

# India's Gold Market

## Reform and growth





# Foreword



In 2017 we produced 'India's Gold Market – evolution and innovation'. A lot has changed since that report was published.

This compendium of updated reports delves deeper into key factors that underpin India's position as the second largest gold consumer in the world: it studies the drivers of gold demand and the perception of consumers; it examines the new investment landscape; and it considers the complex issue of gold supply.

Few of the global events that have rocked societal and geopolitical stability could have been imagined when our 2017 report was published. That India has had to adapt is not surprising, but the rate at which change is happening in the country is, arguably, unprecedented.

The IMF forecasts that per capita GDP growth will increase 23% between 2022 and 2026. On the face of it, rising living standards benefit gold, but there are other factors in play: the country's savings rate is declining, and the government's 'bank the unbanked' initiative is creating a sea change in investment choice and availability. Gold must respond if it is to successfully steer a course through these headwinds.

Despite – or perhaps because of – macroeconomic uncertainties, India's population resolutely turns to gold. Weddings and festivals are key drivers of gold demand and the country is one of the world's largest bar and coin markets. There is no doubt that gold retains prominence in the social and financial life of many Indians, both urban and rural.

The years ahead will present challenges. But rather than thinking them onerous, we believe there is tremendous opportunity for gold. Regulation of India's jewellery industry has already made huge strides in building consumer trust. If new export markets can be developed, the current fragile platform – 90% of jewellery exports go to just five countries – will be diluted. More accessible banking offers a possibility to reach investors who have long understood gold's safe-haven qualities but now find themselves negotiating a plethora of choice. And in the longer term, the Gold Monetisation Scheme, proposed legislative changes in the mining industry, and resolution of recycling traceability issues may reduce India's reliance on imported gold.

As we look ahead with optimism, the insights in this report will help us ensure that gold retains or even increases its relevance to India's economy – generating further employment and continuing to play its roles as an adornment and an effective portfolio diversifier and hedge against inflation.

**Juan Carlos Artigas**  
Global Head of Research



# Contents

<b>1</b>	<b>The drivers of Indian gold demand</b> p03	
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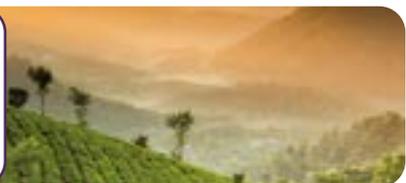
<b>2</b>	<b>Jewellery demand and trade</b> p17	
----------	--	--

<b>3</b>	<b>Jewellery market structure</b> p41	
----------	--	--

<b>4</b>	<b>Gold investment market and financialisation</b> p61	
----------	---	--

<b>5</b>	<b>Bullion trade</b> p87	
----------	-----------------------------	--

<b>6</b>	<b>Gold refining and recycling</b> p101	
----------	--	--

<b>7</b>	<b>Gold mining in India</b> p115	
----------	-------------------------------------	--

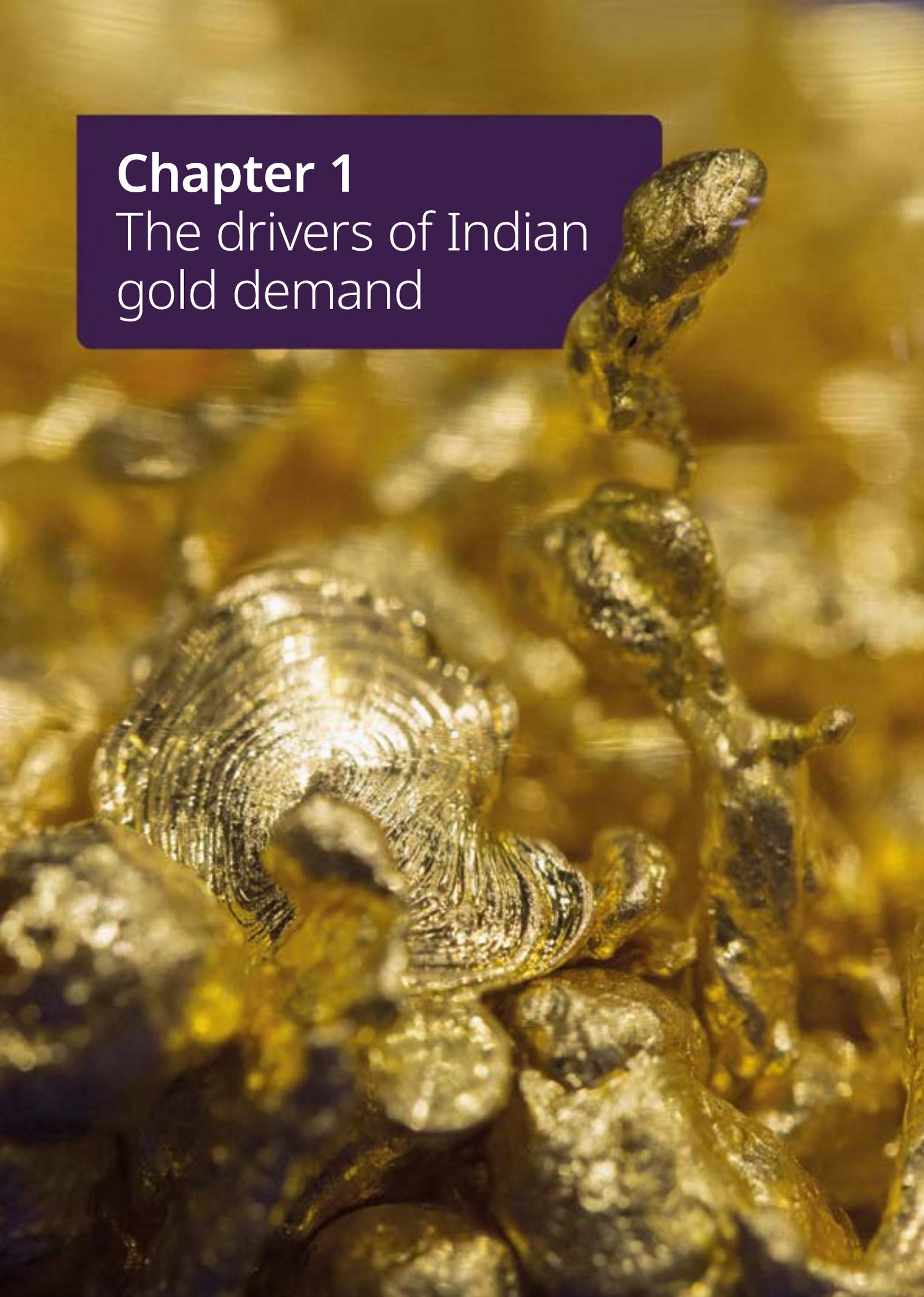
<b>Appendices</b> p125
---------------------------

<b>References</b> p136
---------------------------

<b>Contributors</b> p145
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# Chapter 1

## The drivers of Indian gold demand





Econometric analysis shows that rising income is the most powerful driver of Indian gold demand in the long term. This bodes well for gold demand as the economy is set to benefit from a demographic dividend: the IMF forecasts per capita GDP growth of 23% between 2022 and 2026.<sup>1</sup> But while India is the second largest consumer of gold, its per capita consumption is low. And demand faces challenges in the short term from declining household savings rate and agricultural wages. Income may be the key long-term driver of demand, but it is affected by a variety of other factors, including policy measures. Support from such measures is currently lacking as policy makers view gold demand solely through the prism of imports. Meanwhile, industry efforts to improve transparency are not cohesive. Building trust and improving awareness among consumers, together with innovation, can play a role in enhancing the image of India's gold industry, boosting domestic demand and allowing it to play a pivotal role in rebuilding household finances in the post-COVID world.



# Chapter 1 contents

<b>Collective drivers of gold demand</b>	<b>06</b>	<b>Outlook</b>	<b>16</b>
<b>Quantitative drivers of gold demand</b>	<b>06</b>	<b>Chapter 1: Appendix 1</b>	<b>126</b>
Long-term drivers	06	<b>Chapter 1: Appendix 2</b>	<b>133</b>
Short-term drivers	07		
Our econometric model	07		
<b>Qualitative trends and influences</b>	<b>08</b>		
India's demographic dividend	08		
Regional preferences, population shifts and gold demand	08		
Increasing urbanisation	09		
Agriculture – a sector in flux	09		
The rural economy – structural change	10		
Indian income levels are rising	10		
<b>A changing environment for gold as an investment</b>	<b>11</b>		
Savings and spending	11		
Growing financial inclusion	11		
Alternative avenues for investment	11		
Brighter prospects	12		
A framework for investment growth	12		
Inflationary pressure and gold demand	12		
<b>Government policies and the impact on gold</b>	<b>14</b>		
The unofficial market	14		

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# The drivers of Indian gold demand

## Collective drivers of gold demand

The drivers of gold demand in India are many and varied. Cultural affinity, long-held tradition and festive gifting clearly play a significant role. But these qualitative factors are complemented by quantitative factors, which offer additional and important insights.

In this report, the first in a series of in-depth articles on the Indian gold market, we assess gold demand from a range of perspectives, both quantitative and qualitative.

First, we consider the findings of a comprehensive econometric analysis of the long- and short-run determinants of Indian gold demand.<sup>2</sup>

Second, we analyse demographic, socio-economic and related developments that are likely to shape demand both today and in the future.

We also delve into aspects of Indian demographics and economic development that may help us to understand gold demand today as well as look to the future.

Rising incomes have a positive effect on Indian gold demand and higher gold prices have a negative effect



## Quantitative drivers of gold demand

Using an econometric model, we have drawn on three decades of annual data, dating from 1990 to 2020, to gauge some of the principal influences driving gold demand in India.<sup>3</sup>

### Long-term drivers

Our research reveals that, all else being equal, three key factors influence consumer demand for gold over the long term.<sup>4</sup>

- **Income:** for each 1% increase in gross national income per capita, gold demand rises by 0.9%
- **Gold price level:**<sup>5</sup> for each 1% increase in the rupee-based price of gold, demand falls 0.4%
- **Government levies:** import duties and other taxes affect long-term demand but the magnitude varies depending on whether gold is bought as jewellery or bars and coins.<sup>6</sup>

While the influence of income and price on demand may be widely expected, their comparative weight is perhaps more surprising. Simply put, demand responds more to income than it does to price. This was clearly demonstrated between 2000 and 2010, when demand increased by more than 40%, from around 700 tonnes (t) to 1,000t per annum, even as the rupee gold price soared by 137%.<sup>7</sup> At the same time, per capita income rose 77%, more than offsetting rising prices.<sup>8</sup>

## Short-term drivers

Our research also reveals the key econometric factors that influence short-term demand for gold.

- **Inflation:** in common with investors around the world, Indian savers turn to gold as a hedge against inflation. For each one percentage point increase in inflation, gold demand increases by 2.6%<sup>9</sup>
- **Changes in the gold price:** while steady price increases or decreases affect long-term demand, sharp price changes have an impact on short-term demand. For each 1% fall in the gold price in any given year, demand increases by 1.2%<sup>10</sup>
- **Tax regime:** an increase in the rate of import duties since 2012 has depressed demand for gold by 1.2% per year
- **Excess rainfall:** while the monsoon has less of an impact on demand than in the past, it still affects consumer behaviour. A 1% increase in rainfall, compared to the long-run average, boosts gold demand by 0.2%.

## Our econometric model

Our analysis centred on gold jewellery demand, as this accounted for more than 75% of total demand for gold in India between 1990 and 2020. In general, jewellery demand is more influenced by long-term drivers while demand for gold bars and coins tends to respond more sharply to short-term factors, such as inflation or tax.

Overall, however, our model provides a useful overview of some of the key factors affecting demand for gold over both the long and the short term, particularly income, price, inflation and fiscal policy (which we discuss in detail in **Chapter 1: Appendix 1**).<sup>11</sup>

As such, it can be used as a framework to help understand broader market trends and consider how they might influence gold demand over the coming years. We discuss these trends below.

## Long-term factors

### Increasing working age population

- The Indian working age population is expected to increase by an average of 7mn in the next 20 years
  - By 2041, it is forecast to be 890mn.

### Rising incomes

- Rising incomes have a positive effect on Indian gold demand and higher gold prices have a negative effect
  - For a 1% increase in income, gold demand rises by 0.9%
  - For a 1% increase in the gold price, gold demand falls by 0.4%.
- The growth in the working age population and participation in the labour force is expected to lead to increased gold demand
  - Indian culture supports gold demand across religions
  - As the population becomes more urbanised, earning power increases
  - Higher household incomes boost gold demand.

## Short-term factors

### Inflation

- For a 1% increase in inflation, demand increases by 2.6%
  - Investors around the world turn to gold to protect against inflation. India is no different.

### Gold price changes

- For a 1% increase in the gold price, gold demand will decrease by 1.2%
  - In the first half of 2013 the rupee gold price fell 20%, while consumer demand leapt 37% year-on-year.

### Excess rainfall

- A 1% increase in monsoon rainfall above the long-run average boosts gold demand by 0.2%
  - A good monsoon can increase crop yields, sweep money into the rural economy and boost gold demand.



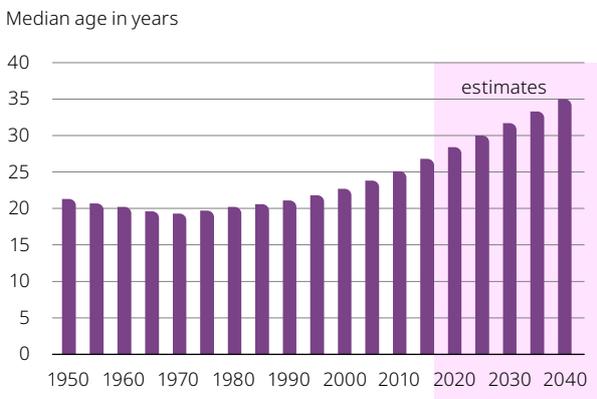
# Qualitative trends and influences

## India's demographic dividend

In April 2023, India became the most populous country in the world with 1.4bn population.<sup>12</sup> Not only is the population extensive, but its demographic structure is likely to confer significant economic benefits. Unlike many countries around the world, the Indian population is young and expected to remain so for many years. Today, the median age across the country is just 27 and it is forecast to remain below 35 for the next decade (Chart 1).<sup>13</sup>

**Chart 1: India's population is young**

Median age of Indian population in years

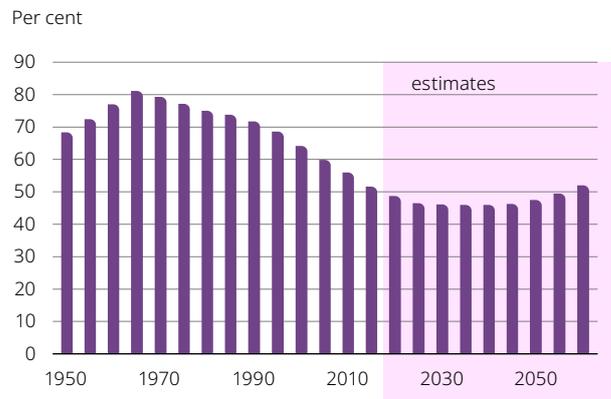


Note: As of 2019. Forecast estimates of median age are taken from United Nations Population Prospects 2019.  
Source: United Nations Population Prospects 2019, World Gold Council

At the same time, the dependency ratio has been shrinking fast as the working age population (aged between 15 and 64) has grown more rapidly than the dependent population (aged below 15 and above 64). Emerging more than a half a century ago, this trend has become particularly marked over the past 20 years and it is expected to continue in a similar vein until 2040 (Chart 2). As such, the working age population is expected to grow by roughly 7mn per year between 2021 and 2041.<sup>14</sup>

**Chart 2: India's dependency ratio is expected to decline until 2040**

India's dependency ratio, percentage



Source: United Nations

This presents major opportunities for India. As research from the Reserve Bank of India (RBI) indicates, growth in the working age population and participation in the labour force are key determinants of economic growth.<sup>15</sup> This suggests that India is set for a period of strong economic expansion, rising incomes and a growing middle class – all of which are conducive to rising gold demand.

## Regional preferences, population shifts and gold demand

While India is known for its strong, nationwide affinity for gold, this is especially marked among the rural population, where jewellery ownership is considerably higher than it is in urban areas. Consumption patterns also differ between town and country. Jewellery is considered both an investment and an adornment in rural areas. City dwellers tend to consider bars and coins as their preferred forms of investment.

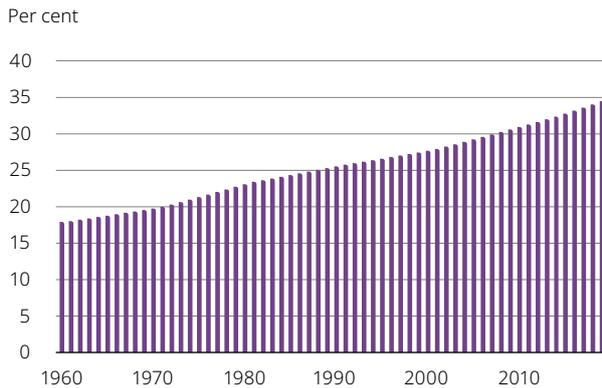
These differences take on a particular significance for gold demand as Indian cities and rural areas change and evolve.

### Increasing urbanisation

India's population has long been centred around rural communities. But this is in the throes of change. In 1960, just 18% of the population lived in cities. By 2019, that had almost doubled to an estimated 34% and there is every expectation that such a trend will continue through the coming decades (Chart 3).<sup>16</sup>

**Chart 3: Urbanisation has accelerated over the last few decades**

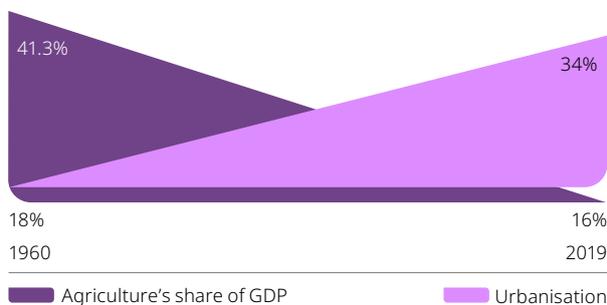
Percentage of India's population living in urban areas



Note: World Bank database as of February 2021.  
Source: World Bank, World Gold Council

Growing urbanisation has already contributed to a significant shift in employment patterns. World Bank data shows that agriculture accounted for 63% of employment in 1991. By 2019, that percentage had shrunk to 43% and it is expected to continue falling sharply – to 25.7% by 2050.<sup>17</sup> Agricultural income has traditionally been both relatively low and relatively volatile. A shift away from this sector should therefore drive incomes higher and, by extension, bolster demand for gold.

### With the rise in urbanisation in India, agriculture's share of GDP has declined



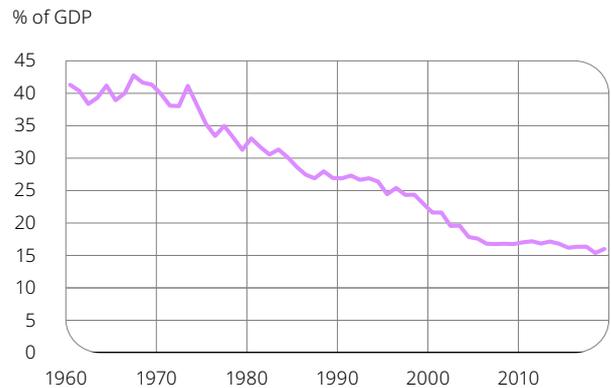
In recent times, new products such as sovereign gold bonds and digital gold products promoting micro savings have made an impact on savvy urban investors. The advent of bullion banking and exchange traded products may increase the variety of investment products and channels, which may offer potential opportunities for the industry to innovate.

