nevertheless, the emphasis was on existing practices on the first two points and knowledge to manage these risks, however with regards to operational risks standardisation in refined bars was discussed to avoid risks related to purity and source of gold.

Banks showed confidence about their **ability to scale** up immediately given an opportunity as they viewed the business similar to that of foreign exchange vertical, the only major difference being that of physical vaulting and standardisation.

Talking about vaulting, lack of vaulting infrastructure at smaller towns was highlighted as one of the reason for not being able to on board smaller jewelers by banks. Adding to that the varying tariff rates and inability to hedge their price exposure were seen as reasons to limit the reach only to large cities.

The panel concludes that the market need not be over regulatory and a balance has to be created. Regulating the complete gold market seems a bit difficult. Hence the option of giving banks, the





freedom to operate, can bring more regulation in the system. Banks need special authority to develop and become the leaders. They are essential to keep the value chain alive and play a pivotal role to create a sustainable gold model and a robust eco system. Gold is the only asset that connects equities, bonds, forex, and a flourishing jewellery industry and consumer market.

Some of the interesting quotes in the discussion were:

- "Market shouldn't be over regulated or under regulated and a balance needs to be striked"
- "Regulating the complete gold market will be impossible instead giving banks the freedom to operate will bring in the much required regulation in the system"
- "Allowing banks to develop and be the leaders of the development will bring the change, they are the bloodstream to complete value chain"
- "To develop a sustainable model and create a robust eco system bullion banks play a pivotal role"
- "Gold is possibly the only asset that is connected to equities, bonds, forex, a flourishing jewellery industry and consumers"



#### Panel Discussion 3: Driving growth in the Indian gold derivatives market

Panel Discussion 3 – Driving growth in the Indian Gold Derivatives Market (L to R): Prof. Joshy Jacob, Associate Professor, IIMA, Mr. Viral Shah, Sr. VP and Head of Commodities at India Infoline Wealth P Ltd, Mr. Abdul Nazar, Head Bullion & Banking, Malabar Gold & Diamonds, Mr. Shivanshu Mehta, Head-Bullion, MCX Ltd., Mr. Nagendra Kumar, Sr. VP & CEO, NSE and Mr. Sameer Patil, Head - Business Development, BSE

The commodity exchanges have seen the high and the trough since its inception in 2003, which is all with in fifteen years. Policies have been at the forefront which has shaped the growth of derivatives market. For instance the introduction of Customs Duty on gold shifted the market to overseas market, Commodity Transaction Cost had led towards shifting the trades to "Bucket Shops"- the unofficial trade where only the net position is executed on exchange. All said, there has been a slew of measures undertaken in last two years, which has helped revive market participation, albeit the fact that being open interest in the most actively traded contract is only 25 metric tonnes, which is just a fraction of COMEX.

Globally commodities particularly gold has been strongly viewed as an alternative investment class leading to increased allocations through derivatives exchanges. However in India we have started taking baby steps on the front very recently. However the interest to participation is blurred due to taxation structure more than anything else.

Retail jewelers who consume on average 600 tonnes annually are still a large untapped market for hedging and the reason was because they haven't yet understood the mechanism or importance of hedging. More often a hedging position becomes a speculative trade thereby defeating the whole purpose and sending a wrong message on the benefits of derivative market. Jewellers noted that only large players with scale in their operations have been successful at it by employing professionals to manage hedging the inventory. Also it was noted that jewelers prefer to do a back-to-back purchase following daily sale thereby protecting from any sharp price moves, even so it may get adjusted in the 'board price' which is charged to customers.

MCX while agreeing to it said they have been aggressive in running awareness campaigns, and been working closely with various regional associations too for disseminating knowledge on hedging.

There were debates on the existing product and room for product diversification / development. However, there are a few concerns which need to be addressed. The opinion was that the intrinsic value of options contract can't be higher and we need to see the potential of introducing weekly options. Further to that the tick size has to be minimum and opined the difficulty of explaining hedging mechanism to jewelers.

According to Prof. Joshy there is a good opportunity for structured products to come to India limited to institutional participation early on. However, these products typically exploit investors. Therefore, it is imperative that:

- 1. A structured product is not an esoteric product
- 2. It has be known/familiar to the investor
- 3. Should be broad-based and not manipulated by seller
- 4. Highly liquid

Regarding Options Joshy was of the view that it is less understood compared to futures.

1. Option is the right pricing of risk.





- 2. Short options will get more players.
- 3. Education for options products is required.

Some of the notable quotes from the session:

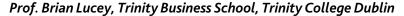
"Hedging in India is more expensive than overseas market."

"SEBI's universal exchanges license will promote hedging by using margins on commodities side. Also, non-commodities participants can use their margins for commodities derivatives trading."

"The end user should be aware that there is a thin line between hedging and speculation. Also, that gold & rupee hedging go hand in hand."

## C. Abstracts of Papers Presented

## 1. The intellectual structure of research on the financial economics of precious metals





Shri Rajaraman K, Additional Secretary, DEA presenting the MCX Award for Excellence in Research on Gold to Prof. Brian Lucey

This paper examines the literature on the financial economics of precious metals from a bibliometric and scientometric perspective. Authors surface the main trends and authors in the area over the last two decades, and provide estimates of the density of the networks of both researchers and research. Clear evidence is provided of an area dominated by a number of high output researchers, with distinct and clear areas of research with little overlap. A probabilistic topic modelling approach is further applied to determine the main topics of research in the area. We conclude that there are significant areas of potential synergy as yet unexploited in this research domain. The paper also highlights the current topics that can be a particularly important focus for these synergy efforts.

JEL Codes: A10; Q30

Keywords: Gold, silver, platinum, palladium, bibliometrics, Topic modelling, LDA

## 2. Gold Mining Shares and Flight to Quality





This paper uses the co-movement of gold mining companies with the price of gold to identify three distinct crisis characteristics: (i) flight to quality (from gold mining stocks to gold), (ii) arbitrage and (iii) a safe haven trade. The analysis of a large sample of globally listed gold mining companies reveals that financial crises are very different depending on the country in which the mining company is listed and the size of the company. We also find evidence that investors increasingly exploit the safe haven property of gold by purchasing gold mining shares in reaction to safe haven events.

JEL Classification: G01; G11; G14

**Keywords:** gold; safe haven; flight to quality; gold mining; black swan event

3. Prof. Baur in special address discussed how he was motivated to research on gold and how he explores on new research ideas. Following this brief talk Dirk discussed his paper which was co-authored with Josua Oll on "From financial to carbon diversification – The potential of physical gold"





Gold is a well-known diversifier of financial risk with a long history as a physical asset. This paper analyzes whether gold provides additional environmental benefits in the portfolio context. We show that the addition of gold to a diversified equity portfolio does not only enhance the riskreturn relationship but also its sustainability by reducing the portfolio's carbon emissions. If carbon emissions are fully accounted for at the production (firm) level, physical gold holdings have zero CO2 emissions. Even if CO2 emissions are fully assigned to physical gold holdings, gold becomes a CO2 diversifier if held over longer periods. Our study highlights the critical role of physical assets and the investment horizon in the sustainability analysis of portfolios.

**Keywords:** gold; physical assets; sustainability; carbon emissions

## 4. Decomposing the macroeconomic dynamics of gold – an econometric explanation





India's appetite for gold has been on an unabated rise in the recent years. This paper decomposes the macroeconomic dynamics of the determinants of gold price in India. This empirical investigation for the sample period 1960-2017 involves the cointegration regression methods followed by residual-based cointegration tests, Toda-Yamamoto causality test, and the auoregressive distributed lag (ARDL) model. The main findings are: (1) the net financial position of households has a positive effect on the gold price and the causality is unidirectional towards the gold price (2) The rise in the financial openness of the country affects the gold prices negatively with the unidirectional causality towards the gold price. (3) The rising crude oil price negatively impacts the gold price, though the magnitude of the impact is minimal. (4) The official gold reserves of the country affect the gold price positively. The notable policy implication of the results is that increasing financial openness of the country exerts a moderating effect on the gold price and as the net financial position of the households' increases, there is a positive effect on the gold price, suggesting that the policy makers should keep this relationship in sight while designing the taxation measures.