### Agriculture – a sector in flux

Falling agricultural employment levels reflect changes to farming's contribution to the Indian economy. In the 1960s, agriculture was responsible for more than 40% of India's GDP. By 2019, that had reduced to 16% (Chart 4). Notwithstanding this shift, some 70% of rural households remain dependent on agriculture for their livelihoods.<sup>18</sup>

**Chart 4: Agriculture sector contribution to GDP has been in steady decline**

Agriculture sector value added, % of GDP



Source: World Bank, World Gold Council

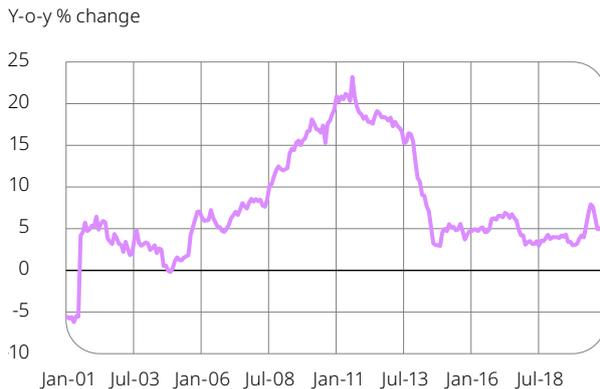
70% of rural households remain dependent on agriculture for their livelihoods



And in recent years, the rural economy has suffered, with annual growth in nominal monthly rural wages averaging just 4.6% from 2014 to 2020 (Chart 5). Adjusted for rural CPI, real wages actually declined, on average falling -0.3% in the wake of persistent weakness in wholesale food prices.

### Chart 5: Wage growth in rural India has declined since 2011

Monthly average of the rural wage rate for men in India across various occupations, y-o-y % change



Note: Data as of February 2021.  
Source: Bloomberg, World Gold Council

Keen to redress the situation, the government announced a series of measures in 2016, designed to double farmers' income by 2022. Three specific laws were introduced in 2020 to help farmers still further and policies have been launched to boost non-farming rural incomes too (see Chapter 1: Appendix 2).

### The rural economy – structural change

Encouragingly, the rural economy itself is changing. In 1993, rural areas contributed less than 30% to manufacturing output. By 2011, the time of the last census, that percentage had increased to 51.3%.<sup>19</sup> A continuation of this trend could deliver meaningful change, particularly in conjunction with recent government policies. Online marketplaces and improving infrastructure are changing consumer aspirations and logistical capabilities. This could dilute the sharp division in consuming and investing habits between rural and urban consumers in the coming years. Taken together, they could engender a period of sustained recovery for the rural economy, driving GDP growth and consumer spending across India.

There could also be considerable consequences for India's gold industry, as rural households still account for a majority of India's gold demand. Sustained growth in rural incomes may therefore foster demand for gold.

### Indian income levels are rising

Looking back over the past 30 years underlines how far India has come since the economic liberalisation of 1991. Between that time and 2020, India's economy grew more than nine-fold, its foreign exchange reserves soared from US\$1bn to more than US\$500bn, the middle class expanded and household incomes rose,<sup>20</sup> with per capita net income rising from Rs7,000 in the early 1990s to Rs134,186 per year in financial year (FY) 2019-20.<sup>21</sup>

The coronavirus pandemic has provoked a slowdown in economic growth but long-term prospects remain bright, fuelled by these demographic changes, rising urbanisation and shifts in the rural economy. Analysis from consultancy Bain & Company, for instance, suggests that the number of middle-class households should grow by 140mn between 2018 and 2030, while the number of high-income earners will increase by 21mn.<sup>22</sup>

This is likely to presage an almost four-fold increase in consumer spending, from US\$1.5tn in 2018 to US\$5.7tn by 2030.<sup>23</sup>

Such a shift could have mixed implications for gold demand. As our model shows, rising incomes historically translate into increased gold purchases. Demand will also get a boost as more people move up the economic chain from below the poverty level. At the same time, however, today's consumer is increasingly drawn to other forms of expenditure, a trend that may reduce gold's share of the wallet, if left unchecked.

Comparatively, however, there is scope to raise gold's per capita consumption in India, which currently ranges between 0.3g and 0.6g per person. This is lower than emerging markets in South-East Asia such as Vietnam (0.4-0.7g) and the Middle East, as well as developed economies such as Germany (1.2-2.0g) and Switzerland (3.5-6g) – where demand thrives alongside sophisticated financial markets.<sup>24</sup> But for this to happen, gold has to be positioned with unassailable trust among various other competing savings opportunities and supported by transparent access, integrity and fungibility.

## A changing environment for gold as an investment

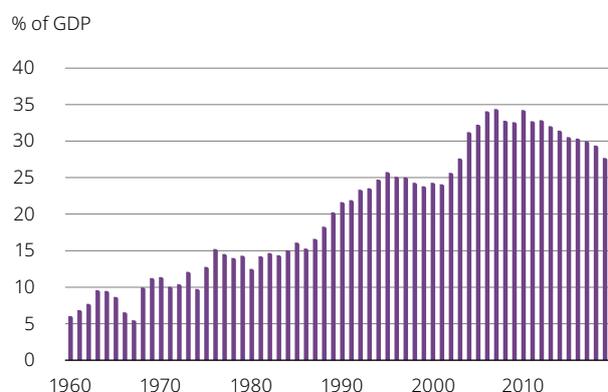
With India's deep affinity for gold, Indians have historically turned to this asset as a means of preserving their wealth – and increasing its value over time. Now, however, attitudes are changing. Consumer spending on other goods has increased, growing financial inclusion has encouraged more people to put their savings in the bank and greater financial literacy has boosted interest in other assets, such as equities.

### Savings and spending

India has a long tradition of saving. From the 1960s until 2010, for example, the Indian savings rate climbed from 6% to 34.3%.<sup>25</sup> Since that time, however, savings as a percentage of GDP have declined, dipping below 30% in 2018 and continuing to inch lower to this day (**Chart 6**). Rather than hoarding their money, Indian consumers have begun to spend more on goods and services, such as smartphones, designer clothes and travel.

#### Chart 6: India's savings rate has declined since 2010

Gross domestic savings, % of GDP



Note: World Bank database as of February 2021.  
Source: World Bank, World Gold Council

### Growing financial inclusion

Even as consumer spending has risen, the government has taken steps to clamp down on unaccounted money and increase financial inclusion. These measures have met with considerable success. Between 2011 and 2017, for example, the share of adults with a bank account more than doubled to 80%.<sup>26</sup>

The growth in micro finance companies and payment banks has helped to boost financial inclusion in villages and small towns.<sup>27</sup> At the same time, soaring smartphone use has allowed Indians to access financial services swiftly and efficiently. Many Indian banks now have smartphone apps, access to high-speed internet is inexpensive in many parts of the country and take-up has been enthusiastic.<sup>28</sup> As of the end of 2020, India had the second largest number of internet users in the world, with almost 750mn Indians actively accessing the internet each month.<sup>29</sup>

### Alternative avenues for investment

There has been growing interest in Indian equities too, following several years of strong growth. This is exemplified by the increase in 'demat' accounts, used to hold shares and securities in an electronic (or 'dematerialised') format. The number of these accounts almost tripled from 16.7mn in 2009 to 49.8mn by the end of 2020 (**Chart 7**).<sup>30</sup>

#### Chart 7: Demat accounts have increased steadily

Demat accounts from 2009 to 2020



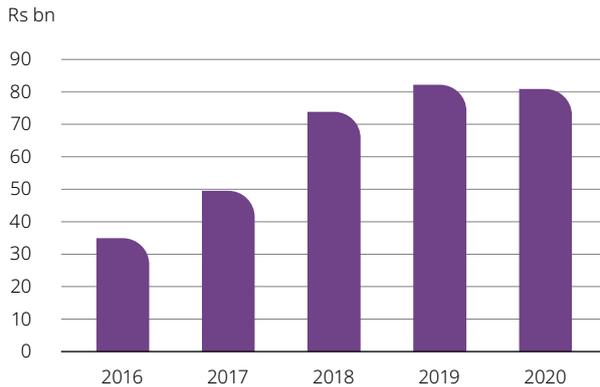
Note: Data as of December 2020.  
Source: Securities and Exchange Board of India, World Gold Council



The amount of money flowing into equities through Systematic Investment Plans (SIPs) has also surged in recent years, reflecting growing awareness of mutual fund investment. Average inflows to SIPs more than doubled between 2016 and 2020, from Rs35bn to Rs81bn a month (Chart 8).<sup>31</sup>

**Chart 8: Average monthly inflows into Systematic Investment Plans (SIPs) have been steadily increasing**

Average monthly SIPs, Rs bn



Note: Association of Mutual Funds in India began disclosing monthly SIP contribution data in 2016.

Source: Association of Mutual Funds in India, World Gold Council

### Brighter prospects

Financial inclusion and financial literacy, while beneficial for India's prosperity and income equality, have created challenges for the gold market. These are particularly evident in rural areas, where physical assets, including gold, have long been considered the preferred form of investment. However, bank account penetration has already reached 80% and, looking ahead, the post-pandemic environment may encourage gold ownership, as the economy rebounds, discretionary spending increases and investors seek out assets that will protect their wealth in the years ahead (Focus 1).

### A framework for investment growth

In an environment where gold faces unprecedented competition as an investment asset, action is almost certainly required. Our latest consumer research has identified three key focus areas that would allow gold to retain its long-held position as a valued asset across India and an effective investment.<sup>32</sup>

- **Trust:** Mandatory hallmarking, good delivery standards for gold bars and a gold spot exchange will drive a sea change in the Indian gold market, building trust among consumers and investors alike

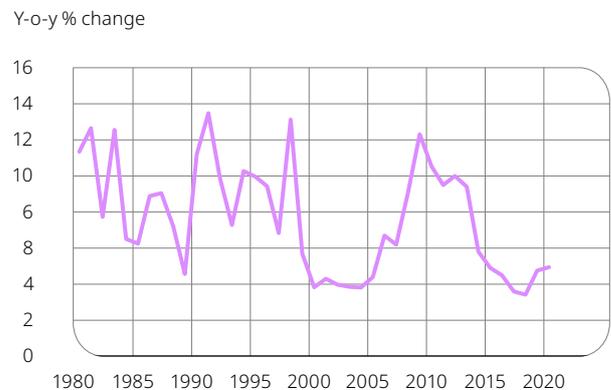
- **Education and awareness:** An orchestrated campaign explaining how to buy gold could inspire many potential gold investors, especially if this included products that accommodate small incremental investments. Explaining moves in the gold price, on television for example, might also help to allay concerns among less sophisticated investors
- **Innovation:** Digital tools, such as online platforms, roboadvisors, mobile applications and e-commerce platforms, will drive accessibility and put gold on a par with other investment assets.

### Inflationary pressure and gold demand

Inflation may also spur future interest in gold. A persistent problem for India, inflation has regularly spiked above 10% over the past four decades, imposing considerable pressure on the economy. Between 2014 and 2020, however, average retail inflation remained below 5% (Chart 9), reflecting lower food price inflation and concerted action from the RBI.<sup>33</sup>

**Chart 9: Following the 2010 spike above 10%, Indian inflation has been relatively benign in recent years**

Consumer price index, y-o-y % change



Note: As per IMF World Economic Outlook 2020 database

Source: IMF, World Gold Council

However, household inflation expectations have also risen in line with inflation in recent years. As we state above, rising inflation tends to drive gold demand. Gold is perceived as a strong hedge against inflation and decades of data supports this assumption.

## Focus 1: COVID-19 and the impact on Indian gold demand

The Indian economy plummeted in 2020 as the pandemic unfolded. To curb the virus, at the end of March 2020, India imposed a two-month nationwide lockdown, impacting jobs and the economy. As a result, Q2 2020 GDP growth contracted by 24.4% year-on-year (y-o-y). With the gradual reopening of the economy in Q3 2020, sentiment improved but GDP still contracted by 7.4%.<sup>34</sup>

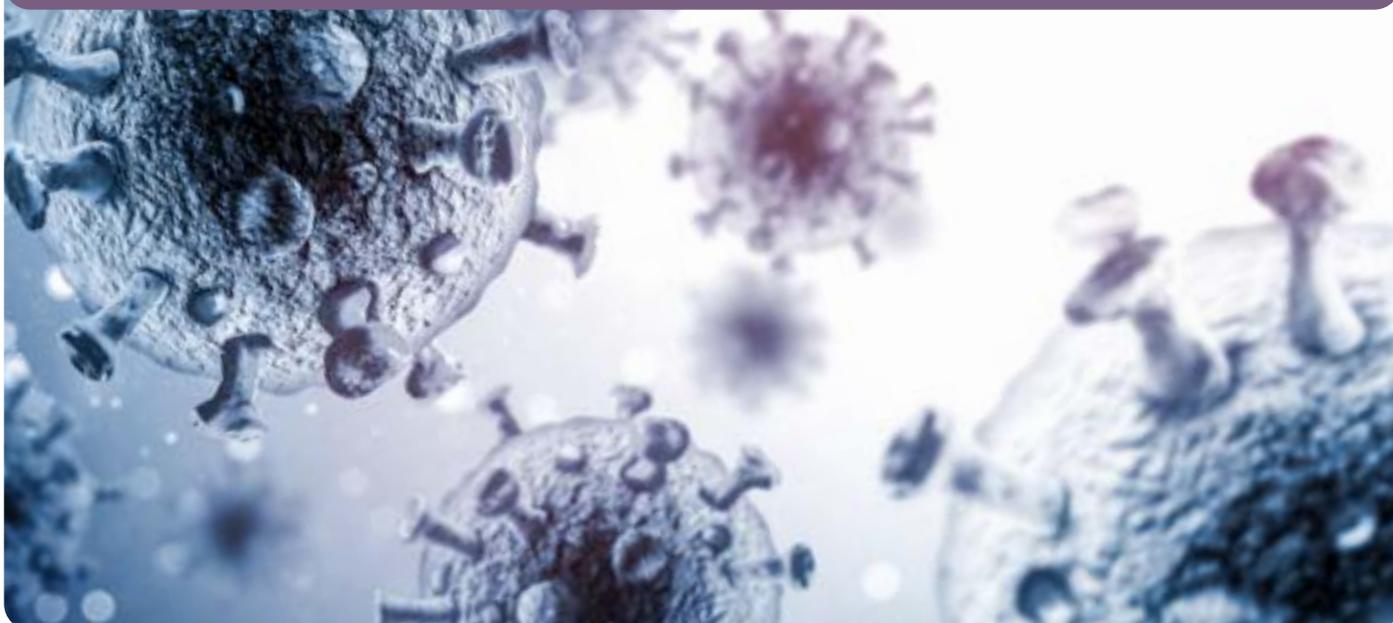
By contrast, the rural economy was relatively unscathed. Rural incomes were boosted due to agriculture and related activities being categorised as essential services during lockdown, higher minimum support prices and a positive monsoon. Despite the contraction in the broader economy, the agriculture sector grew by 3.5% and 3% in Q2 and Q3 2020 respectively.<sup>35</sup>

Considering the impact of the pandemic on India's gold market specifically, gold recycling volumes dropped by nearly 20% in 2020.<sup>36</sup> This was despite average annual local gold prices being 28% higher and annual jewellery demand being 42% lower in the year.<sup>37</sup> This is counterintuitive but validated by our econometric analysis showing that recycling had a lower correlation with both the gold price and jewellery demand. Lower recycling volumes were partly driven by the inability to sell gold during the lockdown – to a large extent the reflection of the absence of distress selling – as well as a higher propensity for gold consumers to exchange existing gold for new wedding purchases and by consumer preferences to secure loans against gold rather than sell it outright ahead of higher price expectations.

The pandemic wreaked a similarly severe impact on Indian jewellery demand, which was slashed 42% in 2020 by a combination of the sharp economic slowdown, higher local gold prices and postponement of weddings.<sup>38</sup>

The pandemic also impacted the nature of gold investment, as store closures reduced access to physical investment products, encouraging a shift towards gold ETFs. The rising gold price, increased volatility in equity markets and economic uncertainty fuelled further safe-haven demand into gold ETFs. Inflows into Indian gold ETFs almost doubled in 2020, taking total gold holdings to 28.3t by the end of the year.<sup>39</sup>

Looking at 2021 to date, a healthy rebound in the economy with GDP growth of 1.6% in Q1 2021 and lower infection rates boosted gold demand in Q1.<sup>40</sup> However, the emergence of a more severe second wave of infections from April onwards once again hit consumer sentiment, with lockdown restrictions implemented across large parts of the country. Importantly, the ferocity and spread of the second wave of COVID-19 affected rural India, impacting income levels and forcing many rural consumers to sell gold to fund medical expenditures during the second wave. The ebbing of infections in Q3, together with a pick-up in the pace of vaccination and easing of restrictions, led to a rebound in economic activity in the quarter, mitigating the need for further distress selling. Gold can also benefit from higher levels of savings amid the pandemic – particularly in rural India where the metal still attracts a sizeable proportion of rural savings.<sup>41</sup>





Looking back over the past 40 years, for example, gold has delivered an average annual return of 10% in rupees, clearly outperforming CPI inflation, which expanded by an average of 7.3% over the same period.<sup>42</sup>

Gold's performance has also been particularly strong when inflation was high, increasing by 11% on average, when inflation rose above 7%.<sup>43</sup> As inflationary pressures tick up, therefore, historical precedent would suggest that demand for gold will follow.

## Government policies and the impact on gold

India is unusual. Even though the country is one of the leading sources of gold demand worldwide, there is almost no domestic production. As such, when demand rises, imports tend to rise in sync. This can, at times, have a significant effect on India's trade balance and current account.

This was particularly in evidence after the Global Financial Crisis, when gold imports rose sharply, reaching a high of Rs2,922bn by FY 2012-13, almost 20% of total imports to India.<sup>44</sup> A combination of rising demand for gold, reduced demand for Indian exports and soaring oil prices had severe implications for India's current account deficit (CAD). From less than Rs116bn in 2001, the deficit surged to Rs4,796bn in FY 2012-13, equivalent to 4.8% of GDP.<sup>45</sup>

Faced with this fiscal imbalance, the government imposed restrictions on a raft of imported goods, including gold. Duties on gold imports increased five-fold in less than two years, from 2% in January 2012 to 10% in August 2013. The government also implemented the '80:20' rule, under which gold importers were required to export 20% of their gold as jewellery.<sup>46</sup> Recognised as unwieldy and market-distorting, the rule was scrapped in November 2014 but import duties remained at elevated levels. And in July 2019, they were raised still further to 12.5%, as part of a series of tax-raising initiatives designed to improve the government's fiscal position.<sup>47</sup>

The Basic Customs Duty (BCD) on gold was reduced to 7.5% at the Union Budget of 2021-22 but, in combination with other levies, total import duties on gold still stand at 10.75% (compared to 12.875% before the budget).<sup>48</sup>

### The unofficial market

Over the years, government policies on gold have had widespread consequences. Back in 2013 and 2014, for example, import duties and the 80:20 rule pushed up the gold price premium in the local market, created uncertainty and deterred some potential gold buyers.

But there is a far more pernicious consequence of high import duties and other such restrictions: they tend to drive parts of the gold supply chain underground. Between Q3 2013 and Q4 2014, some 335t of gold was smuggled into the country, around a quarter of total demand. And, in the second half of 2019, while official imports fell and the CAD narrowed, unofficial imports surged by 42%.

In the face of huge, smuggled inflows of gold, the efficacy of successive import restrictions has been called into question. There is a further consequence too – the more pervasive India's unofficial gold market becomes, the more difficult it is for the mainstream market to advance and develop. A reduction in tax rates could therefore confer benefits on two fronts. Lower duties would almost certainly boost overall demand for gold. And lower tax rates could create more opportunities for the compliant and organised sections of the gold market by squeezing out the unofficial or 'grey' market.

This could have a meaningful impact on India's role on the global gold stage. A direct consequence of high rates of duty, grey trading severely reduces gold's role in mainstream financial services, limits the appeal of India's handcrafted jewellery overseas and curtails India's influence in the gold trading market.

It should also be noted that gold imports have accounted for just 7% of total imports (**Chart 10**) over the past eight years. Over the same period, electronics imports accounted for 11% of total imports, while crude oil made up 24% of the total. The CAD has also fallen, averaging Rs2,112bn over the last seven years (**Chart 11**).

**Chart 10: Gold imports moderated after 2013**

Gold imports, Rs bn and as % of total imports, FY

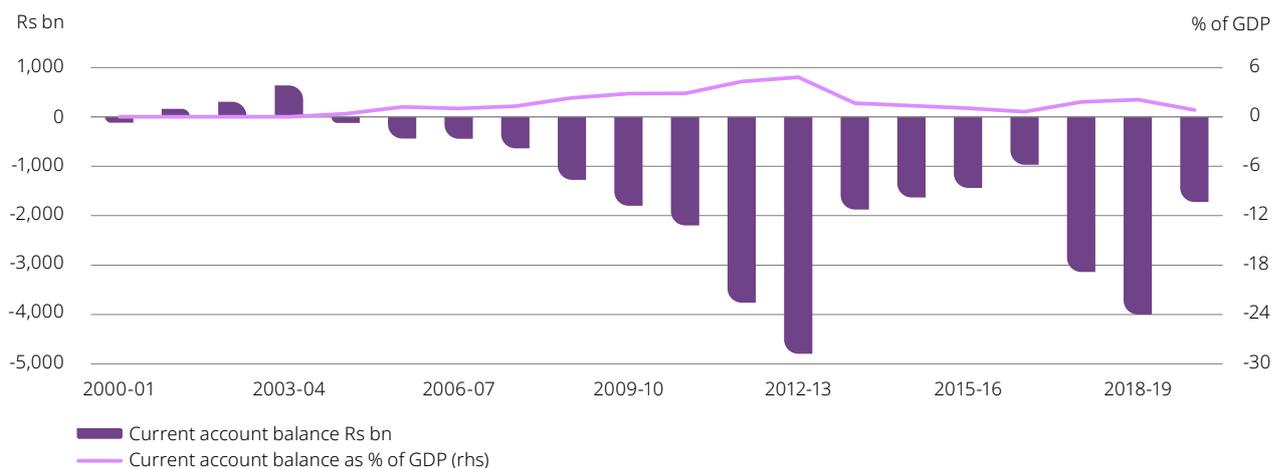


Note: FY refers to financial year (April-March).

Source: Department of Commerce, World Gold Council

**Chart 11: India's current account deficit has narrowed with moderation in gold imports**

India's current account deficit, Rs bn and as % of GDP, FY



Note: FY refers to financial year (April-March).

Source: RBI, World Gold Council

India's dependence on gold imports can have implications for the current account deficit and has at times prompted government measures to restrict gold demand. Between 2013 and 2021, gold accounted for 7% of total imports





## Outlook

Looking longer term, the Indian gold market is influenced by both positive and negative factors. On the upside, the economy is expected to benefit from several robust structural factors.

- First, rapid growth in the working age population over the next two decades will create a strong and sustained demographic dividend
- Second, continued urbanisation will drive and support economic expansion
- Third, higher penetration of both the manufacturing and services sectors in rural areas will reduce their reliance on agriculture and deliver more stable incomes for millions of households.

As our econometric model illustrates, rising incomes are one of the biggest single drivers of long-term gold demand. This suggests that, as India's economy grows, demand for gold should increase. However, the Indian gold market also faces several challenges.

- Households are saving proportionately less than they used to, which may reduce the amount of capital they allocate to gold
- Financial inclusion is increasing, which provides investors with other sources for their savings beyond physical gold
- Government policies can impact demand and inadvertently foster India's unofficial market
- Agricultural wages are still in decline, despite government actions in recent years.

Taking all these factors into consideration, it would seem that the gold market is at a crossroads. Government plans to increase farmers' income should boost rural wages, lending further support to the market. Should the government choose to impose further tax increases, import restrictions or other adverse policies relating to gold, demand could be stifled or driven underground.

Looking ahead, it would appear that India's gold market is most likely to benefit from positive demographic and socio-economic changes if the industry takes steps to become more transparent, more standardised and more in line with global peers. The social and cultural transformations taking place in India should be underpinned by concerted efforts to provide easy access, and improve integrity and fungibility to reinforce trust in gold as an asset.

Such moves would increase trust, boost confidence and allow the gold market to truly capitalise on India's growing wealth. A more robust market would encourage Indian consumers and investors to see value in gold even as they become wealthier and more sophisticated. Overseas, a more reliable market would foster demand for Indian gold products the world over and allow India to take its rightful place on the global gold stage.

Rising incomes are one of the biggest single drivers of long-term gold demand

## Chapter 2

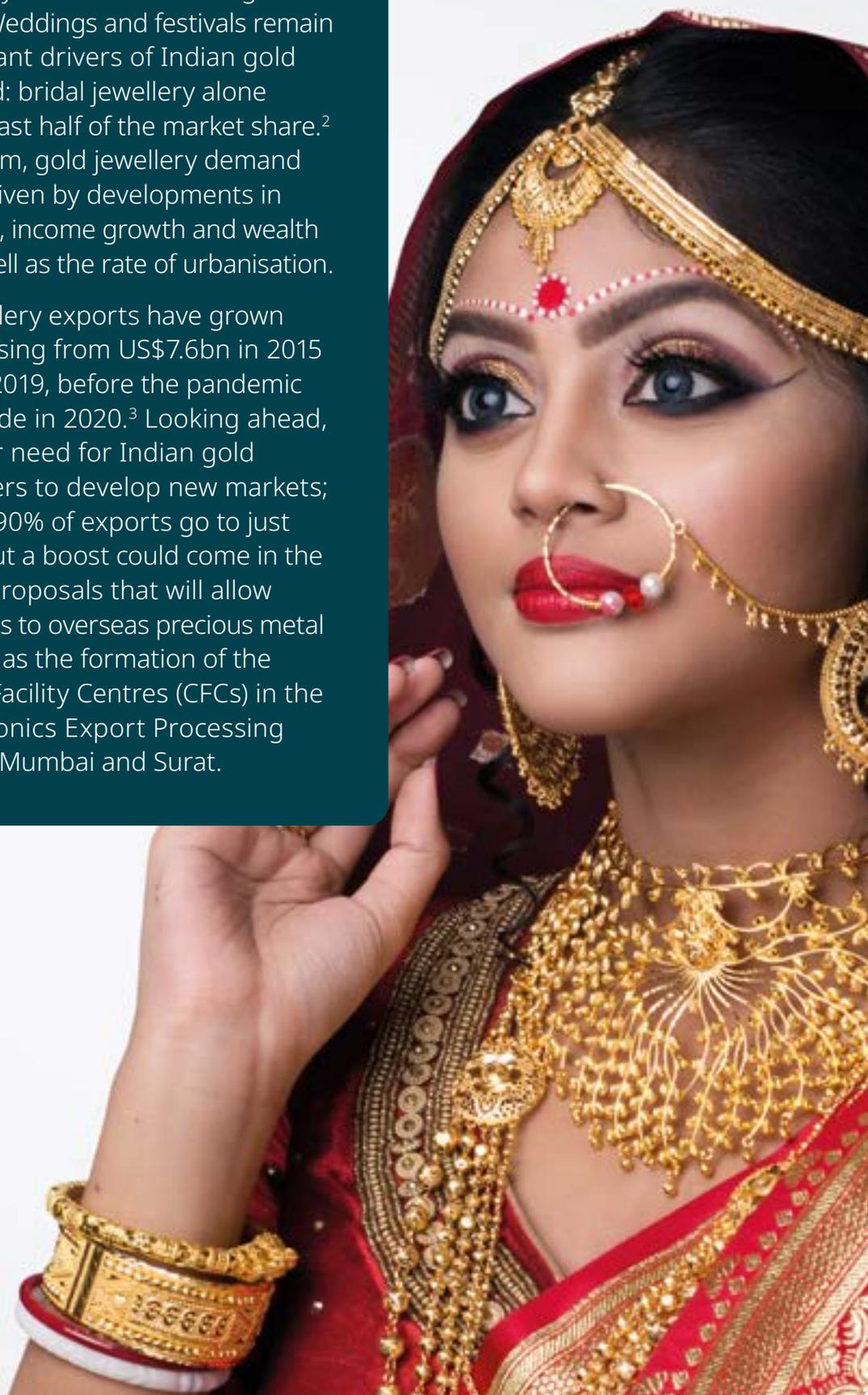
# Jewellery demand and trade





India, the world's second largest consumer of gold jewellery, has experienced rapid change over the last few years due to evolving demographics.<sup>1</sup> Weddings and festivals remain the most important drivers of Indian gold jewellery demand: bridal jewellery alone accounts for at least half of the market share.<sup>2</sup> Over the long term, gold jewellery demand in India will be driven by developments in economic growth, income growth and wealth distribution, as well as the rate of urbanisation.

India's gold jewellery exports have grown over the years, rising from US\$7.6bn in 2015 to US\$12.4bn in 2019, before the pandemic impacted the trade in 2020.<sup>3</sup> Looking ahead, there is a greater need for Indian gold jewellery exporters to develop new markets; currently, nearly 90% of exports go to just five countries.<sup>4</sup> But a boost could come in the form of further proposals that will allow advance payments to overseas precious metal suppliers, as well as the formation of the Mega Common Facility Centres (CFCs) in the Santacruz Electronics Export Processing Zones (SEEPZ) of Mumbai and Surat.



# Chapter 2 contents

<b>Executive summary</b>	<b>20</b>	<b>International jewellery trade</b>	<b>31</b>
Bridal gold jewellery dominates the Indian gold jewellery landscape	20	The gems and jewellery industry is a key contributor to India's total exports	31
Plain gold jewellery retains a dominant market share	20	US overtakes UAE to become top jewellery export destination	31
US overtakes UAE as the largest export destination	20	Share of plain gold jewellery has declined in the export mix	32
Looking ahead	20	Removal of proposed tariffs by the US will further help Indian jewellery exports	33
<b>Jewellery demand</b>	<b>21</b>	The India-UAE CEPA will help lift the UAE as a jewellery import destination	33
India is the second largest jewellery market	21	There is a need to develop new markets to boost exports	33
Weddings, religious festivals and agriculture drive gold demand in India	21	There are various government schemes for jewellery exporters	34
<b>Indian jewellery segmentation</b>	<b>23</b>	Indian gold jewellery imports remain very small	35
The importance of bridal gold jewellery	23	Round tripping continues despite government measures to reduce fictitious exports	35
Plain gold jewellery dominates the landscape	23	Special Economic Zones have played a key role in boosting jewellery exports	38
Lower caratage daily wear jewellery has been widely accepted	26	Issues have stabilised after initial hiccups	40
Gold-plated jewellery growth slowed after initial euphoria	26	Jewellery exports via e-commerce are a big positive for the industry	40
<b>Understanding regional, income and demographic differences</b>	<b>28</b>	<b>Outlook</b>	<b>40</b>
Regional demand	28		
Rural India is the largest consumer of gold jewellery	28		
The middle class is the primary gold consumer	29		
The younger generation is driving changes in the Indian gold jewellery market	30		
Silver and platinum jewellery do not pose a significant threat	30		

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[gold.org/goldhub/research/jewellery-demand-and-trade-india-gold-market-series](https://gold.org/goldhub/research/jewellery-demand-and-trade-india-gold-market-series)



# Jewellery demand and trade

## Executive summary

### **Bridal gold jewellery dominates the Indian gold jewellery landscape**

Gold is intrinsic to Indian culture, closely tied to religious beliefs, tradition and festivals. Bridal jewellery dominates the gold jewellery landscape, enjoying 50-55% of market share; weddings, together with festivals, constitute the two major gold purchase occasions in India. In the absence of official records, the country is estimated to have around 11-13mn weddings per year.<sup>5</sup> With women marrying at an average age of 22 and with more than half of the country's 1.4bn population below the age of 25, demand for bridal jewellery looks set to remain strong over the long term.<sup>6,7</sup> The importance of this type of jewellery in India stems largely from the fact that the gold gifted to a woman for her wedding is solely her property and is therefore an important form of financial security.

Agriculture remains important to gold demand. India has seen significant urbanisation yet 65% of the population still live in rural areas and depend on the land for their livelihood. Gold remains the most popular form of investment for these communities, and while access to bank accounts has increased, faith in gold has not diminished. Gold demand in this segment is seasonal, closely linked to the success – or otherwise – of harvests.

### **Plain gold jewellery retains a dominant market share**

Despite the traditional nature of India's gold demand, consumer behaviour over recent years has changed and continues to do so. Plain gold jewellery maintains 80-85% of market share, the majority of which is 22-carat although the market for 18-carat jewellery is growing.<sup>8</sup>

The country exhibits distinct regional preferences. Studded jewellery – known as Polki, Kundan or Jadau – has an estimated market share of 15-20% overall, although in Northern India this share is considerably higher.<sup>9</sup> In the South, consumers are more inclined towards plain gold products, 60-70% of which are studded with diamonds and the remaining 30-40% set with precious or semi-precious stones.

Manufacturers are increasingly focused on producing lightweight pieces to satisfy demand from the younger consumer, especially those who want daily wear gold jewellery that matches their adoptive Western-style attire. Silver jewellery is becoming more common due to high gold prices and platinum is making an appearance, particularly in male jewellery items, but neither appear to have the cultural significance or the aspirational quality of gold and therefore do not pose a major threat.

### **US overtakes UAE as the largest export destination**

India remains one of the world's largest exporters of gold jewellery. In recent years, the US has surpassed the UAE as the largest export destination for Indian gold jewellery.<sup>10</sup> This reflects two developments. First, the imposition of extra tariffs on Chinese jewellery exports to the US, which has made Indian exporters more competitive and, second, the implementation in the UAE of a 5% import duty in January 2017 and 5% Value Added Tax (VAT) in January 2018, both of which negatively impacted competitiveness.<sup>11</sup>

But under a Comprehensive Economic Partnership Agreement (CEPA), which was introduced in May 2022, 90% of Indian goods will be allowed duty-free access to the UAE. This will have far-reaching effects as goods sold there are re-exported to other countries and already this has resulted in a substantial rise in India's gold jewellery exports.

### **Looking ahead**

Over the last few years the Indian gold market has grappled with numerous changes in the regulatory environment and in consumer behaviour. Looking ahead, gold jewellery demand will face further challenges. Changing demographics and the possibility that millennials will move away from gold as other luxury items demand their attention cannot be ignored. Against these headwinds, gold jewellery demand will likely benefit from strong economic growth and growing urbanisation as incomes rise and the middle class grows. As more people are lifted out of poverty, gold jewellery demand will benefit.

E-commerce opportunities are increasing and as a more robust regulatory structure emerges to support online gold jewellery sales at home and abroad, manufacturers and retailers will be able to use this to extend their reach.

The Indian government seeks to boost manufacturing and exports, and as a consequence jewellery exports are likely to improve further over the coming years. Proposals to allow advance payments to overseas precious metal suppliers and to set up Mega Common Facility Centres (CFCs) in the Santacruz Electronics Export Processing Zone (SEEPZ) in Mumbai and Surat could stimulate growth in the sector if implemented. The CFCs could facilitate sharing of manufacturing best practice and state-of-the-art machinery, which would bring the latest technology and resources within reach of small manufacturers. If these efforts are supported by appropriate communications around both quality and craftsmanship, the future of India's gold jewellery market will be assured.

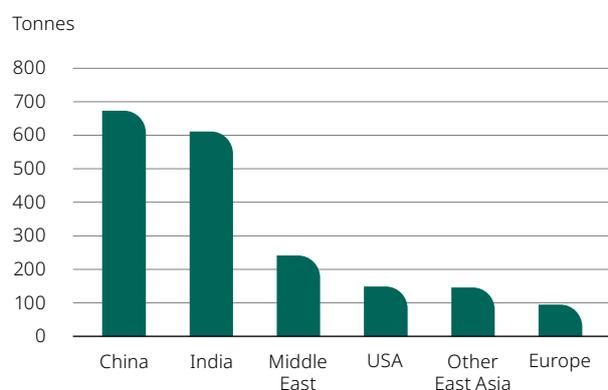
## Jewellery demand

### India is the second largest jewellery market

The gold market forms a deeply intrinsic part of India. For the population of 1.4bn, gold, and specifically gold jewellery, plays a central role, acting both as an adornment and a form of investment. It is therefore not surprising that for decades India was the largest consumer of gold before being overtaken by China in 2009.<sup>12</sup> In 2021, India bought 611t of gold jewellery, second only to China (673t) but comfortably ahead of all other gold-consuming markets (**Chart 1**).<sup>13</sup>

### Chart 1: India is the second largest jewellery-consuming nation in the world

Jewellery demand in 2021 by countries/regions



Source: Metals Focus, World Gold Council

Much of the Indian gold market is very traditional, reflecting important cultural and religious ties. This can be seen in the long-standing preference for 22-carat jewellery and the dominance of bridal jewellery. But the gold market is evolving, with changing tastes and designs driven by economic growth, globalisation and changing consumer preferences. In recent years, for example, demand has grown for lightweight and studded jewellery.

Aside from gold, India has a sizeable and vibrant silver jewellery market and is the world's largest fabricator of silver jewellery. Our 2019 consumer survey, carried out by Hall & Partners, found that 60% of the women surveyed owned gold jewellery, closely followed by 57% who owned silver jewellery, but only 26% owned diamond jewellery.<sup>14</sup> Platinum jewellery did not appear among the top purchases by female consumers, as this market is still in its infancy in India.

Other markets often reflect on the long-established nature of India's gold jewellery markets – both in scale and importance. The reasons behind gold's history and longevity lie in how these metals are inextricably linked to Indian customs and religion.

### Weddings, religious festivals and agriculture drive gold demand in India

Gold is deeply embedded in Indian culture and purchases are often driven by tradition. Typically, all family members are involved in decision making about how and when gold jewellery purchases are made. Discussions over the years between Metals Focus and retail jewellers have revealed that weddings remain the key motive for buying gold in India. As our 2019 consumer retail insights survey demonstrated, weddings were the number one purchase occasion to buy gold (17%), followed by other important occasions such as birthdays (12%) and festivals (11%).



Contemporary bridal choker made with a combination of traditional Nakashi (repoussage) work, filigree and bezel set Kundan work.



Focusing on the impact of religion and festivals, gold is often seen as a symbol of wealth and prosperity in the Hindu religion. In particular it is associated with Lakshmi, the goddess of prosperity, fertility and productiveness. During the country's most important festival of Diwali, Hindus pray to the goddess for prosperity, and gold is an important part of that ritual. According to Hindu mythology the creator of the universe, Brahma, known as Hiranyagarbha, was born from a golden egg.

Gold has always been considered a sacred colour, and so gold adornments are worn for specific rituals and events. In religious ceremonies gold coins are often used for pujas (an Indian worship ritual). Most Indian gods and goddesses wear gold-embroidered clothes or jewellery. If one looks at the images of various deities, such as Lakshmi, Ganesh or Krishna, one will always find them wearing some form of jewellery.

During the festivals of Diwali and Akshaya Tritiya it is considered extremely auspicious to buy gold. Dhanteras (the first day of Diwali) usually falls during October or November, and Akshaya Tritiya between late April and early May. Hence retailers across the country introduce attractive designs in the run-up to these occasions. On average around 40-60t of gold is sold in India during these two auspicious festivals alone.<sup>15</sup> Underlining the importance of these occasions, the household survey of India Gold Policy Centre-IIM Ahmedabad (IGPC-IIMA) found that 65-70% of respondents cited festivals as their main gold purchase occasion, with Dhanteras and Akshaya Tritiya accounting for 30-35% of these purchases.<sup>16</sup> And with prominent overseas Indian populations, the Middle East and East Asia also see significant gold buying at these times.<sup>17</sup>

Finally, agriculture makes up an important part of Indian gold demand. Even though the sector now accounts for less than 19% of the Indian economy, a large swathe of rural India is still dependent on agriculture and related industries.<sup>18</sup> Put another way, while there has been rapid urbanisation across much of the country, 65% of the population still lives in rural areas, highlighting the importance of agriculture as a key driver of gold demand.<sup>19</sup> Gold demand in rural communities usually picks up after the harvest season. Harvesting of Kharif crops runs from September until November and about 70% of Indian agricultural production takes place during the Kharif season.

As shown in the heatmap below, the combination of the wedding season, harvests and festivals means that demand tends to be concentrated in two periods: April to June, and September to January (**Table 1**).

On average around 40-60t of gold is sold in India during the two auspicious festivals of Diwali and Akshaya Tritiya alone

Table 1: Jewellery demand peaks between September and November

2023	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
Gold buying:												
Festivals												
Marriages												
Harvests			Rabi crops							Kharif crops		

Source: Metals Focus, World Gold Council

## Indian jewellery segmentation

Indian jewellery consumption can be divided into three categories: bridal, daily wear and fashion jewellery. Each category has its own characteristics and offers different products, sizes and designs. That said, there is some crossover between products, such as bangles and chains, as these are not limited to one segment.