JEL Classification: E21; E40; E44; F31; Q31

**Keywords:** consumption; savings; gold; oil price; interest rate; inflation; cointegration; residualbased cointegration tests; Toda-Yamamoto test; ARDL

#### 5. Does Volume of Gold Consumption Influence the World Gold Price?





Gold is a universal commodity traded throughout the world. The price is fixed twice a day by LBMA known as AM and PM fix prices. This study is an attempt to find out whether the volume of gold consumption shows any significant impact on the world gold spot price known as LBMA fix prices. Six major gold consuming countries like India, Europe, USA, Middle East, China and Japan are included in the empirical analysis. The study used the quarterly data for the period from January 1994 to June 2018. Econometrics models such as Johansen Cointegration, VAR Granger Causality/Block Exogenity Wald test, Impulse Response Function and Variance Decomposition are used to carry out the empirical analysis. The results conclude that LBMA fix prices and gold demand of all the countries move together in the long run. Further, the volume of gold demand significantly influence the world gold spot prices, LBMA AM fix and PM fix prices. Overall, the demand of all the countries together influence the world gold price. As far individual effect is concerned, only India and China significantly influence the price fixation. As India stands largest consumer in the world gold market, either IBJA or IBMA can initiate steps to bring Indian market price as bench mark price in the world gold markets.

Keywords: World Gold Market, Gold demand, Wald test, Impulse response function, Variance Decomposition





#### 6. Time Varying Risk Premium in Gold Futures Market: Empirical Investigation in India

Prof. Trilochan Tripathy, XLRI



This study fits the multivariate GARCH model to obtain the dynamic conditional correlations (DCCs) between gold futures returns (gold ETFs) and the excess returns of the equity index in India over the period of 2009-2018. Using the first stage DCC GARCH model inputs, study finds the presence of significant gold futures risk premium and lend support to the theory of Normal Backwardation (1930). The study also reveals that gold future (gold ETFs) offers the benefit of portfolio diversification, hedging and safe haven benefit to the equity index investors in India. The portfolio and hedge effective analysis suggest that adding gold futures to a portfolio of stocks significantly improves its risk adjusted return and the equity risk exposure can be effectively hedged away over time. Further, it is the idiosyncratic factors of gold such as gold futures basis, spot price realised variance and skewness are found to be the significant determinants of the risk premium in gold futures (gold ETFs). Finally, gold futures risk premium can be used as a significant predictor of equity risk premium in India. The outcome of this study has academic, managerial and regulatory policy implications.

JEL classification: Q42; Q11; C32

Keywords: Multivariate GARCH; Dynamic conditional correlations; Gold Futures; Wavelet Coherency.

#### 7. Predictive Analytics for Devising Gold Prices: A Case Study of Price prediction for Importing Gold from Thailand to India





This paper uses predictive machine level algorithm to forecast the price of Gold between two countries on transaction basis. This enables the Gold jewelry business men to fix the prices of Gold using automated distributed networking from different distributed databases and integrate into one. A case study has been conducted to prove the results.

**Keywords:** Price prediction, Gold price, Gold supply chain

#### 8. Impact of price path on disposition bias

Prof. Joshy Jacob, IIMA / Mr. Avijit Bansal, Doctoral student IIMA



Avijit Bansal, Doctoral Student IIMA presenting a paper – Impact of price path on disposition bias







Prof. Joshy Jacob, Associate Professor, IIMA presenting a paper – Impact of price path on disposition bias

#### 9. Mapping the Perception of Consumers of Post-Liberalisation Generation towards Symbolic Values of Gold

Prof. Girish S Pathy, Prof. Hareesh N Ramanathan, Bhavan's Royal Institute of Management / Toc H Institute of Science and Technology



Gold is one of those rare commodities that possess utilitarian, hedonic and symbolic benefits. India is one of the largest importers of the yellow metal, accounting consistently for almost one fourth of the global gold imports year after year. One among the key reasons for the unprecedented demand is at association to the culture. Culture is dynamic, particularly when it is exposed to elements of other culture. The present study attempts to map the perception of customers in the post liberalized generation in India towards symbolic values of gold. It uses the multi-dimensional scaling technique to plot the perception. The study brought out that there are mainly two bases on which perception towards gold is influenced among the post liberalization consumers in India, Spiritual dimension and psychological dimension. It could also identify that the post liberalization generation doesn't hold emotional bonding with the gold they possess, unlike what most historic studies have brought out. One of the limitations of the study is that there is an element of subjectivity since it used multidimensional scaling technique.

Keywords: Gold, Physical Gold, Culture, Globalisation, Perception, Perceptual mapping, Symbolic values of gold, Multi-Dimensional Scaling

#### 10. A Study of Various Purposes and Avenues to Invest in Gold





Investors tend to look at the Return – the potential return possible from investment; Risk- the variability in returns from an investment in avenues due to value going up and down; Liquidity -the ease with which the investment can be converted into cash. Based on the preferred risk, return and liquidity each individual selects investment avenues that match with his investment objectives. An individual investor has to confront his / her demographics, lifestyle and investment psychology whether the investor's age or occupation or education plays a significant role while making preference for investment avenues and purposes.

Many persons would be looking at buying Gold this 'Akshaya Tritiya' and 'Dhan Teras'. Some of the persons might have thought of dumping physical Gold i.e. jewellery & coin, Gold mutual funds, e-trading and buying of Gold and going for Gold funds instead. Liquidity of Gold – the ease with which the investment can be converted into cash, based on the preferred risk, return and liquidity each individual selects Gold as investment avenues that match with his investment objectives. This Study explores the investment in Gold who resides in Moradabad District. The primary objective of the study is to find out the various purposes and avenues of the investment pattern for those who are dealing in Gold.





#### 11. Understanding the gold customer of tomorrow

#### Mr. Arjun Raychaudhury, Managing Director at MMTC-PAMP India Limited



Mr. Arjun Raychaudhury, MMTC-PAMP presenting a case study: Consumption trend in the digital gold – an analysis of over a million customers

This case describes about the buyers and consumers of gold in India, components on which the future gold demand shall depend and proxies for future customer behavior for digital gold. The income has a major impact on the demand of gold. If there is a sudden growth in the demand, there may be a rise in the adoption of digital gold, both by consumers and market. Poor quality standards in terms of physical delivery, purity verification and nature of the parties, can permanently affect the tastes and preferences of future consumers.

Keywords: Gold consumers, GDP growth, digital gold, purity, demand

#### 12. Challenges in scaling gold retailing

#### Prof. Arvind Sahay, IIMA



Prof. Arvind Sahay, Chairperson IGPC, presenting a case study

The case study is about Tanishq (A Tata Group company). Retailing, marketing and merchandising are the core competencies of Tanishq. Tanishq, as a brand, believes in educating the customer on karatage, gross as well as net weight and factory visits. It also adopts a transparent exchange process whereby the old jewelry is melted in front of the customer. Given a retail jewelery market of more than INR 250,000 crores and an organized retail chain market share of less than 30% the potential for upside is large and Tanishq consciously targets this potential. It aims at changing the retail behavior pattern specifically in the younger generation through brands such as Mia that are lower in caratage and in price and this easier to buy. The case discusses the major challenges faced by Tanishq in the areas of customer adoption, given the enormous range of designs across the country; the challenges of maintaining the margin in the commodity driven market and inventory management that can be a key to delivering higher margins.

**Keywords:** gold market, gold demand, inventory, Tanishq, gold merchandising

#### **Closing Comments:**



Mr. Rajesh Khosla, Chairman-Emeritus MMTC-PAMP India Ltd. delivering closing comments



Prof. Manas Paul, IMT Ghaziabad, observer for all panel discussions, summarizing the sessions







A vote of thanks by Mr. Sudheesh Nambiath, Head IGPC



# Events and Industry Engagements

#### Bullion Federation Global Convention (BFGC), July 27-29, 2018, New Delhi



The focus of the convention was on the future of digital gold, and the role of gold monetization scheme. One of the key benefits that came out through the discussion was that digital gold could be bought and sold in smaller quantities. Professor Arvind Sahay began his address by analyzing which constituency or bracket of people would find digital gold attractive, or would want this product—whether it would be the bullion traders, the central bank, the consumers, or all three, and whether there currently exists a clear path to make digital gold more attractive. Prof.





Shay further pointed out that the current trend being observed is that the younger generation of consumers in India are consuming less gold as compared to their older counterparts. That particular interest and association with gold which was a characteristic of Indian consumers are declining over the years, especially in the context of 14-carat gold jewelry being available for relatively low prices as compared to the previous demand for 22-24 carat gold jewelry.



The panel discussion then turned to the need for regulation, ideally for there to be a separate depository-like regulatory body. The establishment of a "gold clearer" or clearing house for digital gold was also proposed, that may enable "currency" creation in the form of digital gold, which could then be treated like the Dollar or Euro. The gold monetization scheme was discussed with reference to the need for such regulatory procedures if digital gold is to be treated as a financial product.