Despite this crossover, one can differentiate in terms of size and weight and therefore decide into which category a product should fall. For example, bangles ranging from 10g to 20g tend to count as daily wear, whereas those that are 25g and above are considered bridal products.<sup>20</sup> When measured by the number of sales, bangles and chains are the most popular items, but when measured in gold content, necklaces are the most important (**Table 2**).

### The importance of bridal gold jewellery

If we analyse the gold jewellery market by weight, the importance of weddings and bridal wear is clear (**Table 3**). India is a young country with more than half the population below the age of 25 (and 65% under 35). Although there are no official figures for the number of weddings in India, an estimate is between 11mn and 13mn per year. As the average age of marriage for women in India is 22, the number of weddings per annum looks set to remain strong. Considering these numbers, demand for bridal jewellery should remain robust over the long term.

Another important factor as to why bridal jewellery makes up a key component of gold demand is the concept of streedhan – property that a woman receives at the time of marriage, given to her as security, which remains hers to keep. An additional, albeit much smaller, element of wedding-related demand comes

from jewellery gifted to the immediate family of the bride and groom, as well as jewellery that wedding guests buy to wear themselves.

The field research undertaken by Metals Focus reveals some interesting trends.<sup>21</sup> Bridal jewellery remains the dominant segment (approx. 50-55% market share by weight), despite rising domestic gold prices over the last decade and stiff competition from other luxury purchases, such as destination weddings and foreign holidays. The rupee gold price has almost doubled since 2012, encouraging manufacturers gradually to shift towards lighter weight pieces, but bridal jewellery has been relatively price inelastic, losing only around 5-10% market share in that time.<sup>22</sup> Furthermore, bridal jewellery has faced increasing and stiff competition from other luxury purchases, such as destination weddings and foreign holidays. Wedding jewellery tastes vary considerably across different regions (**Table 4**).

### Plain gold jewellery dominates the landscape

The Indian gold market has witnessed several changes, driven by both regulation and consumer behaviour (**Focus 1**). Amid these, plain gold jewellery has maintained its dominant 80-85% market share. Most plain gold jewellery sold in India is 22-carat, but there is a growing market for 18-carat pieces.

Studded jewellery has an estimated market share of 15-20%. In Northern India this share is considerably higher, in contrast to the South where consumers are more inclined towards plain gold products. Between 60% and 70% of these pieces are set with diamonds; the other key segment of studded jewellery pieces are those set with precious or semi-precious stones. This type of jewellery, which is extremely popular across much of the country, is termed Polki, Kundan or Jadau, and is manufactured in the states of Rajasthan, Gujarat, Andhra Pradesh and West Bengal.

**Table 2: Split of retail sales by type of jewellery**

Category	% of retail sales	Range of weights (g)	Most common weight sold (g)
Necklaces	15-20	25-250	30-60
Bangles	30-40	8-25	10-15
Chains	30-40	10-50	10-20
Earrings	5-15	2-30	3-8
Finger rings	5-15	2-15	3-7

Source: Metals Focus, World Gold Council



**Table 3: Jewellery demand segmentation**

	Bridal	Daily wear	Fashion
Market share by weight %	50-55	35-40	5-10
Caratage	22ct, 23ct, 18ct	22ct, 18ct	18ct, 14ct
Size (g)	30-250	5-30	5-20
	Small Sets: 30-60	Chains: 10-20	Chains: 8-15
	Large Sets: > 60	Necklaces: 20-30	Pendants: 1-3
	Earrings: > 15	Earrings: 5-8	Earrings: 3-5
	Bangles: > 30	Bangles: 10-25	
	Waist Bands: > 40	Pendants: 5-10	
	Bindi Chains: > 40		

Source: Metals Focus, World Gold Council

**Table 4: Wedding jewellery tastes by region**

Bride	Bangles	Earrings	Chains	Small necklaces	Large sets	Others	Gross weight in g (average upper middle class consumption)
Uttar Pradesh Bride	Kundan Kangan, Ancia Kangan	Kaan Matti	Mangalsutra	Choker	Choker	Anguthi, Nathn, Baju Band, Benda	200
Sindhi Bride	Kundan Kangan	Vala	Mangalsutra		Diamond Haar	Maang Teeka, Nathni, Bajo do Kado	190
Maharashtrian Bride	Tode, Patli	Jhumke	Mangalsutra	Tushi		Aangathi, Haath Pan, Nath, Baju Band	250
Gujarati Bride	Bangdi, Kundan Bangdi	Kundan Butti	Mangalsutra	Chandan Haar	Chapla Haar, Laxmi Haar	Nath, Baju Band, Damani, Pocha	180
Bengali Bride	Plai Bala, Mugh Bala, Chitra Bala	Jhumkaa		Gola Chik	Sita Haar	Kamar Chavi, Tikloy, Kamar Band	210
Rajasthani Bride	Bangdi, Kada, Rajputi Bangdi	Kundan Butti		Thewa	Rani Haar	Rakhdi, Haath Phool, Baju Band, Anguthi	190
Andhra Bride	Kangan, Gajalu	Buttalu	Sutaru Golusu	Kandabaranam	Nakshi Haram	Aravanki, Nakshi Vaddanam, Jada	300
Mangalore Bride	Lakshmi Bale, Coorgi Bale, Kembina Bale	Jhimki	Mangalsutra, Mohan Sara		Havalakki Sara, Malliga Sara	Bandhi, Odiyanam, Kemp Ungila	280
Tamilian Bride	Muthu Valayal, Lakshmi Valayal, Kemu Valayal	Kempu Kal Jhimkki	Mangalsutra	Vella Kal Mookhuthi	Lakshmi Haram, Muthu Haram	Ottiyanam, Nethichutty, Jadai Billai	300
Kerala Bride	Kolkata Bangle, Machine cut Bangle, Thoda Bangles	Jhimki	Kurumulaka Mala, Patthakam	Kingini Mala, Manga Mala	Kazuthulia, Kasu Mala, Lakshmi Mala, Mulla Motu	Toe Ring, Minnu	320

Source: Malabar Gold and Diamonds, Metals Focus, World Gold Council

## Focus 1: Changing dynamics of Indian jewellery demand

With a company history of more than five decades, Senco Gold and Diamonds has witnessed considerable change in the Indian jewellery market. These developments have occurred both at the retail and trade level. The chief catalyst was the liberalisation of the economy in 1991, which kick-started India's economic growth. The resultant gains in consumer incomes, which have continued over the last three decades, have given rise to a large middle and upper middle class in India. Consumers are now more informed than ever, contributing to some notable shifts across the retail jewellery market.

To begin with, economic liberalisation paved the way for abolishing the Gold Control Act, which allowed the metal to be freely imported. This helped the retail trade to flourish as it became much easier to source gold. In addition, with incomes rising, tastes and preferences for jewellery have also changed. For instance, with better exposure to Indian and global trends, due to rising travel and internet penetration, jewellery tastes are no longer local and traditional. A consumer in the South of India is no longer opposed to Jaipur jewellery or studded diamond jewellery. Similarly, temple jewellery, which is widely popular and traditionally bought only in the South, now has acceptance even in the North. Modern takes on traditional jewellery are also increasingly popular, and young consumers are no longer fixated on buying only traditional pieces. The concerted shift from local to regional and national buying patterns has largely benefited chain stores, whose market share has grown sharply in recent years.

Separately, consumer behaviour has also been affected by the trend in rupee gold prices, which have touched record levels. Consumers normally have a fixed budget when they visit stores and so the amount of gold they can buy will vary with changing gold prices. As a result, over the last five to six years retailers and manufacturers have increasingly focused on lightweight products to satisfy a range of budgets. This is important, even for traditionally heavy bridal pieces and temple jewellery. As a result, I believe, over the years there has been at least a 10% drop in average product weights.

Aside from moving to lighter pieces, the daily wear segment has seen some key developments. Most important, I believe, has been a trend embracing

modern designs to fit Western attire, which has seen increased demand for lower caratages, notably 18-carat and 14-carat. Given that more than 65% of the Indian population is below 35, their choice of jewellery differs greatly from earlier generations as younger consumers tend to prefer Western clothing.

Another significant development over the last decade has been the penetration of mobile phones and low-cost internet. About a decade ago very few jewellery retailers focused on online sales, but today every large and mid-sized retailer has an online platform. Even for us, online jewellery sales now account for between 5% and 10% of our overall sales, which have been growing since the pandemic. Lastly, rising internet access and the advent of social media have allowed retailers to interact directly with their consumers in new ways to create brand awareness and drive sales.

From a regulatory perspective, successive governments have taken steps that have impacted the trade and consumer behaviour. These include a sharp increase in import duty, restrictions on cash transactions, compulsory declaration of PAN Card on high-value transactions, demonetisation, the introduction of the Goods and Services Tax (GST) and compulsory hallmarking. While the increase in import duty did initially help the unorganised trade, demonetisation and GST have supported the growth of organised operations. Numerous research agencies attest that chain stores are gaining market share in India. This trend has also been due to changing consumer behaviour and growing awareness about quality and price transparency. The clampdown on cash usage has also seen more consumers adopt digital payment modes, which is a positive sign.

Overall, I believe the Indian market will continue to evolve as the younger generation drives trends and as organised retailers gain market share. Retailers are trying to tap into the sizeable young population by offering products that suit their tastes and budget. It has made us adjust not just our product offerings, but also how we do business and interact with consumers.

**Suvankar Sen**  
**Managing Director**  
**Senco Gold and Diamonds Pvt Ltd**



### Lower caratage daily wear jewellery has been widely accepted

Daily wear/fashion jewellery accounts for 45-50% of the market. Unlike the bridal segment, which is primarily 22-carat, daily wear products cover 22-, 18- and 14-carat. Even so, 22-carat remains dominant with more than 80% of the market, and 18- and 14-carat combined account for a 15-17% share, with both having increased over the last decade.<sup>23</sup> 14-carat jewellery has only emerged in the last two or three years and, as it stands, only a small number of retailers currently offer this lightweight, relatively low-carat product.

The daily wear category covers a wide range of items, including earrings, rings, chains, mangalsutras, bangles and bracelets, ranging from 5g to 30g.<sup>24</sup> The growth in lower caratages has been driven by three factors: the growing popularity of modern designs; the increase in rupee gold prices; and the growth of studded diamond jewellery. Studded diamond jewellery is predominantly sold in lower caratages (14-carat and 18-carat) for two reasons: first, the studded diamond jewellery is purchased for adornment rather than investment; second, lower carat studded diamond jewellery is typically harder and so lends itself to stone-setting better than softer alloys. It is also easier to make thinner and more delicate designs in harder alloys, which again works better when the designer wants to set stones.

### Gold-plated jewellery growth slowed after initial euphoria

Gold-plated jewellery, or gram gold as it is known in India, is a phenomenon that has developed over the last decade, primarily driven by high gold prices. Essentially, it is jewellery with less than 1g of gold. This type of jewellery has resonated with lower-income consumers. Gram gold is available in bridal and daily wear collections.

Another recent phenomenon has been the introduction of gold-plated silver jewellery, which is becoming increasingly popular among fashion-conscious consumers who frequently seek out new designs to match their attire (**Focus 2**).

Daily wear/fashion jewellery accounts for 45-50% of the market



## Focus 2: Gold-plated silver jewellery gains traction

Gold's usage in India for industrial purposes can be broadly divided into two categories – electronics and other industrial. The former covers the use of gold in electrical contacts and printed circuit boards (PCBs), while the latter includes plating and jari (gold thread).

Looking first at plating, over the last few years the tremendous growth in sales of gold-plated silver jewellery and articles, as well as imitation jewellery (gold-plated brass jewellery), has underpinned the increasing usage of gold potassium cyanide (GPC) in India.

However, not all of this has benefited local GPC producers as most fabricators rely on imported material. For instance, in the first seven months of 2022 alone, India imported nearly 750kg of GPC, equivalent to 510kg of gold in fine-weight terms (gold accounts for 68.2% of GPC). To minimise costs, thrifting has emerged even in this segment, with the average thickness of gold coatings steadily declining. For instance, watches with a 5-micron ( $\mu\text{m}$ ) plating thickness a decade ago are now using plating as thin as 0.1  $\mu\text{m}$ .

The key barrier to local GPC production is the 15% import duty on gold bullion compared to that on gold compounds, which includes GPC at 11%. I believe that the government should work towards changing this inverted duty structure so that Indian producers can benefit from a level playing field.

Overall, the duty structure needs to be reviewed for industrial players to boost local industrial usage of gold. With the manufacturing of electronics and PCBs likely to rise and with the demand for plating also growing, there is a need to create a differential import duty structure for the industrial segment. In our view, this will help domestic fabricators, potentially opening up export markets and, in turn, help to cushion the negative impact of gold imports on India's current account deficit.

**Ketan Dhruv**  
**Director**  
**Bangalore Refinery**

## Indian jewellery segmentation





## Understanding regional, income and demographic differences

### Regional demand

South India dominates Indian gold jewellery consumption, accounting for 40% of the country's total jewellery demand.<sup>25</sup> There has been little change in the regional share of gold demand over the past few decades. Southern demand remains high due to consumers' affinity for plain gold jewellery, high per capita incomes and low poverty levels. Those living in states like Kerala have high incomes due to large financial inflows from the Gulf, especially from Keralites who are settled there. Tamil Nadu, meanwhile, is India's IT and manufacturing hub. The notion of high gold consumption in South India was also supported by a TNS consumer research study in 2016. This revealed that Southern India had the highest gold ownership rates (76% of the respondents said they owned gold jewellery) and the highest rate of purchases in the past 12 months (60% of the respondents had purchased gold jewellery within that timescale).

While the South dominates the landscape, changes have emerged within the region. In particular, gold demand in Andhra Pradesh and Telangana has superseded other Southern states due to the inflow of investment since the state of Andhra Pradesh was sub-divided and Telangana was created. A robust policy framework and a good response mechanism have helped encourage investment in these two states. On the other hand, demand in Kerala has been negatively impacted due to the slowdown in the Gulf during the COVID-19 pandemic.

Despite better access to bank accounts in rural areas, gold still remains the main investment choice

Southern India's gold market is dominated by plain 22-carat gold jewellery, although demand for 18-carat diamond pieces has increased in recent years driven by younger consumers who are more open to buying diamond-set products. North and West India enjoy 20%<sup>26</sup> and 25%<sup>27</sup> of market share respectively. In contrast, Eastern India has a market share of just 15% (Table 5). The Northern and Western markets are quite diverse, with a preference for 23-, 22-, 18- and 14-carat items. Unlike the South and West, the Eastern part of the country remains economically underdeveloped due to a lack of connectivity and difficult terrain. However, during the last few years the government has focused on developing the North-East, a policy that will likely result in a rise of market share in this region.

Table 5: Regional tastes in gold jewellery

	South	East	West	North
Market share	40%	15%	25%	20%
Caratage	22ct	22ct	22ct, 18ct, 14ct	23ct, 22ct, 18ct, 14ct
Important centres	Chennai, Hyderabad, Cochin, Bengaluru	Kolkata	Mumbai, Ahmedabad	New Delhi, Jaipur

Source: Metals Focus, World Gold Council

### Rural India is the largest consumer of gold jewellery

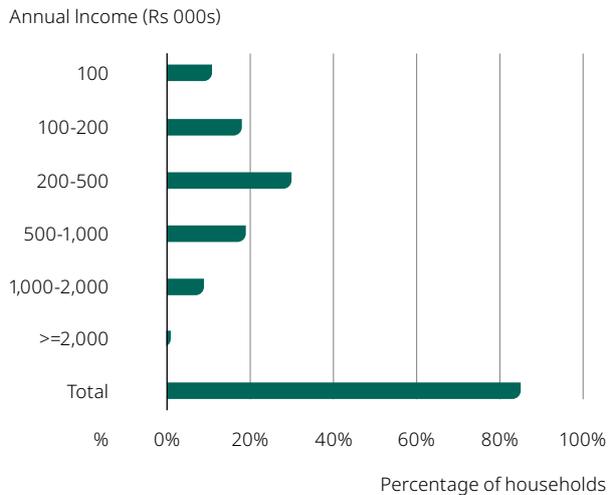
Despite urbanisation and migration to cities, two-thirds of India's population are rural dwellers.<sup>28</sup> But this figure is falling. In the last decade alone, the number of people living in rural India has dropped from 69% to 65%, which loosely translates to nearly 50mn people migrating to urban areas.<sup>29</sup>

For decades, gold has been the focal point for investment across many rural communities, in part due to a lack of awareness and penetration of banking products and services. Over the last decade, however, successive governments have focused on financial inclusion and banking services have become more widespread in rural areas. Nevertheless, despite this better access to bank accounts, gold remains the main investment choice and rural India's gold demand has only dropped by a few percentage points over the last few years – from 60% to the current 55-58%.<sup>30</sup> On the one hand, rapid urbanisation and erratic monsoons have impacted demand in rural India, but on the other, urbanisation in small towns has led to inward investment and rising land prices, which in turn has led to rising incomes.

### The middle class is the primary gold consumer

Many international companies regard India as a key strategic market. At the heart of their ambitions is the Indian middle class, which has expanded from 150mn in 2010 to an estimated 350mn in 2021.<sup>31</sup> Given India's economic trajectory and young demographic this number will likely rise going forward. Considering the size of the middle class in India it is not a surprise that 50% of gold demand originates here.<sup>32</sup> This is backed by the IGPC-IIMA household survey, which concluded that in 2020 about 51% of gold demand stemmed from consumers with incomes between Rs200,000 and Rs1mn per annum. For those with incomes above Rs1mn the share was just 19%. On the other hand, consumers with an income below Rs200,000 were responsible for 30% of gold demand. Consumers with an income above Rs1mn hold a large proportion of their investment in equity markets and real estate **(Chart 2)**. Another interesting insight from the same survey was that over half of the middle class owned gold. In contrast, the percentage for higher income groups was just 17%, while about 32% of low-income households owned gold.

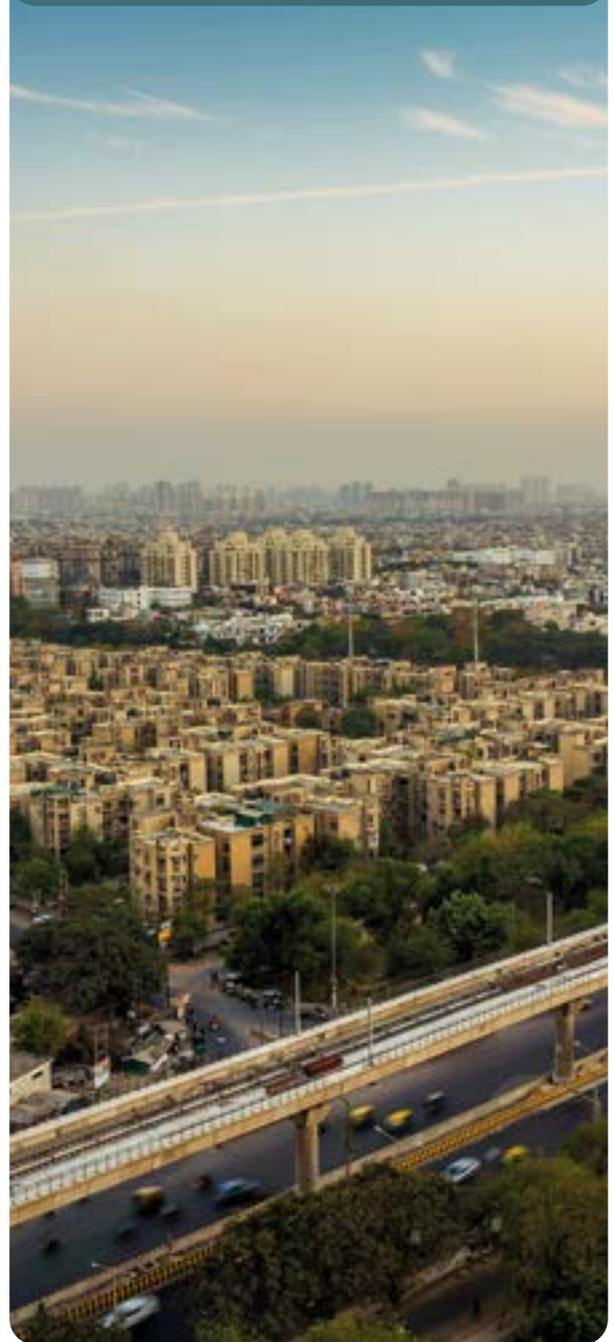
**Chart 2: The middle class is the primary gold consumer in India**



Source: Metals Focus, World Gold Council

Southern India had the highest gold ownership rates

(76% of the respondents said they owned gold jewellery)





### The younger generation is driving changes in the Indian gold jewellery market

Over the last few years retailers have focused increasingly on the millennial population aged between 25 and 40 whose buying behaviour differs from their elders. Our 2019 research, carried out by Hall & Partners, found that around one-third of 18-24 year olds had bought gold jewellery in the 12 months prior to the survey; this percentage increased to 44% for 25-34 year olds.<sup>33</sup> Although 18-24 year olds believed that gold would hold its value in the long term, this was not enough to convince them of its desirability. In particular, young women in urban India had a much weaker emotional connection to gold jewellery than their elders.

Shifts in the buying behaviour and preference of millennials is instigating changes in the jewellery industry. Metals Focus' interactions with various retailers over the last few years have revealed a strong demand for lightweight jewellery, especially in the daily wear segment. For example, today one can easily buy a chain or mangalsutra in a weight of 5-8g, which would have been impossible five years ago. Furthermore, young consumers are looking at modern designs that can be paired with Western clothing. An increasing number of manufacturers and designers are becoming mindful of these needs and are creating

Young consumers are looking at modern designs that can be paired with Western clothing



product lines specifically for this audience. One case in point is Mia, an independent jewellery brand floated by Tanishq, which focuses on lightweight, modern jewellery for the young woman. Another important change is the growth of diamond jewellery in the more traditional pockets of Southern India.

### Silver and platinum jewellery do not pose a significant threat

Over the last decade there has been a steady increase in demand for silver and platinum jewellery, driven by the rising gold price as well as changes in consumer behaviour and product innovation. For instance, gold-plated silver jewellery has emerged as one of the fastest growing segments in recent years. As a result, silver jewellery fabrication has increased from 700t in 2010 to 1,800t in 2021.<sup>34</sup> Meanwhile, platinum jewellery demand has risen from 0.8t in 2010 to 3.9t in 2021.<sup>35</sup> This has led to a debate across the trade as to whether the growth in silver and platinum jewellery is hurting the gold market.

While silver and platinum jewellery have made inroads, they have yet to pose a significant threat to gold jewellery consumption. Most silver jewellery in India consists of traditional pieces, such as anklets, toe and nose rings. The only silver segment that overlaps with gold is gold-plated silver jewellery and modern daily wear, in particular sterling silver pieces that are attractive to the younger consumer. The growth in the silver jewellery segment has largely been a function of the rising gold price; most modern silver jewellery features rose or yellow gold-plating, which suggests that it is being promoted as a low-cost alternative to gold for daily and occasion wear.

Over the last five years, traditional designs, such as temple and bridal jewellery, have also been made in gold-plated silver. Given the fact that many large independent and chain stores are now offering this jewellery in the silver section of their displays, this may have the potential to cannibalise gold jewellery sales. Gold-plated silver jewellery closely resembles real gold jewellery, especially as manufacturers are improving both the design and finish of these items. We believe, however, that this is unlikely to emerge as an outright competitor to gold jewellery; it is more probable that it will gain only a small percentage of gold jewellery sales in the daily and occasion wear market, particularly if gold prices continue to outpace silver.

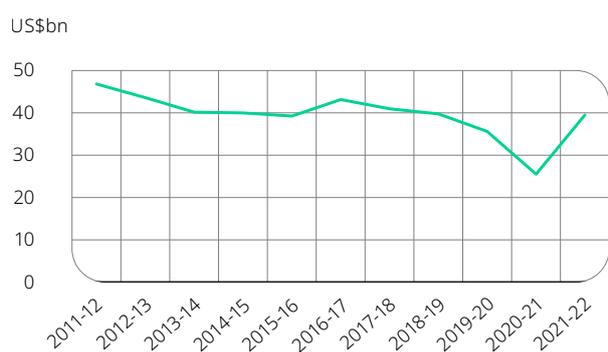
In terms of platinum, while this is a fast-growing market, in absolute terms it is extremely small. A consumer who buys platinum rarely does so as an alternative to gold. Platinum jewellery does, however, compete with gold in certain areas: most notable are products for men, such as bracelets, chains and love bands, which make up the fastest growth segment. It is also worth noting that platinum sales are driven by the younger generation, especially the middle and upper middle classes, as it has always been marketed as a premium product aimed at evolved and aspirational consumers rather than targeted towards a mass market. However, Metals Focus believes that there is little understanding of platinum jewellery outside the young urban demographic and so gold comfortably retains its standing as the most popular aspirational purchase.

## International jewellery trade

**The gems and jewellery industry is a key contributor to India's total exports**

Given the high dependence on bullion and doré imports and the subsequent effect this has had on the country's current account deficit (CAD), gems and jewellery (G&J) exports play an important role in cushioning at least some of this impact. For instance, G&J exports have accounted for 11% of India's total exports; worth approximately US\$25-40bn per year during the financial years 2012 to 2022 (Chart 3).<sup>36</sup>

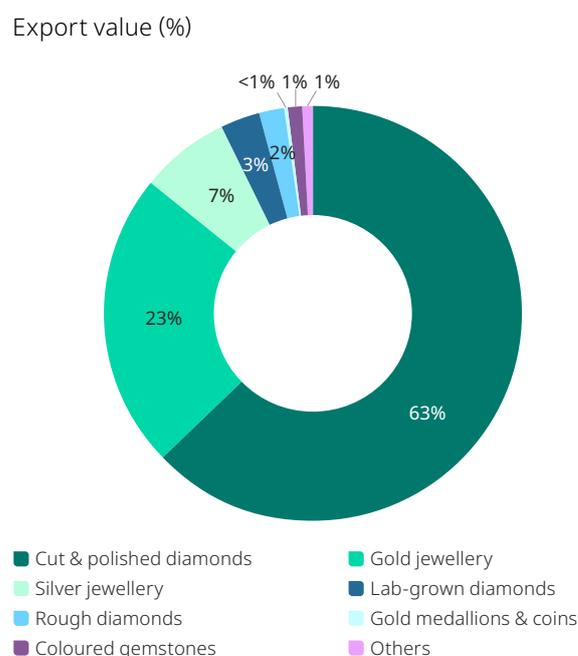
**Chart 3: Gems and jewellery exports have bounced back after COVID-19**



Source: The Gem & Jewellery Export Promotion Council, S&P Global, World Gold Council

These exports include several product segments, such as cut and polished diamonds, gold jewellery and medallions, rough diamonds, gemstones, pearls, synthetic stones and fashion jewellery. Of these, cut and polished diamonds accounted for over half of the total, while gold jewellery (plain and studded) accounted for 23% in 2021 (Chart 4).

**Chart 4: Gold accounted for 23% of gem and jewellery exports in 2021**



Note: Others include pearls, synthetic stones, fashion jewellery and sales to foreign tourists.

Source: The Gem & Jewellery Export Promotion Council, S&P Global, World Gold Council

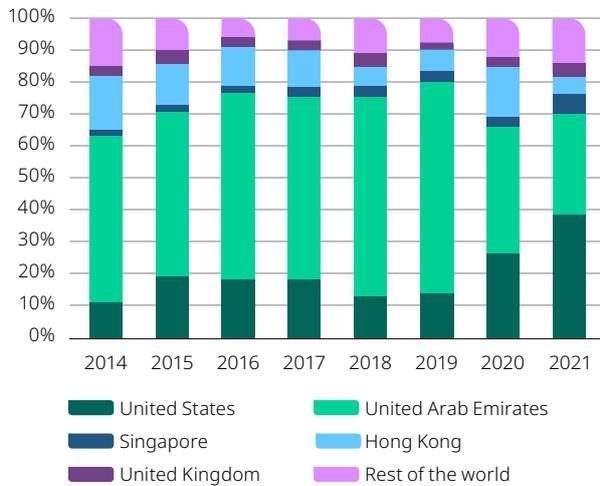
**US overtakes UAE to become top jewellery export destination**

Until the pandemic, the UAE had been the top export market for Indian jewellery, accepting nearly half of outbound jewellery shipments from India and peaking at 67%.<sup>37</sup> But in 2021 the US, which had been the second biggest importer of Indian jewellery, saw its market share surpass the UAE (Chart 5). It is important to note that Indian exports to the US suffered when in 2007 the US withdrew the Generalised System of Preferences (GSP) status that applied to some key jewellery categories, notably gold rope necklaces and neck chains, and gold mixed link necklaces and neck chains.<sup>38</sup> As a result, Indian exports attracted the Most Favoured Nation (MFN)<sup>39</sup> import duty of around 5-6% compared to the pre-2007 duty-free status.<sup>40</sup> This caused a substantial fall in Indian exports to the US: from US\$2.3bn in 2006 to US\$1.3bn in 2017.<sup>41</sup>



**Chart 5: US surpassed UAE as the top destination for Indian jewellery exports in 2021**

Export value (%)



Source: S&P Global, Metals Focus, World Gold Council

Since 2019, trade tensions between the US and China have escalated and the imposition of tariffs on Chinese exports has benefited Indian exports to the US. For instance, before the trade war, goods from both Hong Kong and China had long been subject to duties at the US MFN rate of 7%.<sup>42</sup> However, a ‘Section 301’ list published in August 2019 subjected many Chinese consumer goods, including diamonds and jewellery, to an additional 10% US tariff.<sup>43</sup> This tariff has been changed a few times but today stands at 14.5%. Metals Focus’ discussions with exporters in India suggest that the duty advantage they have enjoyed over the last three years has enabled more Indian fabricators to better compete with China when it comes to US exports.

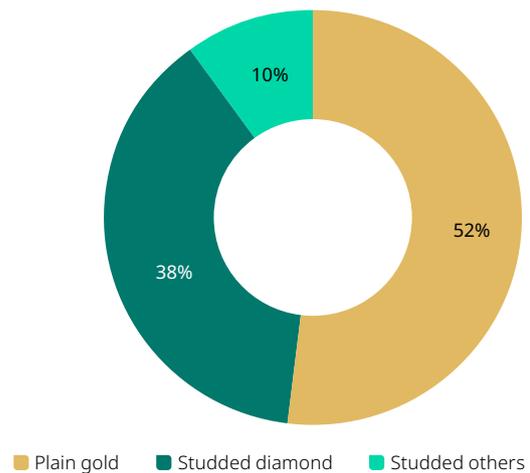
But while trade with the US increased, that with the UAE suffered due to the implementation of a 5% import duty in 2017 and 5% VAT from the beginning of 2018. This additional cost for Indian jewellery arriving in the UAE resulted in lower margins for Indian exporters and in turn contributed to the overall decline of gold jewellery exports to the UAE. To put this in context, from a peak of US\$8.2bn in 2019, Indian exports to the UAE dropped to US\$3.2bn in 2021.<sup>44</sup>

**Share of plain gold jewellery has declined in the export mix**

Reflecting this market share shift among export destinations, the product mix of gold shipments has also changed. During the UAE’s earlier export market dominance, plain gold jewellery accounted for a larger share than studded gold jewellery (which is mostly studded with diamonds). However, between 2019 and 2021, the greater influence exerted by the US caused a marked reversal of this trend. To put this into perspective, in 2019 exports of plain gold jewellery – at US\$8.7bn – were more than double that of studded gold jewellery (US\$3.4bn).<sup>45</sup> But by 2021, the growth in exports of studded gold jewellery (US\$4.4bn) had outstripped plain gold jewellery (US\$4.1bn). Importantly, the share of studded jewellery in India’s export mix increased from less than 30% in 2018 to 48% in 2021 (Chart 6).<sup>46</sup>

**Chart 6: Plain gold jewellery exports accounted for 38% of gold jewellery exports from India in 2021**

Gold jewellery exports value (%)



Source: S&P Global, Metals Focus, World Gold Council

### Removal of proposed tariffs by the US will further help Indian jewellery exports

Although exports to the US have grown, there has been ongoing uncertainty with regard to new tariffs levied by the US on Indian exports. To provide some context, in April 2021 the US Trade Representative (USTR) proposed retaliatory duties of 25% on six nations, including India, that had introduced e-commerce taxes on US companies, such as Amazon.<sup>47</sup> This included 17 jewellery categories worth approximately US\$50mn annually in exports, according to India's Gem & Jewellery Export Promotion Council (GJEPC).<sup>48</sup> In June 2021, after the conclusion of the one-year Section 301 investigations, the USTR suspended these tariffs for a period of up to 180 days to give additional time to complete the ongoing multilateral negotiations on international taxation, which were to take place at the OECD and the G20.

These tariffs were finally scrapped in November 2021 and, looking ahead, the removal of this uncertainty will help Indian exports to continue their aggressive push into the US market.<sup>49</sup> Recent India-US trade discussions have included a proposal to restore India's beneficiary status under the US GSP system.<sup>50</sup>

### The India-UAE CEPA will help lift the UAE as a jewellery import destination

In February 2022, India and the UAE signed a landmark Comprehensive Economic Partnership Agreement (CEPA), which was implemented on 1 May 2022. The CEPA will cover in excess of 11,000 goods and services, affording more than 90% of Indian goods duty-free access to the UAE. This effectively makes jewellery exports to the UAE competitive once again by eliminating the 5% import duty. As mentioned earlier, the UAE had been the largest importer of Indian jewellery for decades until the US displaced it as the most important buyer of Indian jewellery in 2021. This has further implications, as the Emirates act as a global gateway for Indian jewellery exports; products exported there are not just consumed by the Indian diaspora but are also re-exported to the Gulf Cooperation Council (GCC) and parts of Africa.

While these are still early days for CEPA, there has already been a visible boost for Indian exports to the UAE. For instance, in the first four months of 2022 – before CEPA was in force – shipments averaged US\$2.6bn per month; in the following three months (May-July) jewellery exports rose 30% to a monthly average of US\$3.62bn.<sup>51</sup>

### There is a need to develop new markets to boost exports

Over the last decade nearly 90% of India's jewellery exports have flowed to just five major markets: namely, the UAE, the US, Hong Kong, Singapore and the UK. India exports jewellery to a total of 146 countries but most of these are extremely small customers. And although Indian jewellery is re-exported to many other destinations across Africa, the Middle East and Europe – through hubs such as Dubai and Singapore – the trade needs to develop newer direct export markets to help secure healthier margins. At present, the likes of Australia and Canada account for a small share of the total (2% and 1% respectively in 2021), but a more focused approach in these jurisdictions should help increase Indian exports as these locations also have a large Indian or Asian diaspora. The same is true for many countries in the Middle East, such as Kuwait, Qatar and Bahrain, where direct exports are currently very small and jewellery is shipped via Dubai.

Trade bodies also need to help focus a spotlight on Indian craftsmanship, as a large part of Indian jewellery is handmade – a skill that is appreciated globally.

90% of India's jewellery exports have flowed to just five major markets: namely, the UAE, the US, Hong Kong, Singapore and the UK





# Exports

## Gold jewellery exports from India



### Exporting around the world

In 2021, gold jewellery was exported to nearly 120 countries, including:



### Exporting to expatriates

India largely exports to countries with sizeable Indian populations, with 32% of exports going to the UAE



### There are various government schemes for jewellery exporters

The government has launched many enterprise schemes that support exporters in areas such as banking, finance, skill development, technology and marketing. For instance, the Credit Guarantee Scheme provides small enterprises with straightforward access to financing,<sup>52</sup> offering a credit guarantee for loans of up to Rs20mn (US\$0.24mn) without the need for collateral or a third-party guarantee. The Market Development Assistance (MDA) Scheme is a government endowment available to all exporters that have delivered up to Rs150mn (US\$1.8mn) of exports in the preceding year.<sup>53</sup> This provides funding for export promotion activities, such as participation in trade fairs and exhibitions.

Given the high customs duty in India, it is imperative to provide duty-free access to gold for export purposes. In this regard, India has introduced the Advance Authorisation Scheme (AA). Put simply, a gold jewellery exporter can import gold without paying customs duty as long as they export jewellery within 120 days from the date of import of each consignment.<sup>54</sup>

This includes an “actual user” condition, which means that the gold cannot be transferred and must only be used in the premises of the licence holder. Furthermore, a minimum value addition (the difference in value between the finished jewellery and the input raw material used to manufacture it) of 3.5% must be achieved for the export of plain jewellery and 6-7% for studded gold jewellery.<sup>55</sup> Apart from that, a maximum manufacturing loss (wastage) of 2.5% is permitted for plain gold jewellery compared with 5% for studded gold items.<sup>56</sup> To prevent misuse of the scheme, licences carry an obligation whereby exports recorded against the gold must be fulfilled – both in terms of quantity and value – within 90 days from accounting for value addition and manufacturing loss.

Another scheme that provides exporters with duty-free gold is the Duty Drawback Scheme (DBK). Unlike the AA Scheme, where duty is exempt at the time of import, the import duty under DBK has to be paid at the point of import and subsequently claimed back after providing the applicable paperwork, such as a Bill of Export.

In 2019, the government also allowed Indian exporters to replenish gold equivalent to any they had sold at exhibitions abroad without paying duty, although this was stopped after the implementation of the Goods and Services Tax (GST) in 2017 and the benefit for exporters who sold jewellery in this way was removed.

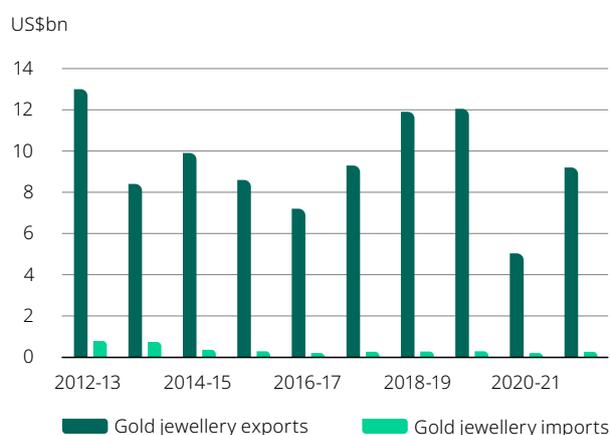
That aside, jewellery exporters are able to take advantage of gold metal loans if they can provide a bank guarantee or cash margin of ~110% of the notional gold value.

Despite these various government schemes, all of which are broadly supportive of gold jewellery exporters, jewellery exports in tonnage terms have faced headwinds in recent years. Key policy measures are needed to facilitate exports and alleviate the challenges exporters currently face (**Focus 3**).

### Indian gold jewellery imports remain very small

In contrast to exports, gold jewellery imports into India remain small (**Chart 7**). Primarily, imported jewellery is machine-made and is either high-end or from international brands that do not manufacture locally. The bulk of India's jewellery imports are from the UAE, the US and Italy. Given India's expertise in handcrafted jewellery, handmade pieces rarely feature in India's jewellery imports.

**Chart 7: Indian gold jewellery exports dwarf gold jewellery imports**



Source: The Gem & Jewellery Export Promotion Council, World Gold Council

### Round tripping continues despite government measures to reduce fictitious exports

While the vast majority of Indian exports are genuine, there remains an element that is not. The practice of round tripping (RT) involves exporting gold (jewellery, bars or coins) with the sole purpose of the product being melted down and re-imported into the original

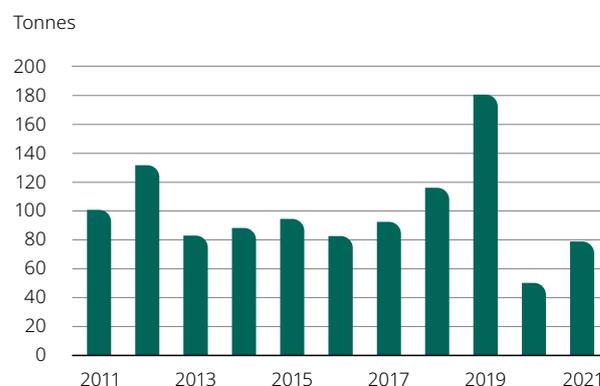
exporting country. This circular flow of gold inflates trade statistics and in India is used by firms to artificially boost their trading volumes and, in turn, secure less expensive finance on the basis of a higher turnover. Due to various government programmes to promote overseas trade, export credit is usually less expensive, and inflating exports through round tripping allows exporters access to more credit at lower rates than other companies would pay.