In his address, Prof. Sahay also discussed about gold policy landscape in India that included gold monetization scheme, refining jewellery, trade exports, standards in the industry, spot exchange and bullion related banking. While talking on the gold monetization scheme, Prof. Sahay emphasized the importance to provide incentives to consumers, the need for regulatory changes, changes required in banks, etc.

The other panel members shared their perspectives on the three factors that affect the premium of the option that included underlying value, time value of contract and the uncertainty. There were also discussions on the issues such as expectations of customs duty, inverse decision, strike prices, etc. The discussion was concluded with a positive outlook for bright future for digital gold market.

http://bullionfederation.co.in/bfgc-2018/

#### India International Gold Convention (IIGC), August 3-5, 2018, Kochi



Organized by Foretell Business Solutions in Association with India Bullion and Jewelers Association (IBJA), the 15<sup>th</sup> India International Gold Convention was held in Kochi during August 3-5, 2018 in which IGPC was a research partner.

Over 400 delegates representing different limbs of gold industry from India and abroad, trade organizations, financial institutions and policy experts participated the convention.

In the inaugural address, Shri Suresh Prabhu, Union Minister of Commerce and Industry and Civil Aviation, stated that India has huge resources, market infrastructure and potential to become the export hub for gold and gold products.

Prof. Arvind Sahay, Chairperson, India Gold Policy Centre, in his special address on Mapping Gold Policy – Present to Future, identified five key pillars on which the gold policy happens. They are (i) Gold Monetization Saving Scheme; (ii) Refinery, Jewellery Making and Trade; (iii) Banking and Bullion Banking; (iv) India Gold Delivery Standards; and (v) Spot Exchange.

Prof. Sahay also emphasized the importance of banking system which is the center of the policy making. Any change in any part of the industry should know the change in the counter parts like the refineries, traders, etc.

Mr. Sudheesh Nambiath, Head, IGPC participated in the panel discussion on "Financialization of Gold" moderated by Mr. Mrugank Paranjape, MCX. Ms. Ruchi Agarwal, Manager, IGPC and Ms. Minal Marathe, Research Assistant also participated in the Convention.





#### IGPC bagged the award for Outstanding Contribution for Gold Policy Research for the year 2017-18.



http://www.goldconvention.in/

#### Precious Metals Investment Symposium (PMIS), October 3-4, 2018, Australia

The two-day event of Precious Mentals Investment Symposium, was held in Perth, Australia during



October 3-4, 2018. The objective of 8th PMIS 2018 was to bring together every aspect of precious metals investment industry from mining explorers and producers, to bullion companies and other investment vehicles. With a fascinating insight into the gold market, PMIS 2018 focused on why precious metals are heading higher and how to invest in the sector and take advantage of this untapped asset. Mr. Sudheesh Nambiath, Head, IGPC, a representative from IGPC delivered a keynote presentation on

"Financialisation of Gold: The Dawn of a New Era in Indian Gold Trade." at the Sysmposium. https://symposium.net.au/agenda/





Organized by Gem & Jewellery Export Promotion Council, an apex body for Gem & Jewellery, the second IGJS was held in Delhi during November 23-24, 2018. The Summit had witnessed representatives including Gold Miners, Policy Makers, Retailers, Bankers, Analysts across the globe.

#### The Objectives of the Summit are:

- 1. To bring all the stakeholders across the world who will attend the conference and contribute to defining the policy which can usher the transparency in gold & consequently the Jewellery business in India.
- 2. To seize the leadership in gold in the world being the largest consumer of gold.
- 3. To understand the implementation procedures and hiccups from other countries in the world like turkey, UK, China, etc.
- 4. To have a discussion amongst Indian and world stakeholders how to utilize gold in enhancing India's objective of being the largest exporters of gold Jewellery in the world and generate eight million employments by the year 2025

The summit had focused on the four broad topics namely Vision 2022: Indian Jewellery Export at \$25 billion, Code of Conduct & Standards for Industry, Spot Gold Exchange for India, Value Addition through Jewellery Manufacturing.



Mr. Sudheesh Nambiath, Head, IGPC had shared his views in one of the panel discussions on "Bullion Banking: A Tool to Leverage India's Wealth in Gold" which was moderated by Mr. Rajesh Khosla, from MMTC Pamp.

https://www.gjepc.org/india\_gold\_and\_jewellery\_summit\_2018.php

#### Meeting with senior officials from Shanghai Gold Exchange (SGE) IGPC, IIMA on 19 Jan along with World Gold Council



Gold & Gold Market Conference organized by IGPC at New Delhi



Mr. Mrugank Paranjpe, CEO, MCX Ltd, lighting the lamp at the Conference



Welcome Address by Prof. Arvind Sahay, Chairperson IGPC







Address by P.R.Somasundaram, MD, World Gold Council, India



Keynote Address: Mr. Rajaraman K. Additional Secretary, DEA (IER, Investment & Admin)



Mr. Mrugank Paranjpe, CEO, MCX Ltd felicitating Prof. Brian Lucey, Professor of International Finance and Commodities, Trinity College, Dublin



Shri Rajaraman K, Additional Secretary., DEA and Mr. Mrugank Paranjpe, CEO, MCX Ltd. At panel discussion







Prof. Arvind Sahay, Chairperson IGPC felicitating Shri. Rajaraman K, Additional Sec., DEA



Prof. Joshy Jacob, Associate Professor for Accounting & Finance, IIMA welcoming Prof. Dirk Baur, University of Western Australia



Technical Session Chair: Prof. Joshy Jacob, Associate Professor, IIMA



Prof. Arvind Sahay, Chairing a technical session





#### Global Gold Dore Forum (GGDF), March 1-2, 2019, Delhi



The 3<sup>rd</sup> Global Gold Dore Forum was held during March 1-2, 2019 in Delhi. IGPC was a "Research" Partner" for the GGDF. Prof. Arvind Sahay, Chairperson, IGPC, had made a presentation on "A Perspective on Policy Framework for Responsible Dore Source for India,".

http://www.golddoreforum.com/

#### India International Bullion Summit (IIBS) March 14-15, 2019, Mumbai



The 6<sup>th</sup> India International Bullion Summit was held in March 14-15, 2019. IGPC, being a research partner for IIBS, participated in the summit. This Grand Summit is aimed at increasing interaction and opportunities between the top market leaders from the world of Bullion and Jewellery Trade, Precious Metal Mining and Refining Industry, Central and Bullion Banks, Commodity Exchanges, Logistics and Transportation, Media Analysts and Top Government Bureaucrats. Prof. Arvind Sahay, Chairperson, IGPC made a presentation on "Management and Marketing in Bullion & Jewellery Trade". Mr. Sudheesh Nambiath, Head, IGPC along with Mr. Kapil Shukla participated in the Summit.

http://iibsummit.in/intro2019.aspx

#### Meeting with Mr. David Tait, CEO of World Gold Council



Meeting with Prof. Arvind Sahay, Chairperson, IGPC felicitating Mr. David Tait, CEO of World Gold Council on his short tour at IIMA Campus on 22nd May. The meeting was attended by Mr. PR Somasundaram, MD, World Gold Council and Mr. Sudheesh Nambiath, Head, IGPC.

## Media Coverage

#### **Govt mulls gold scheme** with limited \$ payment



With the fall in gold prices

internationally, jewellers and traders imported 100 tonnes

of the yellow motal in August

to augment their inventories before losing the advantage to

According to GFM5 Thomson Reuters estimates,

more than doubled

Gold import in Aug'18

**GOLD IMPORTS** 

#### **Business Standard**

#### Govt mulls IGPC's gold investment product entailing deferred dollar outflow



#### ALSO READ

options for investing in the

investing in gold without dollar

The finance ministry is considering a s buying. The scheme is different from a price risk is not on the government.

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स्वर्ण उचोग में नई संभावनाओं पर विशेषजों का सम्मे

5 February 18, 2019 . A N

the import was 46.2 tonnes in August last year, resolting in more than doubling the

import bill in August.
However, the studden

a declining rupos.

#### Gold industry has a great potential to create jobs: Rajaraman

New Delhi, Feb q (UNI) Gold industry has a great potential to create jobs and contribute towards mic growth, Mr K Rajaraman, Additional Secretary, Department of Economic Affairs said

"As gold industry has a great potential to create jobs and contribute towards econsound policy framework that is systematic in structure is required.

A systematic gold policy framework will align the interest of different stake holders with the tives of policy," he said during the inaugural session of the Conference on Gold and Gold Markets 2019, organised by the India Gold Policy Centre (IGPC) of the Indian Institute of

Management - Almedabad (IDAA) bees.
He emphasised on the need for more research on consumer behaviour related to on product design, spot exchange and how banks could include Gold in their opti-Also present on the dais were Mr P R Somasundaram, MD, World Gold Council India; Prof.