The government has introduced measures that, to some extent, curtail this practice by restricting exports of 24-carat jewellery. In its notification of 14 August 2017, the government permitted only the export of gold jewellery containing gold between 8 and a maximum of 22 carats.<sup>57</sup> There have also been changes to value addition norms to help prevent RT.<sup>58</sup> In setting value addition norms the government must perform a delicate balancing act because if they are too high they may negatively impact genuine jewellery exporters. In 2017, the government banned the export of 24-carat medallions and coins but subsequently allowed 22-carat versions to be exported with a value addition of 1.5%.<sup>59</sup>

Despite the measures taken by the government, RT continues, particularly in the jewellery trade with the UAE, Hong Kong and Singapore (**Chart 8**).

This can involve crude jewellery in the form of bangles, which is close enough in form to be exported as jewellery but crude enough to carry negligible making charges.<sup>60</sup> After arriving at its destination, the jewellery is melted down and shipped back to India in bar form through official or unofficial channels. Prior to the measures taken in August 2017, RT focused on exporting jewellery in medallion form and without any value addition this wrongly inflated India's jewellery export figures.

**Chart 8: Round tripping has continued despite government measures to curb these exports**



Source: Metals Focus, World Gold Council



### Focus 3: Potential policy measures to facilitate exports

Despite the Foreign Trade Policy (FTP) having been broadly supportive of exporters of gold jewellery, jewellery export figures are declining in volume terms, even as they rise in value terms. This disparity is largely due to the rise in gold prices we have seen in recent years.

To examine the reasons for the decline in volume and explore the remedial measures to reverse the downtrend, the issue needs to be tackled on two fronts, i.e. issues related with the policy and its implementation, and those related to 'Marketing India'.

- **Policy-related/operational issues**

- **Tackling the scarcity of duty-free gold**

In India, nominated agencies import duty-free gold for exporters. At a few ports, this gold is cleared the same day the shipment is landed (e.g., Delhi or Chennai). However, at some ports (e.g., Kolkata) customs officers delay the clearance of imported cargo for several days, often on some frivolous pretext. The resultant delay results in a cost escalation due to demurrage and interest costs. For instance, due to these reasons banks are unwilling to import duty-free gold at Kolkata port. Instead, they prefer to use Chennai or Delhi where the clearing process is smooth and expeditious; banks later transfer the gold to Kolkata. This escalates costs for the exporter in Kolkata as the cost of stock transfer is also realised by the banks in the form of increased premiums compared to the London settlement. Moreover, interstate stock transfers attract Integrated Goods and Services Tax (IGST), which the exporter pays up front. This requires more investment and interest costs, which reduces the competitive edge of the exporter.

- **Procedural problems in clearing gold supplied in advance by foreign buyers**

Customs rules permit the import of gold by an exporter if the metal is being supplied by an overseas buyer as an advance against the export of jewellery of equivalent quantity in terms of fine gold. At the time of import, the importer has to furnish a bond backed by a Letter of Undertaking (LUT) or Bank Guarantee (BG) equivalent to the value of the imported gold and the import duty. The LUT/BG can be redeemed after submitting proof that the jewellery has been exported. Mumbai customs routinely clear such consignments, but the Kolkata customs refuse to do so on a subjective interpretation that the gold has been imported on a loan basis. Given the above-mentioned issues, it is recommended that uniform procedures are implemented at all customs ports to support exporters.

- **Foreign Trade Policy should also allow the import of gold by an exporter if it is supplied by an overseas buyer post export of jewellery**

The UAE is one of the biggest importers of Indian gold jewellery. The normal trade practice in the UAE is to settle gold jewellery payments plus value addition in cash.

However, to settle the bills of Indian suppliers, the UAE dealer has to first sell his stock of gold bullion (which he receives from his buyers) and then convert the local currency into USD to wire transfer the invoice amount to India. Due to this, the UAE dealer, at times, has to sell gold at a discount and also suffers a loss due to conversion currency charges, thereby increasing his transaction costs. Dealers in the UAE therefore insist on settling the bill by export of equivalent gold in fine terms and wire transferring dollars for value addition and freight and insurance. However, India's FTP does not permit such transactions. The FTP should allow the import of gold supplied by an overseas buyer in advance as well as post receipt of shipments from India. The GJEPC recommended this about two years ago.

– **Replacing the Duty Drawback Scheme with Remission of Rates and Taxes**

Exporting gold jewellery made out of duty-paid gold and claiming duty drawback is not commercially viable, as the drawback duty rates are always lower than the rate paid while importing. The rates of duty drawback are revised and fixed for a period of six months, which does not work well for a commodity like gold whose price is usually quite volatile. In addition, nominated agencies do not supply duty-free gold to small exporters who want to service overseas orders, which prevents newer players from entering this space. Over a period of time, the GJEPC has seen a drop in the number of companies exporting gold jewellery under the Micro, Small and Medium Enterprises (MSME) category, which has impacted exports from Domestic Tariff Areas (DTAs). The loss suffered on account of an insufficient duty drawback is also very high. The present duty drawback does not recognise this peculiarity.

• **Marketing-related measures**

It is a well-accepted fact within the Indian industry that to secure a greater share of jewellery exports the need for sustained and vigorous marketing of Indian jewellery is paramount. Though the GJEPC is mandated to promote Indian jewellery overseas, its activities are centred around holding B2B exhibitions in India or overseas markets and inviting or sending trade delegations. There is also a need to target consumers in overseas markets with better publicity through those avenues that are available today. Unfortunately, this is an extremely expensive proposition and the GJEPC alone cannot garner sufficient resources for B2C publicity.

It is therefore recommended that the government should consider supporting the industry to facilitate B2C events.

**Pankaj Parekh**  
Regional Chairman – Eastern Region  
Gem & Jewellery Export Promotion Council

## Round tripping

Gold is exported from India, often in the form of crude jewellery



Round tripping is used by firms to boost trading volumes and secure cheaper finance; one reason why trade statistics should not be taken at face value.



### Special Economic Zones have played a key role in boosting jewellery exports

The Special Economic Zones (SEZs) Act introduced in 2005 has played a key role in boosting India's exports over the last two decades. To provide some background, an SEZ is an area classified as a territory outside the customs territory of India for its authorised operations. The policy was announced in April 2000 with the main objective of providing an internationally competitive and hassle-free environment for exports. SEZs feature key facilities, such as banks and in-house customs, to allow for quick and easy clearance. By the end of 2021, 268 SEZs were operational in India.<sup>61</sup> Of these, 15 are dedicated to gems and jewellery, and are home to over 500 manufacturing units (**Table 6**).<sup>62</sup> Studded gold jewellery accounted for the highest share (47%) of net exports from the SEZs in 2021, followed by studded silver jewellery (27%), plain gold jewellery (11%), plain silver jewellery (7%) and polished lab-grown diamonds (3%).<sup>63</sup>

For jewellery exporters, operations in the SEZ allow duty-free imports of gold and hence save considerable working capital and paperwork compared to exporting through the Domestic Tariff Areas (DTAs) where duty refunds must be processed separately. The latter not only takes more time but often offers a lower duty drawback than the actual duty paid, due to differential applicable tariffs.<sup>64</sup> That aside, DTAs also attract GST, which does not apply within export units based in the SEZs.

By the end of 2021, 268 SEZs were operational in India<sup>61</sup>



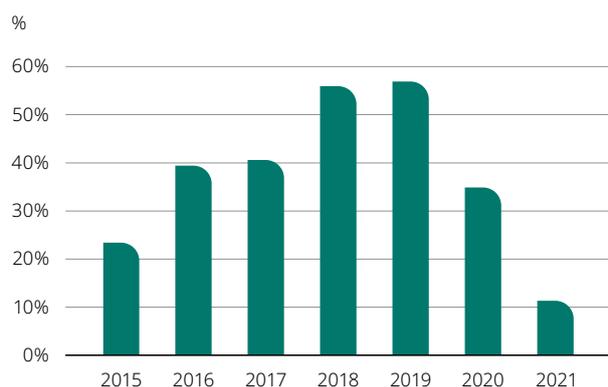
**Table 6: List of operational or approved SEZs in India**

Name of SEZ	Location	State
Santacruz Electronics Export Processing Zone (SEEPZ)	Mumbai	Maharashtra
Surat SEZ	Surat	Gujarat
Sitapura SEZ	Jaipur	Rajasthan
Delhi State Industrial Information Development Corporation	Delhi	Delhi
Cochin Special Economic Zone (CSEZ)	Cochin	Kerala
Madras Special Economic Zone (MEPZ)	Chennai	Tamil Nadu
Hyderabad Gems SEZ	Hyderabad	Telangana
Vishakhapatnam SEZ	Vishakhapatnam	Andhra Pradesh
Manikanchan SEZ	Kolkata	West Bengal
SEZ Noida	Noida	Uttar Pradesh
GIFT SEZ	Gandhinagar	Gujarat
Gems and Jewellery Park	Ankurhati	West Bengal
India Jewellery Park Mumbai	Navi Mumbai	Maharashtra
IBJA Jewellery and Knowledge Park	Navi Mumbai	Maharashtra
GHB Gem and Jewellery Park	Surat	Gujarat

Source: Metals Focus, World Gold Council

As a consequence, gold jewellery exports through SEZs grew from just 23% in 2015 to 57% in 2019.<sup>65</sup> However, the pandemic negatively impacted jewellery fabrication and by 2021 the share of exports via SEZs had collapsed to 11% (**Chart 9**). This drop can also be attributed, in part, to the fact that some of the tax advantages enjoyed in SEZs for nearly two decades (such as income tax exemption on export income) ended in 2020.<sup>66</sup>

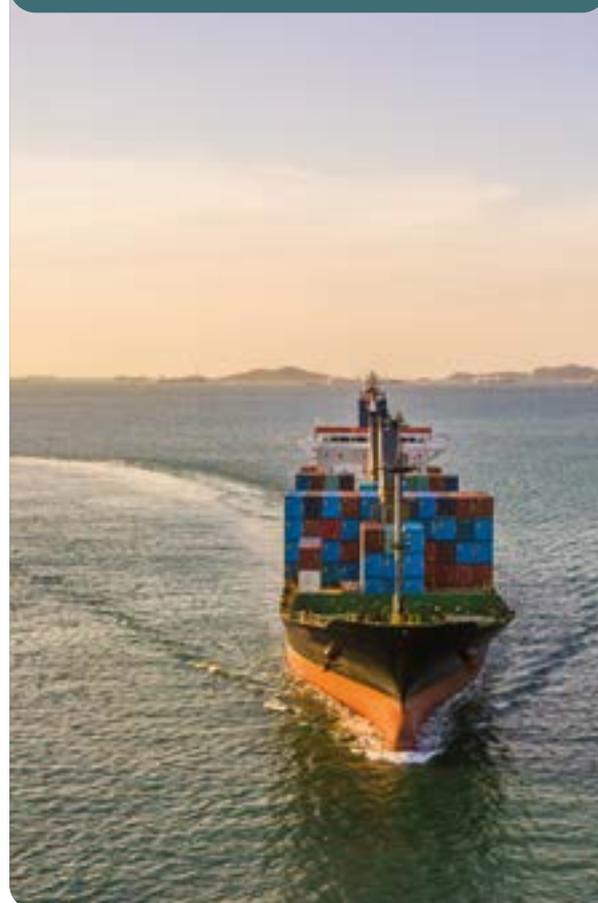
**Chart 9: The share of SEZs in total gold jewellery exports collapsed after the pandemic**



Source: The Gem & Jewellery Export Promotion Council, Metals Focus, World Gold Council

The government is considering the introduction of a new SEZ policy in the coming years, which should further ease the export process. Indian authorities have already introduced a draft policy – the Development of Enterprise and Services Hub Bill 2022, or DESH Bill – which is intended to be WTO-compliant as it seeks to explicitly prevent concessions and subsidies for exporters located in the SEZs.<sup>67</sup> Through this Bill, the government intends to go beyond export-oriented manufacturing and focus on broad-based parameters such as boosting additional economic activity, generating employment and integrating various industrial hubs. Unlike in the SEZ ecosystem, the government now proposes to create development hubs where the focus is not limited to just exports but is inclusive of the domestic market. In addition, the customs duty would be paid only on the inputs used and not on the expensive final goods. Although the SEZ Act led to a notable improvement in India's exports, interest in SEZs over the last few years has declined across many industries and as a consequence more than 100 units were de-notified between 2008 and 2020. Of the 425 currently notified SEZs, only 268 are operational. The new legislation should help address key hurdles, such as a lack of land for certain sectors and the complexity of operational models, and thus help improve the SEZs' performance.

The government is considering the introduction of a new SEZ policy in the coming years, which should further ease the export process





### Issues have stabilised after initial hiccups

The Goods and Services Tax (GST) that was introduced in 2017 initially created complications for Indian exporters as they had to pay 3% GST up front when they bought gold from nominated agencies, such as banks. This created an additional blockage of working capital for exporters as, apart from providing a bank guarantee for the customs duty, they also had to set aside additional capital for GST, which in turn undermined their margins. However, following a period of lobbying by the industry, on 1 January 2019 the government announced that jewellery exporters would – under the scheme for “Export Against Supply by Nominated Agency” – no longer have to pay the 3% Integrated Goods and Services Tax (IGST) to nominated agencies.<sup>68</sup> There were conditions attached: namely, that the beneficiary of the GST exemption must export their jewellery within 90 days, and the exporter must provide to the nominated agency a copy of the shipping bill or bill of export with a Goods and Services Tax Identification Number (GSTIN) within 120 days of receiving the gold.

### Jewellery exports via e-commerce are a big positive for the industry

In June 2022, the government legalised jewellery exports through e-commerce platforms.<sup>69</sup> The new rules allow jewellery exports through a courier service, but only after receipt of full payment and with exhaustive evidence of the product being uploaded on the customs system: namely, photos of the export jewellery, product package/outer covering, product listing on the e-commerce platform and the hallmarking certificate. Re-imports of physically damaged or defective jewellery exported via a courier are permitted, subject to criteria to prevent misuse. These criteria include conditions that the product must be returned through the same platform and using the same mode. In addition, the return e-commerce transaction for the jewellery should have been initiated by the same consignee to whom the jewellery was exported, and the total number of returns for the exporter must not exceed 5% of the total number of shipping bills in the same financial year.

Given the scope of global e-commerce, this should effectively open new markets for Indian exporters. Even small-sized firms will now be able to increase their exports by selling via e-commerce platforms.

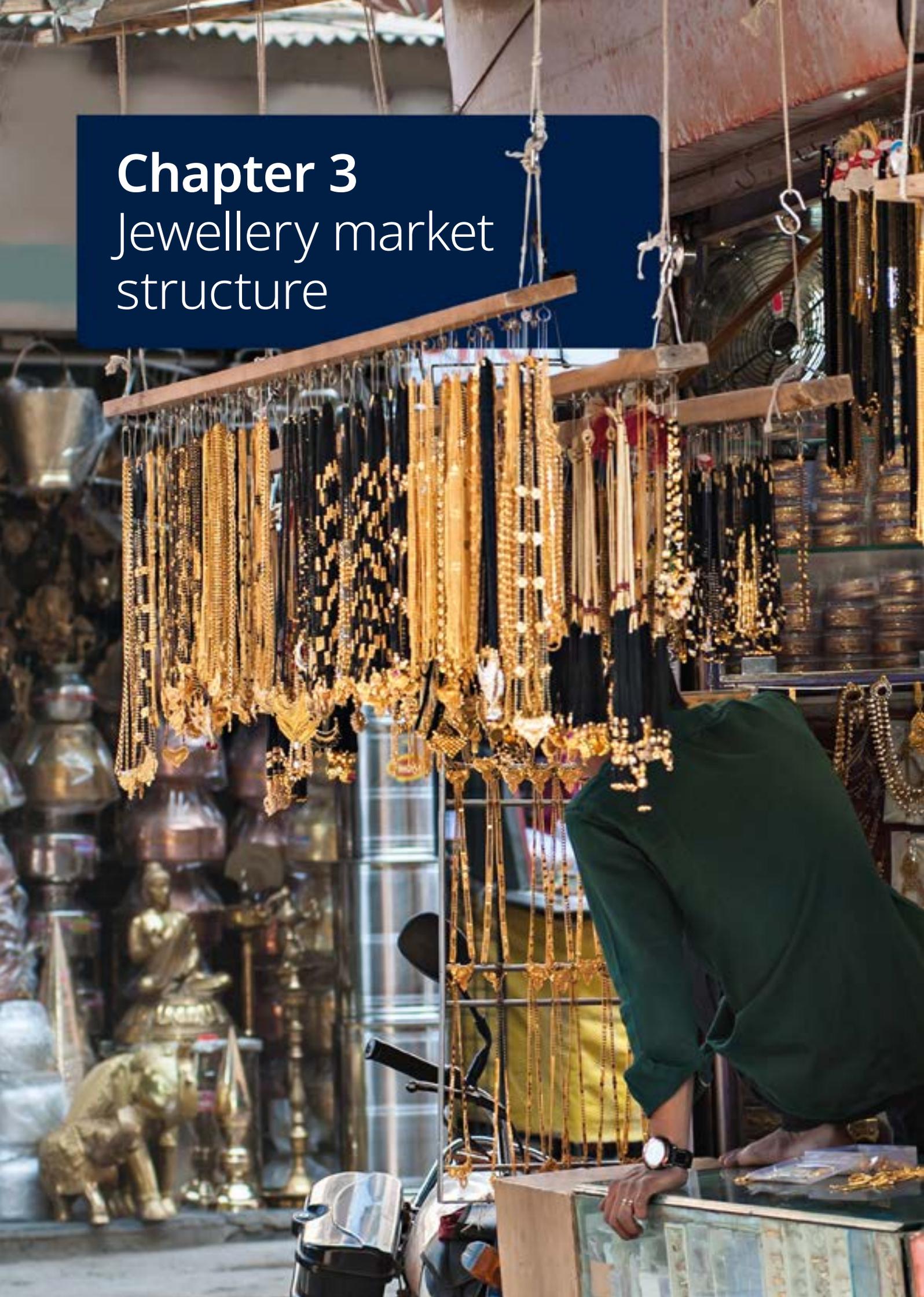
## Outlook

During the last few years the Indian gold market has grappled with numerous changes, both in the regulatory environment and in the behaviour of consumers. And looking ahead, gold jewellery demand faces further challenges, particularly from changing demographics as younger generations of consumers are tempted by other products, be that different styles of jewellery or luxury fashion accessories. Gold jewellery demand has, however, remained resilient in India despite all these factors. And it will likely benefit from strong economic growth and further urbanisation as per capita income rises and the number of middle-class consumers increases.

The Indian government has focused on strengthening manufacturing and exports, and this is likely to be enhanced in the coming years. Proposals to allow advance payments to overseas precious metal suppliers and the instigation of Mega Common Facility Centres (CFCs) in the SEEPZ (in Mumbai) and Surat could boost exports if implemented. Importantly, the CFCs would provide common manufacturing processes and a common pool of high-end capital-intensive state-of-the-art machines. This will particularly benefit small manufacturers as they will have access to the latest technology and resources to help enhance quality and in turn improve export performance.

# Chapter 3

## Jewellery market structure





India's gold market is steeped in tradition and still highly fragmented. However, over the last few years the industry has become more organised and regulated. Although small independent retailers still dominate the landscape, the market share of chain stores (national and regional) has increased steadily during the last decade.<sup>1</sup>

In contrast to the retail jewellery trade, changes at the manufacturing level have been much slower. While manufacturers are becoming more organised, driven by growing demand from chain stores and tighter regulatory requirements (such as pollution licences), artisans still dominate Indian gold jewellery fabrication.<sup>2</sup> But as the gold market continues to develop, organised retail and manufacturing operations will see their market share grow.



# Chapter 3 contents

<b>Executive summary</b>	<b>44</b>	<b>Manufacturing market structure</b>	<b>53</b>
The retail jewellery landscape in India	44	Jewellery manufacturing remains fragmented but is slowly changing	53
Financing remains a crucial challenge for the industry	44	Regions specialise in producing different types of jewellery	54
The jewellery manufacturing landscape in India	44	Working conditions for karigars/artisans must improve	56
Looking ahead	45	Jewellery parks will help the industry become organised and improve working conditions for artisans	56
<hr/>		Hallmarking was made mandatory at last	56
<b>Retail market structure</b>	<b>45</b>	Hallmark Unique Identification number could transform the market	59
India's gold industry makes a significant contribution to its economy	45	Mandatory hallmarking will level the playing field and increase demand	59
Regulation and consumer preference have fuelled greater organisation and transparency in the industry	45		
Chain stores have gained market share at the expense of stand-alone retailers	47		
Customer focus and product offerings are a key differentiation	48	<hr/>	
The gold jewellery retail market is highly fragmented	48	<b>Outlook</b>	<b>60</b>
Financing remains a crucial challenge for future growth, especially for small jewellers	49		
Expansion of the gold metal loan market has been limited	51		
Cash remains the preferred mode of payment	52		
Millennials drive online jewellery sales	52		
Retailers have increasingly adopted advertising to drive sales	53		

This chapter was originally published as a stand-alone report in 09/2022;  
[gold.org/goldhub/research/jewellery-market-structure-india-gold-market-series](https://gold.org/goldhub/research/jewellery-market-structure-india-gold-market-series)



# Jewellery market structure

## Executive summary

### The retail jewellery landscape in India

The gold industry is integral to the Indian economy, contributing 1.3% to Indian GDP.<sup>3</sup> But it is still fragmented – dominated by small and medium-sized enterprises. Over the last decade, the retail jewellery market has undergone a notable shift, driven by changes in consumer behaviour and government regulations designed to encourage the industry to become more organised.

The advent of chain stores in the last 10-15 years and their gradual gain of market share at the expense of stand-alone retailers has been notable. And this market share continues to increase, up 5% since 2016, and representing a 35% share of the market by 2021.<sup>4</sup> The competition fostered by such rapid expansion has encouraged innovation; jewellers are now focusing on product offerings that provide both value and diversity to India's wide cultural and demographic customer base.

Chain stores, with national operations, focus on daily wear and fast-moving jewellery items (such as chains and rings) and these items account for 50-60% of their business. Stand-alone and medium-sized retailers tend to focus on three elements: bridal jewellery (accounting for 60-65% of their business), customisation, and personal relationships with customers.<sup>5</sup>

### Financing remains a crucial challenge for the industry

One of the biggest challenges for the Indian gem and jewellery industry has been securing bank credit – a challenge that has increased in the wake of the Nirav Modi, Mehul Choksi scam when the Indian banking system was defrauded of around Rs130bn (US\$2bn).<sup>6</sup>

Compounding this, more than 20% of loans given to the sector have become non-performing assets (NPAs), resulting in the gem and jewellery industry gaining just 2.7% of India's total credit issuance.<sup>7</sup>

Securing bank finance is especially challenging for smaller independent jewellers who either tend to rely on the monthly gold scheme for funding or who act as money lenders, using that money for financing. One of the key factors preventing smaller jewellers' access to capital is that most deal in cash and so do not report the full extent of their turnover in their accounts. Many have been unable to keep pace with the recent introduction of transparency measures and regulations and, as a result, their businesses have failed.

### The jewellery manufacturing landscape in India

India's manufacturing industry remains fragmented and unorganised. Only 15-20% of units operate as organised and large-scale facilities; this was less than 10% some five years ago. 55% of manufactured jewellery is handmade by karigars (artisans) who produce intricate pieces, thus sustaining the unique selling point for which Indian gold jewellery is renowned in the global market.<sup>8</sup> While karigars form the backbone of the Indian gem and jewellery industry, many work in very poor conditions and a large number are underpaid as compared to many other industries, earning between Rs15,000 and Rs16,000 (US\$190-200) per month.<sup>9</sup>

Mandatory hallmarking became effective on 16 June 2021 and applies to six purities: 14k, 18k, 20k, 22k, 23k and 24k. Its introduction will create a level playing field in terms of purity and enable retailers to focus on differentiation through design and customer service. These moves are likely to remove some of the barriers to purchase among young consumers, which in turn should support demand.

## Looking ahead

National and regional chain stores will continue to gain market share because of their access to credit and the large inventory they are able to carry. And as many of these players look to open businesses in Tier 3 and Tier 4 cities, they should find a certain level of aspirational demand that they can tap into, allowing them to gain market share quickly. Conversely, if smaller players are not able to meet accepted standards of transparency their access to credit will be limited, as banks and financial institutions remain wary of lending to the gem and jewellery sector.

The manufacturing sector is just at the beginning of the journey to become more organised. Jewellery parks – some of which have already been established – will help manufacturers in this process and address some of the growing concerns among retailers and consumers about ethical standards and working conditions for artisans. As many large players limit themselves to working only with organised manufacturers, market share of organised manufacturers will continue to strengthen.

## Retail market structure

### India's gold industry makes a significant contribution to its economy

The gold industry forms an integral part of the Indian economy, reflecting its significance as a key source of employment and foreign exchange earnings. The sector benefits from a large and vibrant market driven by strong domestic consumption and exports dominated by the Indian diaspora. India's gold industry contributed 1.3% to Indian GDP and is dominated by small and medium enterprises. The domestic market is underpinned by culture, wedding and festive demand, which we will explore in more detail in an upcoming report.

### Regulation and consumer preference have fuelled greater organisation and transparency in the industry

The retail jewellery market has undergone notable changes over the last decade, driven by evolving consumer preferences and government regulation that has encouraged the industry to become more organised. That said, a large part of the industry remains fragmented and dominated by independent retailers. There is no single industry definition to distinguish between unorganised and organised retailers. For the purpose of this analysis, Metals Focus has considered jewellers who sell gold via invoice, have proper banking channels and enterprise resource planning (ERP) systems in place, and are registered under the Bureau of Indian Standards (BIS) as organised jewellers.<sup>10</sup>

Over the last few years demonetisation and the introduction of the Goods and Services Tax (GST) have helped the industry to become more organised and therefore more transparent (**Focus 1**). In response to these regulatory changes, many jewellers have adopted proper accounting software and now record sale proceeds via an official bill and maintain books of accounts. It is worth highlighting that the majority of jewellers in large cities and towns fall into the organised category. However, the unorganised sector remains a dominant force in rural centres, where many jewellers also act as money lenders within their community.

Changing consumer preferences have also aided industry organisation. Consumers desire a better shopping experience, transparent pricing and buyback policies, and they want to purchase via bills and online transactions. It is thus not surprising that chain stores are gaining market share. In addition, a lot of what were regional players – such as Joyalukkas, Senco Gold and Diamonds, among others – have expanded to become national chains (**Table 1**).

**Table 1: Top 10 chain stores in India**

Name	Stores	Cities/Towns
Tanishq (including Zoya)	382	209
Malabar Gold and Diamonds	150	111
Senco Gold and Diamonds	126	85
Kalyan Jewellers	116	87
Reliance Jewels	99	85
Joyalukkas	85	67
PC Jewellers	82	68
Shubh Jewellers	82	N/A*
PC Chandra Jewellers	57	50
Orra Jewellery	58	25

\*Not available  
Source: Metals Focus, World Gold Council



## Focus 1: Demonetisation and GST's impact on the gold industry

Over the last few years, India has implemented several measures to formalise the Indian economy, streamline multiple taxes, improve tax compliance and reduce dependency on cash transactions. The most notable among these are demonetisation (2016) and the implementation of the Goods and Services Tax (GST) in 2017.

I believe that the former gave an important push to the cashless economy, catalysing the growth of digital and banking transactions. Even though demonetisation severely hampered the unorganised sector over the short to medium term, businesses and consumers have gradually adjusted to using digital transactions.

The benefits of this will also continue to accrue over the coming years as more people become accustomed to this approach. The pandemic further accelerated the acceptance of digital transactions, and the fact that India saw close to 6bn Unified Payments Interface (UPI) transactions in July 2022 is testimony to its growing penetration and acceptance. UPI is a single platform that merges various banking services and features. It enables sending or receiving money and allows scanning a quick response (QR) code to pay an individual, a merchant or a service provider.

Turning to the GST, this was a landmark tax reform in India as it combined several taxes into one and standardised tax rates in India for most products, which helped to reduce business costs. In my opinion, this benefited interstate business transactions the most as different states operated varying tax structures before the GST, which subsumed several of those taxes.

Focusing on the impact of GST on the jewellery trade, the most notable outcome is how it has changed the way manufacturers and retailers transact with each other. Before GST, retailers like us depended on a mix of job work (providing their own metal for fabrication) and outright purchases of jewellery from the same karigars (artisans) and manufacturers. Under the GST, both are now separate transactions and attract GST. As a result, the retailer now either completely relies on job work or makes outright jewellery purchases from a fabricator. Furthermore, to avoid complexities, a large part of the bullion now remains on the manufacturers' books as many retailers prefer to procure jewellery stock directly from fabricators.

That said, the GST has made operations simpler, even for retailers buying their own bullion and then passing it on for job work. With local levies such as VAT eliminated, we can now purchase bullion from any state, taking into account the ease of logistics. For instance, as a retailer in Mumbai I can source bullion in Coimbatore and pass it on to the fabricator there or buy bullion in Mumbai if prices are competitive and then ship it to the fabricator located anywhere in India without worrying about multiple state taxes. In addition, the fact that many bullion dealers have now launched online apps has introduced greater pricing transparency, adding to the convenience for retailers such as myself willing to take bullion on our own books. This has also allowed retailers to secure a better price for our bullion purchases.

In terms of other benefits, we see GST has helped formalise the trade while hampering the unofficial market. This is because every entity across the value chain must comply with GST to benefit from the input tax credit. To briefly explain this, only the final consumer pays GST, while companies across the value chain (bullion dealers, manufacturers, wholesalers, retailers) simply collect GST and offset the input tax credit against the tax on the outward supply of goods and services.

While GST has benefited the jewellery trade, in my view several challenges remain. Among them is the increased cost of compliance for the sector. This is especially true for small retailers and manufacturers who now must hire dedicated staff to comply with GST accounting and filing and so must invest in systems to ensure proper record keeping. Even for large retailers like us, staff and system requirements have increased, with the estimated additional cost of compliance of around 5-10% for a large part of the industry.

That apart, I believe that GST has negatively impacted retail gold bar and coin purchases. Indian consumers traditionally accumulate gold over a period of time, which is converted into jewellery at a later date, for example for weddings. Metals Focus estimates that 30-40% of bars and coins have traditionally been converted into jewellery in this way. Under the GST regime, a consumer pays 3% at the time of buying a bar or coin and then pays a further 3% GST on

jewellery using that bullion (unless this happens within six months of bullion purchase, in which case an offset is possible). With no offset of GST for the consumer when exchanging their bullion for jewellery, the consumer effectively pays double the tax. Another anomaly within the GST framework is that when an individual provides bullion for job work, he/she has to pay 18% GST on the making charges (labour charges), while a registered dealer carrying out the same transaction has to pay just 5% GST. I believe this must be addressed to bring the consumer on par in terms of taxation.

As a result of this double taxation on consumers, there has been a slow shift away from bar and coin purchases at the retail level. To some extent, the Sovereign Gold Bond (SGB) may have benefited from this. However, given that SGBs are not physically backed, they are not the ideal replacement. Also, SGBs are typically bought by urban Indians or more financially literate consumers.

Finally, I believe that a GST rate of 1.25% is the most ideal for the gold trade as the 3% rate applicable currently is high considering that gold is an investment asset. Also, given that the customs duty on gold is already high, bringing down GST on a high-value asset like gold should be considered by the government.

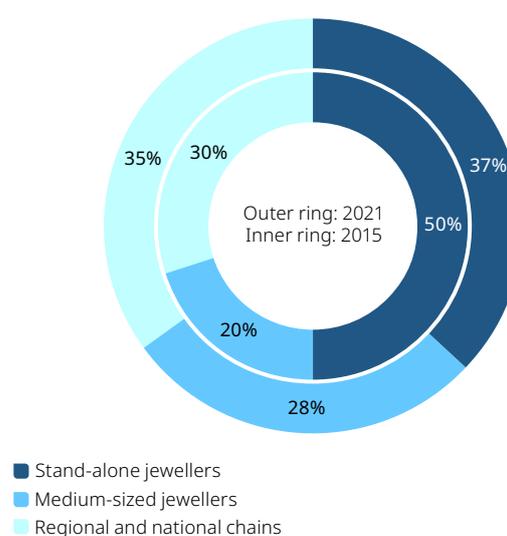
**Ashish Pethe**  
Partner  
Waman Hari Pethe Jewellers

### Chain stores have gained market share at the expense of stand-alone retailers

One of the most significant changes in the jewellery market over the last 10-15 years has been the advent of chain stores and the market share they have gained at the expense of stand-alone retailers. According to market intelligence from Metals Focus, by 2021 chain stores (both national and regional) had achieved a 35% market share (**Chart 1**).<sup>11</sup>

Since 2016, chain stores have increased their market share by 5%. Demand for better designs and consumer experience, a growing awareness about hallmarking, better pricing structures and competitive return policies, as well as the introduction of GST and demonetisation, have all accelerated the shift towards chain stores.

Chart 1: Jewellery market landscape in India



Source: Metals Focus, World Gold Council



35% of Indian jewellery retailers are national or regional branded chains



Most gains have been in large cities and towns. But here, chain stores may be nearing a ceiling for expansion as independent retailers catch up with the need for a heightened consumer experience and customer-led designs. Chain stores are therefore shifting their focus to Tier 2 and Tier 3 cities, where there remains aspirational consumer demand ready to be tapped. Metals Focus estimates that over the next five years or so chain stores will continue to expand and their market share will surpass 40%. The top five retailers alone will likely open 800-1,000 stores during this timeframe.

It is also worth highlighting that many jewellers have changed category over the past five years as their businesses have expanded and they have gained market share. For example, Senco Gold and Diamonds – previously considered a regional chain – now operates in more than 13 states and is categorised as a national chain. Furthermore, many stand-alone retailers with prominent brand names have expanded their stores or opened new ones in their region and are now classified as medium-sized retailers.

**Customer focus and product offerings are a key differentiation**

Given India’s geographic, regional and cultural diversity, it is not surprising that different jewellers focus on different customer segments and product offerings. For example, chain stores – mainly those with national operations – focus on everyday wear and fast-moving jewellery items (such as chains and rings); about 50-60% of their business comes from these products. A focus on everyday wear has helped them gain market share as they can maintain a high inventory and offer a wide choice to consumers. In contrast, regional chains try to build a competitive advantage by focusing on the preferences of their local consumers.

Stand-alone retailers initially struggled to compete with chain stores but the adoption of better practices has allowed them to co-exist in the highly competitive landscape (**Focus 2**). Stand-alone and medium-sized retailers tend to focus on three elements: bridal jewellery, customisation, and developing personal relationships with their customers (**Table 2**). Bridal jewellery accounts for 60-65% of this sector’s business; customisation helps improve profit margins; and shop owners and family members – who are involved in the business and are customer facing – develop and maintain solid customer relationships.

**The gold jewellery retail market is highly fragmented**

The fragmented nature of the industry makes it almost impossible to accurately quantify the number of jewellers in India. Estimates by various trade bodies vary considerably, ranging between 500,000 and 600,000.

Metals Focus looked at several data sources to better inform their estimates as to the size of the market.

**Table 2: Size of retail shop, stocks and employees**

	Stand-alone/ Independent retailers	Medium-sized retailers	Regional chains	National chains
Organised			✓	✓
Unorganised	✓	✓		
Distinctive feature	Caters to the market where customers make purchases based on price	This can include family retailers. The focus is on the traditional market	The focus is on local trends and designs. The differentiator is purity and trust	The focus is on brands and purity. Typically, these chains have high making charges
Shop size in sq ft	150-500	300-1,000	500-3,000	4,000-25,000
Inventory	<10kg	10-50kg	51-150kg	151-500kg
Display in store (% of total stock)	40-50%	60%	80%	90%
Employees per store	4-5	10-15	20-35	40-60

Source: Metals Focus, World Gold Council

According to numbers released by the Goods and Services Tax Council, around 86,000 jewellers have registered for taxation purposes, which is mandatory for any jeweller with an annual turnover above Rs4mn (US\$50,000).<sup>12</sup>

In 2021, the Indian government mandated mandatory hallmarking in 256 districts (out of 748) and any jeweller in these districts with turnover of more than Rs4mn must register with the BIS to sell hallmarked jewellery. To date, 130,205 jewellers have registered with the BIS.<sup>13</sup> Metals Focus also analysed a pan-India database of jewellers in large cities and towns (covering more than 1,200 locations). This database featured over 350,000 unique company names, but a deeper analysis of these statistics revealed that 25-30% sold only artificial jewellery. While India has roughly 4,000 towns, only 400 have a population of more than 100,000, and it is in these larger towns that most jewellers are based.<sup>14</sup>

There are also more than 600,000 villages in India where, until recently, it was widely believed that many had a local jeweller.<sup>15</sup> However, our research suggests that this is seldom the case and jewellery stores are usually located at the district or taluka (typically comprising several villages) level, or in towns with a Nagar Parishad (city council).<sup>16</sup> A jeweller in a local village is usually referred to as either an artisan or a money lender. Furthermore, it is essential to highlight that a significant number of these jewellers focus on money lending and are therefore likely to have annual gold sales below 1kg. As a result, to extrapolate the number of jewellers in India based on the number of villages is often misleading.

Based on this analysis, we estimate that the number of jewellers with meaningful businesses in precious metals in India is likely to be 300,000-350,000.<sup>17</sup>

Our industry interaction suggests that the top 500 jewellers dominate the entire jewellery landscape.<sup>18</sup> Collectively, these hold about 200-240t of product inventories.<sup>19</sup> While it is difficult to ascertain the total volume of gold in Indian jewellery stores, we have used the above inventory factor and our market intelligence to estimate the amount of stock in jewellery shops at 300-400t.<sup>20</sup>

## Financing remains a crucial challenge for future growth, especially for small jewellers

One of the biggest challenges for the Indian gems and jewellery industry has been securing bank credit, which has become even more difficult in the wake of the Nirav Modi, Mehul Choksi scam where the Indian banking system was defrauded of around Rs130bn (US\$2bn).

According to the latest financial stability report from the RBI, more than 20% of loans given to the sector have become non-performing assets (NPAs), second only to the construction sector. It is therefore not surprising that the gems and jewellery industry only accounts for 2.7% of India's total credit issuance, which is less than half that of the textile industry, India's other key export-driven sector.<sup>21</sup> As a result, it has become difficult for small and medium-sized jewellers to expand their businesses.

Even within the industry there is a significant difference between how a large or medium-sized jeweller obtains funding vis-à-vis smaller operations. Securing cash credit from banks is much easier for large and medium-sized businesses. This is because many of these jewellers have much more transparent accounts, making it easier for the bank to judge past and future performance. It is also possible for organised jewellers to avail themselves of gold metal loans from banks. Metals Focus estimates that outstanding gold metal loans were around 65t at the end of 2021.<sup>22</sup>

The other advantage that large, organised jewellers enjoy is credit from manufacturers. For many of the large jewellers, obtaining credit is essential to their operations. For example, discussions between Metals Focus and the trade revealed that jewellery retailers often enjoy between one and three months of credit from a fabricator, which helps them with inventory management and allows them to expand their operations by offering more products.

The other important means of funding, which we believe is unique to India, is the monthly investment scheme run by jewellers, which Metals Focus estimates accounts for 20-30% of their funding.<sup>23</sup> This works as a monthly gold saving scheme where consumers deposit a specific amount of money with the jeweller for 11 months, with the jeweller then paying the consumer one month's equivalent of their deposit as interest. At the end of the year the consumer chooses to buy gold jewellery or minted products with accumulated savings and interest.



## Focus 2: Structure of a stand-alone jewellery retailer

India's retail jewellery sector has witnessed a structural shift over the last decade. From a landscape dominated by single and family-owned stores, a notable portion of the industry is now run by chain stores operated by corporates. Moreover, from just a handful of organised retailers a decade back, India now has several large chains with a pan-India presence, with many others operating at the regional level. Amid all this, while single stores initially struggled to compete, many have adopted good practices and now co-exist in this highly competitive landscape.