Sahay, Professor of Marketing and International Business and Chairperson of IGPC; and Mr Brian M Lucey, Professor of International Finance and Commodities, Trinity College Dublin. Earlier, Prof Sahay welcomed the gathering, describing the event as "a forum that IGPC would like to develop as the forum for research based insight on gold in India. That brings to gather

This was the institute's second conference on policy relevant research on gold-related topics and focused on a wide spectrum of topics that ranged from homsehold motives to invest in the

precisus metal to macroeconomic policy choices. It served as a platform for meaningful interaction among scademia, policy makers and other key stakeholders in the gold ecosystem.

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तिकार करता. अपने सुरात स्वकार से व्यक्ति ने स्वतंत्र के अन्तंत्रका से अन् न ने सहा, तार्कत अन्तर्वात व्यक्तिक अनुस्थित अन्तर्वात आरोति स्वतंत्र करता है। सुसर्व तहार्ते का स्वकार ने इन्त आरोत्रक का स्वतंत्रक the work all were saving set filters alto proper are serve and after witnes to good 50 fittent to trees little form you 30 till इन्होंनेन हो : हुए अक्नार्यात से एक दोने बन्द है जाई में बार्य हैए पा उस्ते हैं के बोध बार्यात हुई : गोल्ड प्रतिकारिक के दिया उसने का उत्तरण और यो बहुएन और मेहिजों मानों क्योंकियों स्वामार्थ के लेक हुईया जिल्हे

तत विकास संक्रित पर बात की गांधे। चैत्रीविक्शूस में एक्किय तीरक और লামিক কার্যাহিনাত বুলির যাল চিছ, নিইডক কার্যাহার মার বৃষ্টিয়া লাগত স रचित्रं कार्डि के अंति पूर्व और १० साम्यान्य , देनी १८६१ के इतिया क कार्य में कर्ष की तक् तामानित सर्व के साथे की एका अर्थिक तरियोजन विकास सर्व की तक्त तमानित सर्व के साथे की एका अर्थिक तरियोजन



#### TIMESNOWNEWS.COM

Gold Policy: भारत की पहली गोल्ड पॉलिसी की सारी तैयारियां पूरी, जानिए इससे आपको क्या फायदा होगा

Gold Spot Exchange पीटर पेरिटरी को तेका तथे प्राप्त ने चार्च हैं उही है। ये प्राप्ता तथा है। उहींदा पाउन मी पहली पीटर पेरिटरी में कर कुछ ही सकता है और



\$1 set end at set from as yours \$1 with at Asse word \$1 alignet. स्रोत को फेरने पर जनता पूर्व हुई है। वार्च नेतन स्टार्टिज के तार्वी that simple it can so bit it are write it on its dilet more with staff (b) you'ld easy the year services it with all services (see

(B) 京田 田

t fost are it von 8 soo es ill seu 8 and ill mit units प्रोप्तर्रों के अंदे से ब्हारत वित्तर होता. वहीं क्रावेण हामाओं में लंगी के हता A year for soit it of grow A spirit as ment it not spread to state director steal.

mans it may be done of that it is with an it must be found in any

कारों काले जोते की देतिए के लिए जीवर करेंद्र एककादेश की असरस का सम तिहा गढ़ा है। इसके उतित लोग तीना की उन्हा ही एककादेश का चीना की देतिए का

paid access of the self of all and self त्तर भी देंग है। र ही बैच तरन करेदर है। दुनिय rest flost cept to fits sceen of early side

हों होने हैं और है के कि कह उपरांद कर करिय हैं पूर्व res Is the discussion alle and set of I सर्टिफोल्प, संस्थापित और अंतरी स्थापीर से eter due other by is body justice and and during the or with pair and

#### Mandatory hallmarking of gold jewellery soon



#### Gold convention at Kochi focusses on streamlining bullion industry

The 15th India International menced here on Friday with palpable optimism follow-ing the release of NITI Azyog report on Transforming In-dian Gold Markets this

Over 400 delegates representing different limbs of gold industry from India and abroad, trade organisaand policy experts are at-tending the deliberations on the newer opportunities and

future plans in view of the changing face of gold in-

from Canada, Peru, Ghana,

Solutions in association with Association (IBJA). Suresh

country's intrinsic capability to manufacture value added gold jewellery for the global market with craftsmanship, technology and design cap

mainly aimed at building the institutional, regulatory and market infrastructure to bring transparency and in-crease the global acceptance of gold and its products from India, he said.

There are special sessions on the changing face of gold



Betting on Gold in New Year 2019? He

Will Gold Outperform in 2019?

Gold Monetisation can Help\*\*\* Reduce Widening CAD

SANGEETHA G

INDIAN Gold Policy Cer.

tre, a research arm of runcil, has ild savings ov the ben-

using more on bullion bunking will give a boost to Gold etisation Scheme, says IGPC Head New Della, New 21 STNE Fernance mean trading handling will give a boost to Guid Monastication Science (CASS), very 10 Scotlands Standards, Mond. Indian Guid Pollay

n with USC, Mr Namblach mid throw is a pased to give his lacking ar basik are primarily damarking agency to import the gold. Therefore there is a sood to immune their rate or that CACI schools gets a boost. "I basik' sold are increased berfore then in physical market liquidity will make and liquidity will

and hole sked being to

gested that standardization should be made mandatury. Sold her should be proped wheel or the the quiter of providing is not ablented

IGPC PROPOSES GOLD SAVINGS

#### product that defers dollar outflow

put the funds into econic activity.

According to Sudheesh Nambiath, Head India Gold Policy Centre at IIM-A, the product has been submitted to the govern-ment for approval. The product can be run by any domestic bank which will

tie up with an internation-al bank to invest the money in forward con-tracts abroad. , 'Gold say-The bank will credit the deferring full price of gold into the gold account of t uct with an

rate as he does not have to pay the customs duty and GST. than the overni

Domestic bank will simultaneously cover USD-INR for the period and book Gold Forwards by paying 2.5 per cent of the value on the value date. At value on the value case. At the time of expiry investor can redeem it in cash or physical metal or transfer the ounces to a jeweler, who is empanelled by banks for purchase of jew-lary or and a purchase of jewellery or can even roll it forward. Redemption will

rates, which ensures that investment is used for

The dollar outflow is limited to cost of hedging until customer redeems it for converting to jewellery.

Gold policy: **IGPC** to give inputs by Aug 14

Kochi: The India Gold Policy Centre (IGPC) at IIM-Ahmeda-bad, an independent research think-tank on gold and a re-search arm of the World Gold Council (WGC), will give in-puts for the new gold policy, be-ing prepared by the Union ministry of finance, by next week.

week.
""We will be giving detailed

week.

""We will be giving detailed inputs by August 12 – 14. Hope-fully by the next three to six months, there will be a policy going to the PMO and the Cabinet clearing it," said Arvind Sahay, chairperson, IGPC.

The policy document is held by the department of economic affairs, at the ministry of finance. "One of the challenges is that during the last 12 months we have seen four joint-secretaries. The good news is that in the fast one year, we have seen some steady progress in terms of the development of the policy document, "Sahay said.

"India the second largest consumer of gold, but there is no solid research-based evidence about what is happening inside the industry. Our remit is to do Indocument over the product of the product of the product of the product where is no solid research-based evidence about what is happening inside the industry. Our remit is to do Indocument research.

inside the industry. Our remit is to do independent research and part of the remit is to act as an advisory for the policy, be-

IGPC for responsible sourcing of gold through certification

## New gold policy: Spot gold exchange, bullion bank, more gold products among key issues, says K Rajaraman of DEA



As discussion on draft gold policy goes on with various stakeholders. K Rajaraman, Additional Secretary, Department of Economic Affairs pointed out that gold could play a significant role in employment generation and economic growth. He also highlighted some key issues such as growth. He also inguigated some key issues such as standardisation of gold, offering more incentives to consumer to use it as a financial asset, enlarging the bouquet of gold products, establishing the spot gold exchange, bullion bank, pushing mining and exploration and raising scrutiny of gold imports to curb misuse of free trade agreements with other countries, among others.

"As gold industry has a great potential to create jobs and contribute towards economic growth, a sound policy framework that is systematic in structure is required," said

The government secretary made the case for creating a centralised spot exchange, and comparing policy options in countries like China and London with those in India. "New routes like gold monetary reserves, which are already popular in countries like Italy, could be explored. RBI may require more guidance as to how to go about it," said Rajaraman, adding that we need to examine the policies around mining and exploration so that exports could be given a boost along with putting in checks and balances on how free trade agreements (FTAs) with other countries is leading to illegal gold imports.

Ramarajan was speaking at the inaugural session of the Conference on Gold and Gold Markets 2019, organised by the India Gold Policy Centre (IGPC) of the Indian Institute of

#### Gold industry has great potential to create jobs, contribute towards economic growth: K Rajaraman



the gold industry which has a great potential to create and provide employment opportunities to the rgeoning population of youngsters entering the job riket every year. Department of Economic Affairs nal Secretary K Bajaraman on Saturday said that edd industry can provide jobo and contribute towards conomic growth but for that to happen, a sound policy ramework with a systematic structure is required.

policy, Bajaraman said while addressing the inaugural ession of the Conference on Gold and Gold Markets 2019, organised by the India Gold Policy Centre (IGPC) of the Indian Institute of Management – Ahmedabad (IIMA)

consumer behaviour related to gold, as well as on duct design, spot exchange and how banks could include gold in their options.

The panelists were prominent personalities from the



#### **CHAPTER 7:**

## Policy Notifications / Circulars

SN	Notification / Circular by Bureau of Indian Standards	Date
01	Banks Authorised to Import Gold/Silver for FY 2018-19	Apri 02, 2018
	https://rbi.org.in/scripts/Bs_viewcontent.aspx?Id=1121	
03	Sovereign Gold Bond Scheme 2018-19 Series-1	Apr 13,2018
	https://rbidocs.rbi.org.in/rdocs/PressRelease/PDFs/	
	PR27372FA24A543F4A4041A58F439EF0E73835.PDF	
04	Sovereign Gold Bond Scheme 2018-19 Series-I, Operational Guidelines	Apr 13,2018
	https://rbidocs.rbi.org.in/rdocs/notification/PDFs/	
	NT164768CE21E88814B8CB4BB3916D52F3381.PDF	
05	Sovereign Gold Bond Scheme 2018-19 Series I	Apr 13,2018
	https://rbidocs.rbi.org.in/rdocs/notification/	
	PDFs/163SGB5393F222F4094805A8382AD9AD58CDB4.PDF	
06	Sovereign Gold Bond 2018-19 Series-I-Issue Price	Apr 13,2018
	https://rbidocs.rbi.org.in/rdocs/PressRelease/PDFs/	
	PR27382D554883464F445CA72A6ACA8B1AEF19.PDF	
80	Gold Monetization Scheme, 2015	June 7, 2018
	https://rbidocs.rbi.org.in/rdocs/notification/PDFs/	
	NT1922536D1BD483F45B3916230773A9D1785.PDF	
15	Sovereign Gold Bond Scheme 2018-19	Oct 08, 2018
	https://rbidocs.rbi.org.in/rdocs/PressRelease/PDFs/	
	PR819DB76EFB69D49402180BD2182B8D33B06.PDF	
16	Sovereign Gold Bond Scheme 2018-19, Operational Guidelines	Oct 08, 2018
	https://rbidocs.rbi.org.in/rdocs/notification/PDFs/	
	NOT58F298759B6EBB44A9A3BA43F4D031B91F.PDF	
17	Sovereign Gold Bond Scheme 2018-19	Oct 08, 2018
	https://rbidocs.rbi.org.in/rdocs/notification/PDFs/	
	NOTI57E903792857324742AFE88A33DFA94EB3.PDF	
19	Sovereign Gold Bond 2018-19 Series-II-Issue Price	Oct 12, 2018
	https://rbidocs.rbi.org.in/rdocs/PressRelease/PDFs/	
	PR8743DF3D98E580549B6B1708F1CDE3E90B9.PDF	

SN	Notification / Circular by Bureau of Indian Standards	Date
20	Sovereign Gold Bond 2018-19 Series-III-Issue Price	Nov 02, 2018
	https://rbidocs.rbi.org.in/rdocs/PressRelease/PDFs/	
	PR1041BCC4BC3A24D44349AE731A117283205F.PDF	
21	Monthly Average Price of Gold and Silver in Mumbai	Nov 14,2018
	https://rbidocs.rbi.org.in/rdocs/Bulletin/	
	PDFs/20T_141120183941D9382BA4439DBE164B129850937A.PDF	
23	Sovereign Gold Bond 2018-19 Series-IV-Issue Price	Dec 21, 2018
	https://rbidocs.rbi.org.in/rdocs/PressRelease/PDFs/	
	PR144292E099CEB0A4488E8D00059E1C7492D8.PDF	
24	Gold Monetization Scheme, 2015	Jan 9, 2019
	https://rbidocs.rbi.org.in/rdocs/notification/PDFs/	
	NT1044851BE542ABF429CA49CA49AA1B919DD.PDF	
26	Sovereign Gold Bond 2018-19 Series V-Issue Price	Jan 11, 2019
	https://rbidocs.rbi.org.in/rdocs/PressRelease/PDFs/	
	PR1632F5B0177669F54D208795744EDAAFA449.PDF	
27	Sovereign Gold Bond 2018-19 Series-VI-Issue Price	Feb 01, 2014
	https://rbidocs.rbi.org.in/rdocs/PressRelease/PDFs/	
	PR18200005EEDBE5294690835056D4D901FDD0.PDF	

SN	Notification / Circular by Bureau of Indian Standards	Date
1	Hallmarking Notification 2018 https://bis.gov.in/bs/DoCA_BIS_Hallmarking_Regulations_2018_Gazette_ notification.pdf	June 14, 2018

SN	Notification / Circular by Ministry of Law & Justice (Legislative Department)	Date
1	The Banning Of Unregulated Deposit Schemes Ordinance, 2019	Feb 21, 2019
	https://www.prsindia.org/sites/default/files/bill_files/Banning%20of%20 Unregulated%20Deposit%20Schemes%20Ordinance%2C%202019.pdf	



#### **CHAPTER 8:**

## **Appendices**

#### 1. World Official Gold Holdings

#### International Financial Statistics, May 2019\*

SN	Country	Tonnes	% of Reserves **	SN	Country	Tonnes	% of Reserves**
1	United States	8,133.5	74.8%	26	Venezuela, Republica Bolivariana de	161.2	77.7%
2	Germany	3,369.7	70.2%	27	Thailand	154.0	3.0%
3	IMF	2,814.0	1)	28	Poland	128.6	4.7%
4	Italy	2,451.8	66.1%	29	Singapore	127.4	1.8%
5	France	2,436.0	60.7%	30	Sweden	125.7	8.4%
6	Russian Federation	2,168.3	18.5%	31	South Africa	125.3	10.5%
7	China, P.R.: Mainland	1,885.5	2.5%	32	Mexico	119.9	2.7%
8	Switzerland	1,040.0	5.5%	33	Libya	116.6	5.7%
9	Japan	765.2	2.5%	34	Greece	113.2	64.1%
10	Netherlands	612.5	65.4%	35	Korea, Republic of	104.4	1.1%
11	India	608.8	6.3%	36	Romania	103.7	10.7%
12	ECB	504.8	28.2%	37	BIS <sup>2)</sup>	102.0	1)
13	Taiwan Province of China	423.6	3.7%	38	Iraq	96.3	6.2%
14	Portugal	382.5	60.0%	39	Kuwait	79.0	8.1%
15	Kazakhstan	361.7	55.6%	40	Indonesia	78.5	2.7%
16	Uzbekistan	348.4	53.4%	41	Egypt	78.5	7.6%
17	Saudi Arabia	323.1	2.7%	42	Australia	68.7	5.2%
18	United Kingdom	310.3	7.9%	43	Brazil	67.4	0.7%
19	Turkey <sup>6)</sup>	293.6	14.0%	44	Denmark	66.5	3.9%
20	Lebanon	286.8	22.9%	45	Pakistan	64.6	17.9%
21	Spain	281.6	16.4%	46	Argentina	54.9	3.5%
22	Austria	280.0	49.4%	47	Finland	49.1	19.2%
23	Belgium	227.4	35.0%	48	Belarus <sup>4)</sup>	47.0	27.7%
24	Philippines	197.9	10.0%	49	Jordan	43.5	12.3%
25	Algeria	173.6	8.7%	50	Bolivia	42.5	22.3%

SN	Country	Tonnes	% of Reserves **	SN	Country	Tonnes	% of Reserves**
51 (	Qatar	40.6	5.5%	76	Paraguay	8.2	4.2%
52 I	Bulgaria	40.4	6.0%	77	United Arab Emirates	7.5	0.3%
53 [	Malaysia	38.9	1.6%	78	Myanmar	7.3	5.3%
54 I	Peru	34.7	2.3%	79	Guatemala	6.9	2.3%
55 \$	Slovak Republic	31.7	22.9%	80	North Macedonia, Republic of	6.9	8.9%
56 I	Hungary	31.5	4.3%	81	Tunisia	6.8	4.8%
	Syrian Arab Republic	25.8	6.1%	82	Latvia	6.6	6.2%
58 l	Ukraine	24.6	5.0%	83	Nepal	6.4	3.1%
59 I	Morocco	22.1	3.8%	84	Ireland	6.0	4.9%
60	Afghanistan, Islamic Republic of	21.9	11.2%	85	Lithuania	5.8	5.5%
61 I	Nigeria	21.4	2.0%	86	Bahrain, Kingdom of	4.7	8.5%
62	Tajikistan	21.3	69.6%	87	Brunei Darussalam	4.5	5.5%
ns	Serbia, Republic of	20.6	6.6%	88	Mozambique	4.4	5.8%
64 5	Sri Lanka	19.9	9.6%	89	Slovenia	3.2	14.2%
65 (	Colombia	18.9	1.6%	90	Aruba	3.1	12.3%
66 I	Ecuador	16.9	26.1%	91	Bosnia and Herzegovina	3.0	1.9%
67 I	Mongolia	15.3	17.6%	92	Luxembourg	2.2	9.8%
68 I	Bangladesh	14.0	1.8%	93	Hong Kong SAR	2.1	0.0%
69 (	Cyprus	13.9	62.0%	94	Iceland	2.0	1.3%
	Curaçao and Sint Maarten	13.1	29.5%	95	Papua New Guinea	2.0	3.7%
71 I	Mauritius	12.4	8.0%	96	Trinidad and Tobago	1.9	1.0%
72 (	Cambodia	12.4	3.6%	97	Haiti	1.8	3.2%
73 I	Kyrgyz Republic	12.2	23.2%	98	Yemen, Republic of	1.6	1.3%
74 (	Ghana	8.7	6.5%	99	Albania	1.6	1.7%
75 (	Czech Republic	8.2	0.2%	100	Guinea	1.5	5.6%

#### **NOTES**

<sup>\*</sup> This table was updated in May 2019 and reports data available at that time. Data are taken from the International Monetary Fund's International Financial Statistics (IFS), May 2019 edition, and other sources where applicable. IFS data are two months in arrears, so holdings are as of March 2019 for most countries, February 2019 or earlier for late reporters. The table does not list all gold holders: countries which have not reported their gold holdings to the IMF in the last six months are not included,



while other countries are known to hold gold but they do not report their holdings publicly. Where the WGC knows of movements that are not reported to the IMF or misprints, changes have been made.

\*\*The percentage share held in gold of total foreign reserves, as calculated by the World Gold Council. The value of gold holdings is calculated using the end of month LBMA Gold price published daily by ICE Benchmark Administration. In March 2019 the end of month gold price was US\$1,295.4 Data for the value of other reserves are taken from IFS, table 'Total Reserves minus Gold'.

- BIS and IMF balance sheets do not allow this percentage to be calculated. In the case of any countries, up to date data for other reserves are not available.
- 2. BIS data are updated each year from the BIS's annual report to reflect the Bank's gold investment assets excluding any gold held in connection with swap operations, under which the Bank exchanges currencies for physical gold. The bank has an obligation to return the gold at the end of the contract.
- 3. West African Economic Monetary Union including the central bank.
- Includes only "Monetary gold" as of February 2014.
- Signatories to the fourth Central Bank Gold Agreement which commenced in September 2014. The signatores include: ECB, Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Luxembourg, Malta, Netherlands, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland.
- 6. The figure for Turkey's official gold reserves excludes gold owned by commercial bank held at the central bank under the Reserve Option Mechanicsm (ROM). As of end-March ROM holdings amounted to 364 tonnes. Our data previously included these ROM holdings in Turkey's central bank holdings. Since May 2017 Turkey's central bank has been increasing its gold reserves by purchasing gold outright. We therefore decided to publish the figure for Turkey's official gold reserves exclusive of ROM holdings, to better reflect true central bank holdings. Please see this link for information on this policy action http://www.tcmb.gov.tr/wps/wcm/connect/57c5777d-1f48-4eb4-98ba-af4c6aaddc20/ANO2012-38.pdf?MOD=AJPERES&CA CHEID=57c5777d-1f48-4eb4-98ba-af4c6aaddc20
- World total as calculated by the IMF. This will not equal the total for the countries in the table as 'World total' will include data for countries beyond the top 100 and for countries that do not publish their reserves. World total also captures BIS holdings inclusive of swap operations (please see footnote 2 above for World Gold Council treatment of BIS holdings).
- In July 2015 The State Bank of Vietnam stated that gold reserves totalled 10 tonnes. This is omitted from our ranking above due to the current absence of any published data.

Please see Disclaimer on the following page.

WORLD OFF	ICIAL GOLD HOLDINGS	
International Fina	ancial Statistics, May 2019	*
Other	Tonnes	% of reserves**
World <sup>7)</sup>	33,976.5	1)
Euro Area (incl. ECB)	10,778.5	54.3%
CBGA 4 signatories 5)	11,944.2	29.6%

#### 2. India: Foreign Exchange Reserves & Gold (1959-60 to 2018-19)

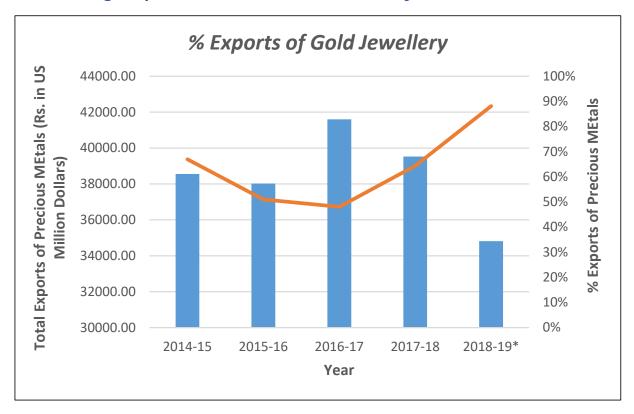
Year	Total Foreign Exchange Reserves (USD Mn)	Gold (USD Mn)	Gold (% of Reserves)	Year	Total Foreign Exchange Reserves (USD Mn)	Gold (USD Mn)	Gold (% of Reserves)
1959-60	762	247	32.4	1989-90	3,962	487	12.3
1960-61	637	247	38.8	1990-91	5,834	3,496	59.9
1961-62	624	247	39.6	1991-92	9,220	3,499	38
1962-63	619	247	39.9	1992-93	9,832	3,380	34.4
1963-64	642	247	38.5	1993-94	19,254	4,078	21.2
1964-65	524	281	53.6	1994-95	25,186	4,370	17.4
1965-66	626	243	38.8	1995-96	21,687	4,561	21
1966-67	638	243	38.1	1996-97	26,423	4,054	15.3
1967-68	718	243	33.8	1997-98	29,367	3,391	11.5
1968-69	769	243	31.6	1998-99	32,490	2,960	9.1
1969-70	1,094	243	22.2	1999-00	38,036	2,974	7.8
1970-71	975	243	24.9	2000-01	42,281	2,725	6.4
1971-72	1,194	264	22.1	2001-02	54,106	3,047	5.6
1972-73	1,219	293	24	2002-03	76,100	3,534	4.6
1973-74	1,325	293	22.1	2003-04	112,959	4,198	3.7
1974-75	1,379	304	22	2004-05	141,514	4,500	3.2
1975-76	2,172	281	12.9	2005-06	151,622	5,755	3.8
1976-77	3,747	290	7.7	2006-07	199,179	6,784	3.4
1977-78	5,824	319	5.5	2007-08	309,723	10,039	3.2
1978-79	7,268	377	5.2	2008-09	251,985	9,577	3.8
1979-80	7,361	375	5.1	2009-10	279,057	17,986	6.4
1980-81	6,823	370	5.4	2010-11	304,818	22,972	7.5
1981-82	4,390	335	7.6	2011-12	294,398	27,023	9.2
1982-83	4,896	324	6.6	2012-13	292,647	26,292.3	9
1983-84	5,649	320	5.7	2013-14	303,674	20,978	6.9
1984-85	5,952	325	5.5	2014-15	341,378	19,837	5.8
1985-86	6,520	417	6.4	2015-16	355,560	19,325.4	5.4
1986-87	6,574	471	7.2	2016-17	369,955	19,869	5.4
1987-88	6,223	508	8.2	2017-18	424,361	21,614.9	5.1
1988-89	4,802	473	9.9	2018-19	411,905	23,408.4	5.7

Source: CMIE; RBI; IGPC





#### 3. Percentage Exports of Precious Metals Jewellery



Source: GJEPC

4. Commodity Composition of India's Imports from World 2007-08 to 2018-19

							(Rs. In Million)
S _	All Commodities	Petroleum crude & products (POL)	Electronic Goods	Gold	Petroleum crude & products (POL) % of Actual Commodities	Electronic Goods % of Actual Commodities	Gold % of Actual Commodities
10	10,051,594.90	3,205,471.80	812,086.10	672,260.40	31.89	8.08	69.9
H	13,744,355.60	4,199,676.10	1,073,197.80	953,238.00	30.56	7.81	6.94
2009-10 1	13,637,355.50	4,116,490.70	994,186.10	994,186.10 1,358,779.10	30.19	7.29	96.6
_	16,834,669.60	4,822,816.90	1,210,172.00	1,847,422.10	28.65	7.19	10.97
7	23,454,632.50	7,430,748.80	1,565,036.20	2,699,007.10	31.68	29:9	11.51
(7	26,691,619.60	8,918,708.60	1,709,851.70	1,709,851.70 2,921,462.90	33.41	6.41	10.95
٠, ١	27,154,339.10	9,978,854.50	2,165,832.70	1,662,426.20	36.75	7.98	6.12
, ,	27,370,865.80	8,428,744.80	2,471,533.10 2,106,580.40	2,106,580.40	30.79	9.03	7.7
1 7	24,902,980.80	5,405,046.90	2,844,345.80	2,074,875.30	21.7	11.42	8.33
' '	25,776,655.90	5,832,171.70	3,055,918.30	1,844,387.60	22.63	11.86	7.16
(')	30,010,334.30	7,003,208.10	3,593,334.10 2,170,720.70	2,170,720.70	23.34	11.97	7.23
(')	35,876,839.10	9,860,196.10	4,208,935.70	2,294,473.30	27.48	11.73	6.4

Source: CMIE; DGCI&S, Ministry of Commerce and Industry



#### 5. Worldwide Gold Production & Fabrication Data

	1990	2000	2005	2010	2014 (metric tons)	2015	2016	2017	2018
Production					metric tons				
China	100	177	255	341	452	450	453	426	389
Australia	242	296	262	257	274	279	291	294	312
Russia	n/a	143	163	201	249	257	253	270	311
United States	294	353	256	231	210	214	222	237	212
Canada	169	156	121	103	152	163	164	176	187
Ghana	17	78	67	92	138	130	129	137	158
Peru	9	133	208	164	140	147	153	151	143
Sudan	0	6	5	2	73	82	93	107	127
South Africa	605	431	295	189	152	145	142	137	119
Mexico	9	26	27	79	118	135	132	127	117
Indonesia	11	127	143	106	69	92	81	99	106
Uzbekistan	n/a	88	84	90	100	100	100	100	102
Kazakhstan	n/a	28	18	30	50	64	75	85	97
Brazil	102	60	38	62	81	83	80	85	95
Argentina	1	26	28	64	60	63	56	63	63
Papua New Guinea	34	75	68	67	56	58	62	60	54
Mali	2	29	49	42	45	47	47	51	49
Guinea	6	16	25	25	23	21	30	47	47
Burkina Faso	3	1	1	24	36	37	39	46	44
Others	528	308	391	488	583	574	612	627	586
World	2,133	2,555	2,504	2,657	3,063	3,139	3,215	3,325	3,320
abrication									
India	n/a	704	695	783	771	812	506	783	n/a
China	46	213	277	523	1,013	920	788	771	n/a
United States	n/a	277	219	179	150	164	168	145	n/a
Turkey	n/a	228	303	109	156	112	101	122	n/a
Japan	205	161	165	158	119	102	99	100	n/a
Italy	n/a	522	290	126	96	94	88	89	n/a
Korea, Rep.	n/a	107	83	93	82	79	78	80	n/a
United Arab Emirates	n/a	50	55	33	42	45	45	56	n/a
South Africa	18	14	10	25	25	31	38	52	n/a
Russia	n/a	34	61	61	70	52	47	46	n/a
Indonesia	84	99	87	45	53	50	45	45	n/a
Iran	n/a	46	41	72	62	56	35	42	n/a
Switzerland	n/a	54	56	41	44	41	34	33	n/a
Germany	n/a	64	52	41	36	32	32	32	n/a
Malaysia	45	86	74	45	45	39	34	30	n/a
Canada	n/a	25	27	44	32	40	41	29	n/a
Singapore	31	26	30	28	29	29	27	28	n/a
Saudi Arabia	n/a	153	125	47	37	41	32	27	n/a
Thailand	86	79	69	27	27	27	24	24	n/a
Others	n/a	819	608	400	356	356	315	310	n/a
World	3,294	3,761	3,325	2.878	3,244	3,122	2,575	2.841	n/a

Source: GFMS, Thomson Routers, British Geological Survey, U.S. Geological Survey, World Bureau of Metals Statistics, World Bank.

Note: n/a implies data not available. Fabrication includes the use of scrap. Fabrication of "Saudi Arabia" includes Saudi Arabia and Yemen in 2000.

Exports of Precious Metals, Stones, Diamonds and Jewellery 2007-08 to 2018-19 9

Year	Total Value Rs. Million	Cut & polished diamonds Value Rs. Million	Gold jewellery Value Rs. Million	Gold medallions & coins Value Rs. Million	Coloured gemstones Value Rs. Million	Silver jewellery Value Rs. Million	Pearls Value Rs. Million	Synthetic stones Value Rs. Million	Rough diamonds Value Rs. Million	Rough diamonds Quantity Million carats	Rough diamonds Unit realisation Rs./carat	Others Value Rs. Million
2007-08	837,654.80	571,171.70	223,157.00	-	11,110.50	9,211.10	156.2	45	22,803.20	28.7	794.5	
5008-09	1,116,114.80	662,246.80	396,001.50	-	11,835.30	10,647.40	153.3	54.5	35,176.00	30.7	1,145.40	
2009-10	1,387,522.90	860,951.70	327,749.60	129,750.70	13,580.10	19,519.00	162.5	65.2	35,254.20	24.5	1,437.00	490.1
2010-11	1,957,358.40	1,285,140.60	352,682.70	224,794.00	14,325.40	25,662.10	186.6	772.9	51,750.60	33.5	1,547.10	2,043.30
2011-12	2,060,800.90	1,109,267.70	472,796.30	334,703.80	16,472.00	36,772.30	157.1	1,180.60	85,137.20	33.9	2,509.40	4,313.90
2012-13	2,126,855.00	947,391.60	712,078.10	284,900.60	35,278.10	50,164.60	257.8	2,827.10	85,920.50	35.2	2,438.50	8,036.60
2013-14	2,111,913.00	1,481,852.00	507,388.50	185,645.30	39,097.00	88,987.80	626.3	4,864.10	95,559.70	43.3	2,205.90	24,350.10
2014-15	2,213,321.60	1,415,142.80	605,100.30	173,924.70	27,733.90	125,689.40	121.4	4,831.50	86,666.70	33.9	2,553.20	3,251.30
2015-16	2,135,946.60	1,354,012.20	561,368.10	344,172.50	28,445.00	194,109.00	70.2	4,727.90	76,758.30	30.6	2,511.20	6,195.60
2016-17	2,377,026.70	1,526,825.90	584,649.20	362,437.50	28,166.60	269,232.50	344.2	9,024.90	100,559.10	30	3,351.00	6,347.40
2017-18	2,107,850.80	1,529,087.30	623,812.10	127,080.50	27,854.90	218,121.80	146.7	14,180.80	92,002.10	38.1	2,416.70	4,028.90
2018-19	2,164,487.00	1,665,731.10	840,048.60	61,260.80	27,837.50	59,070.50	111	15,822.80	94,792.30	30.1	3,144.60	5,133.40

Source: CMIE; GJEPC





							)					
Year	Total Value Rs. Million	Rough diamonds Value Rs. Million	Rough diamonds Quantity Million carats	Rough diamonds Unit realisation Rs./carat	Cut & polished diamonds Value Rs. Million	Gold bar Value Rs. Million	Gold jewellery Value Rs. Million	Rough coloured gemstones Value Rs. Million	Coloured gemstones Value Rs. Million	Non-gold jewellery Value Rs. Million	Silver bar Value Rs. Million	Others Value Rs. Million
2007-08	741,505.40	399,215.00	171.5	2,327.10	222,520.00	89,496.10	17,088.70	5,994.60	2,767.30	437	962	3,190.70
5008-09	1,033,441.70	350,412.50	118.8	2,950.10	406,382.90	210,769.40	13,363.30	4,814.20	4,464.20	1,525.30	1,194.90	40,514.90
2009-10	1,348,625.10	427,331.10	149.9	2,851.70	547,466.40	340,186.00	15,343.60	5,543.30	6,808.80	1,683.90	1,458.20	2,803.60
2010-11	1,919,820.70	545,642.70	154.2	3,538.80	947,256.50	382,450.80	22,133.90	6,818.30	5,538.40	3,805.90	1,900.70	4,273.60
2011-12	2,012,384.70	722,218.90	131.5	5,490.40	683,564.00	502,833.40	70,881.30	6,954.10	14,053.90	3,511.80	3,897.10	4,470.10
2012-13	2,031,934.00	809,925.20	148.4	5,458.10	302,008.90	604,708.10	250,376.10	11,277.80	27,762.30	4,726.60	2,809.90	18,226.40
2013-14	1,871,098.90	1,003,772.70	162	6,195.50	395,859.70	336,495.40	34,959.40	14,447.80	19,723.50	7,714.20	2,360.80	55,543.90
2014-15	1,908,534.60	1,022,350.90	146.2	6,993.20	405,435.90	325,626.30	22,238.90	17,395.00	48,678.70	4,128.90	1,936.70	60,527.80
2015-16	1,586,549.80	919,705.30	138.4	6,645.00	181,277.00	265,367.40	18,972.20	24,241.70	68,804.80	3,500.70	2,593.40	101,941.80
2016-17	1,925,130.90	1,144,764.00	153.3	7,466.80	176,493.20	283,624.10	18,079.90	38,256.40	95,815.00	2,704.70	3,218.80	168,853.10
2017-18	2,030,227.70	1,217,445.40	187.7	6,487.40	144,076.40	367,036.20	18,004.00	26,688.90	35,169.60	4,207.10	3,467.90	184,068.50
2018-19	1,839,833.10	1,095,237.90	165	6,637.60	92,684.90	548,059.50	20,405.10	23,900.90	27,624.90	4,011.10	2,649.50	25,143.20

Source: CMIE; GJEPC

8. Reserves / Resources of Gold as on 01.04.2015 (By Grades / States)

		s and																		10126638	14.56		103846184	310.62
(In Tonnes)		Resour	(A+B)		501839632	654.74	26121000	5.86			12773404	39.54		222884860	37.6		4841033	5.51			17			
(In Tc	ŀ	0.0			22		2				1			22			4			10117289	14.49		90530084	249.09
		Total	(B)		484611458	584.65	26121000	5.86			8870679	31.05		222884860	37.6		4841033	5.51		267000	0.62		37673000	43.78
		Reconnaissance	STD334		145336333	61.12						ı		94000000	16		•	•		4203337	10.26		16020324	38.29
		Inferred	STD333		233608305	227.44	23569000	3.57			6980031	23.78		128884860	21.6		4241033	3.71		5146952	3.61		8204595	28.67
	Resources	Indicated	STD332		70136727	143.8	2552000	2.29			25000	0.17		-			000009	1.8		-	•		24979968	120.73
	Remaining Resources	Measured	STD331		30333248	128.65					291000	1.08		-			-	-		-			1078661	8.53
		sibility	STD222		1968176	12.1					889515	3.57		-			-	-		-			1303000	3.85
		Pre-Feasibility	STD221		1303000	3.85								-			-	-		-			1270536	5.24
		Feasibility	STD211		1925669	7.69					655133	2.45		-			•	-		9349	0.07		13316100	61.53
		Total	(A)		17228174	70.09					3902725	8.49		-			•	-		-			4221000	0.42
	rves	able	STD122		422100	0.42						ı		-			1	1		-	,		2499000	77.7
	Reserves	Probable	STD121		6401725	16.26					3902725	8.49		-			-	-		9349	0.07		10395000	53.34
		Proved	STD111		10404349	53.41								-			-	-						
		State/Grade		All India: Total	Ore (Primary)	Metal (Primary)	Ore (Placer)	Metal (Placer)	By States	Andhra Pradesh	Ore(Primary)	Metal (Primary)	Bihar	Ore(Primary)	Metal (Primary)	Chhattisgarh	Ore(Primary)	Metal (Primary)	Jharkhand	Ore(Primary)	Metal (Primary)	Kamataka	Ore(Primary)	Metal (Primary)



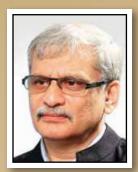


## (In Tonnes)

															,
		Reserves	res					Rem	Remaining Resources	rces				o a leter	
-	Proved	Prob	Probable	Total	Feasibility	Pre-Fe	Pre-Feasibility	Measured	Indicated	ited Inferred	ed Reconnaissance	sance	Total	iotai kesources	sources
State/Grade	STD111	STD121	STD122	(A)	STD211	STD221	STD222	STD331	STD332	32 STD333	33 STD334	4	(B)	(A+B)	B)
Kerala															
Ore(Primary)									462280	96180				558460	558460
Metal (Primary)			•						0.17	0.03			•	0.2	0.2
Ore(Placer)										2552000	23569000	00		26121000	26121000
Metal(Placer)							-			2.29	3.57			5.86	5.86
Madhya Pradesh															
Ore(Primary)			,							5841000	1947000	00	•	7788000	7788000
Metal (Primary)			•							6.18	2.22		•	8.4	8.4
Maharashtra															
Ore(Primary)		-	-	•	-	-	•	•			1517000		-	1517000	1517000
Metal (Primary)			-								3.55		-	3.55	3.55
Rajasthan															
Ore(Primary)			-				-		4600000	50193000	69747720		63000	124603720	124603720
Metal (Primary)			•						6.67	103.34	123.03		0.02	233.11	233.11
Tamil Nadu															
Ore(Primary)		-	-	•	-	-	•	•			00029		-	00029	00029
Metal (Primary)			•	•		-			•	•	1		-	1	1
West Bengal															
Ore(Primary)			-			-			-	-	-	1	12833333	12833333	12833333
Metal (Primary)		.			.			.	,				0.65	0.65	0.65

Figures rounded off Source: Indian Minerals Yearbook 2017, Indian Bureau of Mines, Ministry of Mines, Government of India

## IGPC MEMBERS



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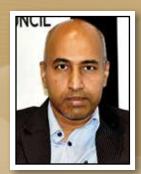


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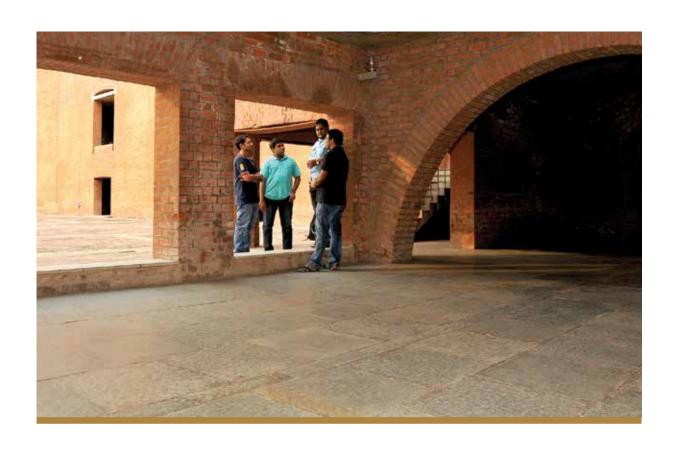
**Ms. Minal Marathe** Research Assistant, IGPC

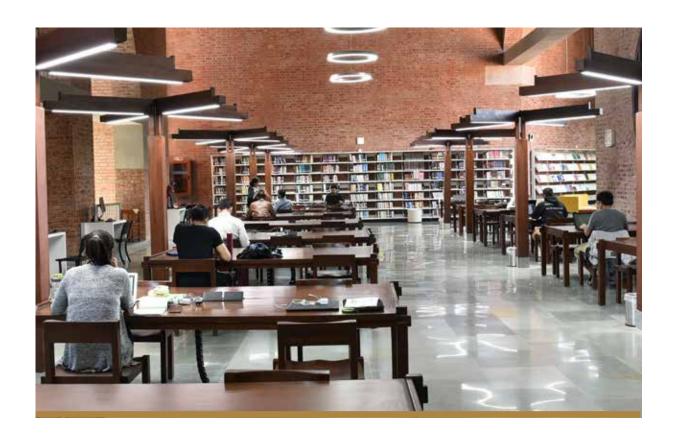


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