Organised retailers with large stores and better access to bank finance can hold larger stocks and so can out-compete smaller and single-store retailers. These economies of scale also allow them to offer more competitive retail margins. Stand-alone retailers on the other hand have faced challenges in inventory management, funding and differentiation in products.

Over the last few years, the smaller retailer has taken on these challenges and is now better positioned in this new retail landscape. To start with, most of these stores are now focusing on specialisation and customisation as their unique selling proposition. For example, in the bridal segment, which is the largest area of gold demand in India, independent retailers have been able to compete, utilising their flexibility, better understanding of local customers and design sensibilities, customising jewellery pieces according to customer budgets, and offering flexibility even with payments. Overall, this strategy has had a pronounced impact on their margins.

Furthermore, even in the daily wear segments, independent retailers are now offering customised solutions, which helps them to compete without the need for high stock levels.

In terms of bank finance, the larger stand-alone retailers have managed to access bank loans, and working capital funding has helped many independent retailers to launch new stores. While the rate of interest and collateral is high, single-store retailers can now access banking finance. Those who choose not to inject capital have turned to working with lower inventory and focus on specialisation. Many of the single-store retailers have been in the business for generations and so can fund daily operations using their own funds, but this can restrict their growth due to limited capital for ploughing back into the business. In a scenario of limited available funding the monthly gold saving scheme also presents an important form of working capital for a jeweller. For many jewellers in small cities this makes up 20-30% of their sales, although in large cities the share is much smaller.

Regarding the buyback of old jewellery, there is little to separate industry practices across large parts of India, and so there is no specific advantage left with organised stores. Finally, with mandatory hallmarking, some of the traditional consumer apprehensions about the quality of the jewellery they are buying have eased, which will further benefit independent stand-alone retailers.

**Jatin Chheda**  
Chheda Jewels



In contrast to large and medium-sized jewellers, it is extremely difficult for small and independent jewellers to secure cash credit from banks; they either tend to rely on the monthly gold scheme for funding or they lend money. Most act as money lenders, offering loans against gold jewellery and charging customers annual interest of 18-30%.<sup>24</sup> This forms a large part of their business and if a consumer misses a couple of payments the interest rate can increase further, or the jewellery is retained. Unlike banks and non-banking financial corporations (NBFCs) where loan-to-value (LTV) is 90% as stipulated by the RBI, the LTV for jewellers is about 60-70%, offering them a better margin of safety and profitability.<sup>25</sup>

Many small jewellers have been in business for generations, during which time they have converted part of their profits into gold and re-routed that back into the business to help fund operations. However, this can restrict growth as there is only limited capital available to plough back into the business. One of the key reasons smaller jewellers find it hard to access capital is that most deal in cash and do not report total turnover in their accounts; this helps to explain why only a fraction of these jewellers are registered under GST. All the regulatory changes that have taken place over the last decade – including the requirement of a PAN card for transactions above Rs200,000 (US\$2,500), restrictions on cash transactions and, more importantly, demonetisation and the introduction of GST – have made it difficult for many smaller jewellers to remain in business. It is not surprising that many have closed their shops, especially those in large cities and towns.

### **Expansion of the gold metal loan market has been limited**

The gold metal loan (GML) is a mechanism under which a jewellery manufacturer can borrow in gold instead of rupees. The loan is then settled in rupees with the eventual sales proceeds. Gold metal loans can be secured for 180 days in the case of domestic jewellery manufacturers and 270 days for exports. GMLs are provided by nominated banks (approved by the RBI), but only to jewellers who produce gold jewellery. Jewellers cannot sell the gold borrowed under the GML scheme to any other party for the purposes of manufacturing jewellery.

According to the latest notification by the RBI, nominated banks authorised to import gold and designated banks participating in the Gold Monetisation Scheme (GMS) (2015) can extend GMLs to jewellery exporters or domestic manufacturers of gold jewellery.<sup>26</sup> These loans are repaid in rupees, equivalent to the value of the borrowed gold on the relevant dates.

Under this new notification, certain changes were made to the existing regulations:

i) Banks shall provide an option to the borrower to repay a part of the GML in physical gold in lots of one kilogram or more, provided:

- the GML has been extended from locally sourced/ GMS-linked gold
- repayment is made using locally sourced India Good Delivery (IGD)/LBMA Good Delivery (LGD) gold
- gold is delivered on behalf of the borrower to the bank directly by the refiner or a central agency acceptable to the bank, without the borrower's involvement.

ii) Banks shall continue to monitor the end use of funds lent under GML.

While the size of the metal loan market has increased over the last 10 years, growth and penetration have been slow, rising from 40-45t in 2002 to about 65t in 2021. In a scenario where funding is difficult for the industry, GMLs present a great opportunity to raise funding at low interest rates for medium and large manufacturers.<sup>27</sup> However, due to the industry's lack of transparency and the weak balance sheets of jewellery manufacturers, most are unable to take advantage of this option.

One issue that has impacted GMLs over the last few years has been the rise in gold prices. To understand the impact of higher gold prices it is necessary to understand how a GML works. A bank that wishes to provide a GML decides on the local premium/discount and the rate of interest at which the loan would be granted; the price of gold will be fixed on the day the gold jewellery is sold. The borrower draws the GML with a stipulated initial margin. The exposure of the jeweller is then marked to market daily, and the jeweller is required to service the margin if the threshold limit is crossed. With gold prices increasing over the last two years, jewellers needed to service margin calls regularly, but a lack of funding impacted their working capital cycle. As a result, many jewellers have closed their metal loan accounts; we estimate that some 5-6t of loan accounts have been closed due to this one issue.<sup>28</sup>



#### Cash remains the preferred mode of payment

During research for this report Metals Focus visited more than 25 cities, and one common thread that stood out was that cash remains the preferred means of making a purchase, accounting for some 50-60% in metros and large cities and 70-80% across the rest of India, in terms of value.<sup>29</sup> According to the half-yearly Target Group Index (TGI) study conducted by Kantar for the World Gold Council, cash remained the dominant mode of payment for gold purchases, in terms of value, accounting for 67% in 2018 and 2019. Among cash purchasers of gold, females aged 35+ were the highest segment.

It is often believed that large cash transactions in the jewellery industry reflect a lack of transparency and that cash purchases are used to 'park' unaccounted income. However, it is important to put this into perspective: there is no denying that cash dominates purchases, but a large proportion of these transactions are not unaccounted purchases. First, Metals Focus' discussions revealed that 80-90% of all cash purchases at large retail stores are backed by an invoice and so both customs duty and GST are paid. Second, it is important to understand that 50-60% of gold purchases in India take place in rural locations. This is because a large section of the population in rural India is dependent on agriculture, which is exempt from tax. Furthermore, many consumers withdraw cash from their bank to buy jewellery as they do not want to share their bank details or are not comfortable with digital transactions. Since the money is already part of the banking system, it does not represent unaccounted cash and therefore all cash purchases cannot be deemed as unaccounted even though some jewellers do not record them in order to evade tax.

The report of the Household Finance Committee by the RBI mentioned that gold is a preferred asset for tax evasion purposes.<sup>30</sup> The committee proposed that the PAN card requirement for gold transactions from jewellers should be extended to all transactions, and not just those above Rs200,000. To prevent the PAN card requirement from driving gold transactions underground, the committee recommended that all gold transactions should be registered using an electronic registry such as a depository.

Another key issue is the Merchant Discount Rate (MDR). Banks charge jewellers a fee for processing payments via credit or debit cards, usually ranging from 1% to 3%. This is high in the context of the price of gold and the low margins that jewellers receive compared to retailers in other industries.

Metals Focus' trade feedback noted that if MDR charges were reduced to around 0.5% this would likely encourage many jewellers to shift towards card transactions. Current MDR charges mean that many jewellers either refuse card transactions or pass on the MDR charges to the customer. This deters consumer purchases via card and encourages the use of cash. That said, many large and medium-sized jewellers have now started to renegotiate MDR with the banks and so have access to rates as low as 0.25-0.5%, which should help digital transactions going forward.

Other positive changes in payment behaviour have emerged over the last few years:

- more cash transactions are being made via an official bill
- digital transactions are increasing significantly, typically via the Unified Payment Interface (UPI)<sup>31</sup>
- consumers are becoming more comfortable with digital payment methods and with using credit or debit cards for high value purchases.

#### Millennials drive online jewellery sales

The Indian online jewellery market has seen rapid growth over the last few years, driven by demand from millennials, growing internet penetration and a hike in smartphone sales. While Indian consumers still strongly prefer face-to-face when it comes to jewellery purchase, they were prevented from doing so during the pandemic. The lockdown restrictions and an aversion to going out in public saw many consumers switch to buying jewellery online, and this accelerated the pace of growth in the jewellery e-commerce market.

The online market can be broken down into three segments: e-commerce platforms (such as Flipkart, Amazon and Snapdeal); specialised online jewellery retailers (such as CaratLane, BlueStone and Candere); and jewellery retailers with their own websites.

While the number of platforms offering gold jewellery has increased, Metals Focus estimates that the share of online sales remains in the order of 3-5% of total jewellery sales value. Most sales are driven by consumers aged between 18 and 45. Interestingly, while online jewellery purchases have risen, the average ticket size has not; most jewellery purchased online has remained between 5g and 10g.<sup>32</sup> Online buyers tend to purchase lightweight daily wear/fashion jewellery in 18-carat gold.

Looking ahead, Metals Focus estimates that the market share of online jewellery in the next five years could increase to 7-10%.<sup>33</sup> This will be driven by greater online offerings from jewellers and a growing acceptance of online channels. Metals Focus forecasts that lightweight jewellery will continue to dominate online sales, with the average weight remaining in the 5-10g bracket.

### Retailers have increasingly adopted advertising to drive sales

The last decade has seen two significant changes in the jewellery industry: increased competition and changes in consumer behaviour, leading many jewellers to adopt aggressive advertising to broaden their appeal. However, the advertising space is still dominated by chain stores and medium-sized jewellers that have a strong local presence.

It is important to understand how advertising methods have changed over the last few years. In the past, advertising was largely confined to print and electronic media (television), but today, websites, social media and outdoor (banners, hoardings and displays) are prevalent.

Social media marketing uses platforms like Google and Facebook to push products via keyword searches or promote products on channels such as Instagram. Most large jewellers, especially those focusing on bridal jewellery, have an Instagram account. In addition, many jewellers link up with social media influencers and celebrities to wear their products, upload on their pages and tag the jeweller. This is a popular option for jewellers who want to target younger consumers. In particular, Indian women aged 18-24 look to social media and influencers for inspiration in curating their choices: the India Influence Report 2018 found that 86% of the most viewed beauty videos on YouTube that year were made by influencers and, as a consequence, 62% of existing advertisers planned to increase their influencer budgets.<sup>34</sup>

Large, organised retailers take marketing very seriously, allocating significant budgets. To give a sense of individual company spend, top branded jewellery chain Titan Company Limited increased its advertising expenditure from Rs380mn (US\$6mn) in 2015 to Rs2,080mn (US\$28.3mn) in 2021. Over the same period, Kalyan Jewellers increased its spend on advertising from Rs700mn (US\$11mn) to Rs920mn (US\$12.5mn).<sup>35</sup>

## Manufacturing market structure

### Jewellery manufacturing remains fragmented but is slowly changing

Despite being one of the largest fabricators of gold jewellery globally, India's manufacturing industry is fragmented and unorganised. Unlike jewellery retailing, which has become increasingly organised since the advent of corporate retailers such as Tanishq some 15 years ago, the manufacturing industry is still dominated by small jewellery workshops and artisans. While there is no official estimate on the number of manufacturers in India, and many operate independently as freelancers, industry estimates suggest there are 20,000-30,000 manufacturing units across the country.

Only a very limited number of manufacturers operate large-scale factories, although their numbers have increased over the years. Only 15-20% of units operate as organised and large-scale facilities; five years ago this was less than 10%. Metals Focus attributes this growth to three distinct factors: the expansion of organised retailing; a growth in exports; and a clampdown by authorities. Orders from overseas and domestically organised retailers tend to be quite large and so cannot be fulfilled by small workshops. That aside, organised retailers and foreign buyers only tend to place orders with large players due to transparency and the availability of capital.

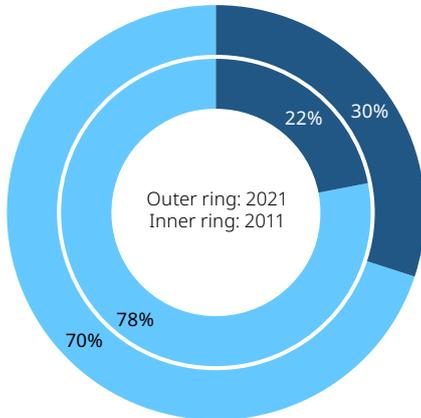
Many large, organised players also outsource manufacturing to small manufacturing units and artisans (**Chart 2**). This reflects the nature of jewellery manufactured in the country; about 55% is handmade (**Chart 3**), a figure that was much higher in the early 2000s. The high share of handmade jewellery means that many karigars are involved in producing intricate pieces, which is a unique selling point for Indian gold jewellery in the global market.

While online jewellery purchases have risen, the average ticket size has not; most jewellery purchased online has remained between 5g and 10g



### Chart 2: Many large, organised manufacturers outsource manufacturing to small manufacturing units and artisans

In-house vs outsourced manufacturing (% of volume of manufactured gold jewellery)

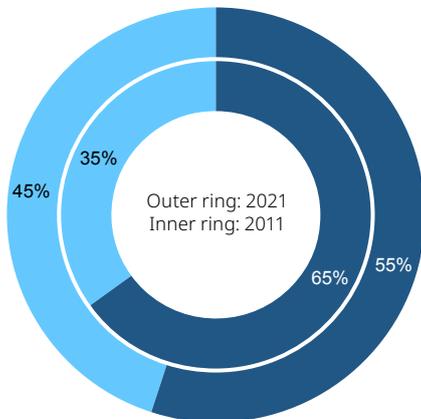


- In-house manufacturing
- Outsourced manufacturing

Source: Metals Focus, World Gold Council

### Chart 3: Majority of manufactured jewellery is handmade in India

Handmade vs machine-made jewellery (% of volume of manufactured gold jewellery)



- Handmade jewellery
- Machine-made jewellery

Source: Metals Focus, World Gold Council

### Regions specialise in producing different types of jewellery

The Indian jewellery market is extremely diverse, with different regions having different tastes and buying preferences. There are some 10 key manufacturing centres, producing around 75-80% of India's jewellery. Of these, Mumbai, Chennai, Kolkata and New Delhi dominate the manufacturing landscape. The other main centres are Rajkot, Surat, Jaipur, Coimbatore, Thrissur and Hyderabad (Figure 1).

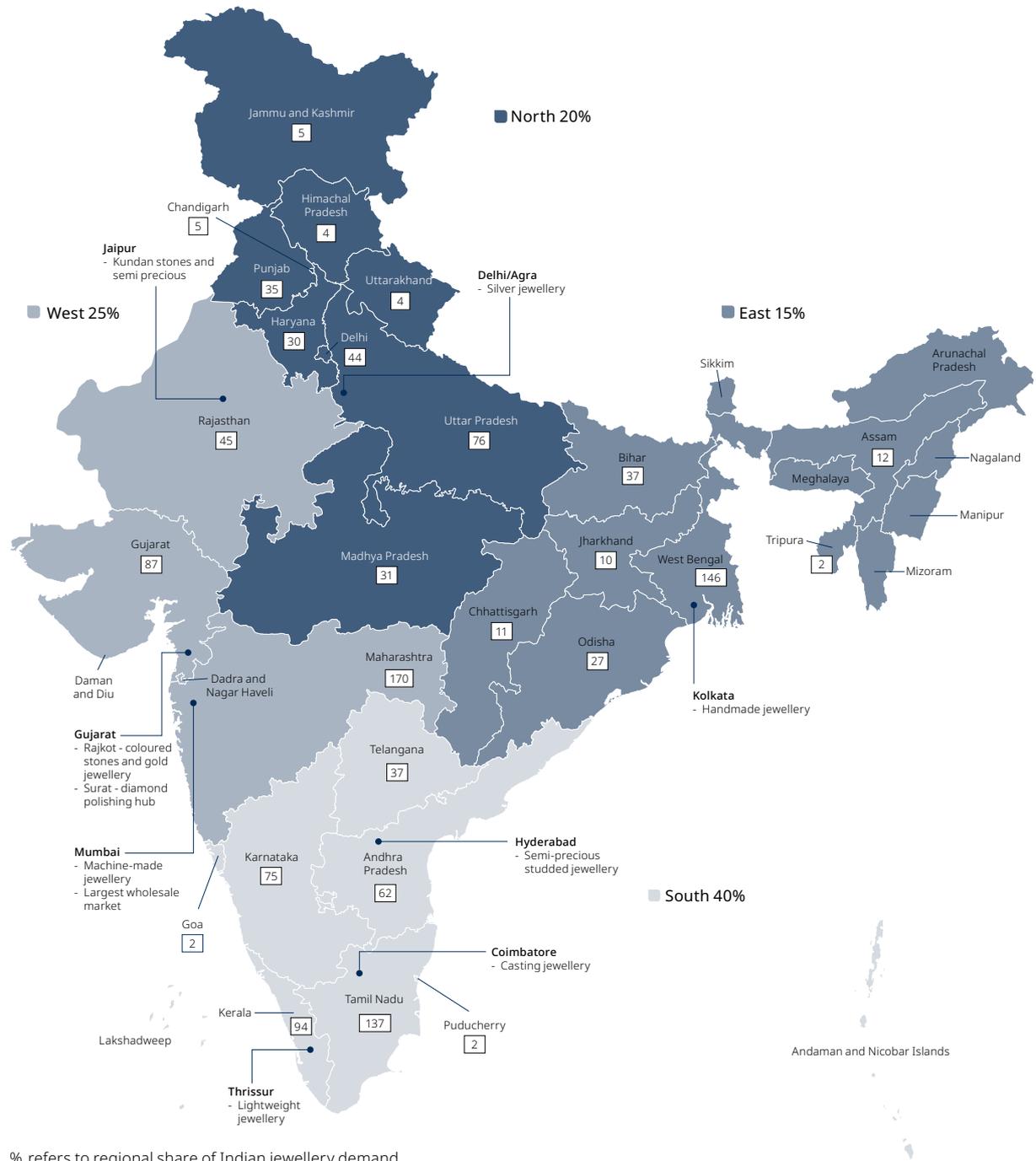
Each of these centres specialises in a different kind of jewellery. For example, Mumbai is the hub of machine-made jewellery, whereas Jaipur specialises in jewellery studded with Kundan and semi-precious stones and Surat is the hub of diamond jewellery; Coimbatore is the centre for casting jewellery while Chennai and Kolkata are known for handmade pieces.

The majority of manufacturing facilities in India are small workshops with two to four employees



### Figure 1: Major jewellery manufacturing and hallmarking centres in India

The map shows the number of BIS-approved hallmarking centres in India



% refers to regional share of Indian jewellery demand  
 □ refers to the number of BIS-approved hallmarking centres in each Indian state



### Working conditions for karigars/artisans must improve

While karigars form the backbone of the Indian gem and jewellery industry, many work in very poor conditions (**Focus 3**). The National Institute of Labour and Economic Research and Development (NILERD) under the aegis of NITI Aayog published a paper in 2020 called 'Socio-economic and working conditions of workers in the Indian gold industry'. The report highlighted some startling facts. Most karigars/artisans working in the industry are employed on a contractual basis with very little access to healthcare or proper working conditions. Moreover, a large proportion are underpaid, earning between Rs15,000 and Rs16,000 (US\$190-200) per month, much lower than many other industries.<sup>36</sup> The report mentioned that 71% of workers do not have social security benefits such as an Employee Provident Fund (EPF).

### Jewellery parks will help the industry become organised and improve working conditions for artisans

To encourage and streamline the manufacturing of gems and jewellery, various state governments are looking at promoting the set-up of jewellery parks by themselves or by industry bodies. These integrated industrial parks provide access to facilities under one roof, including manufacturing units, commercial areas, residences for industrial workers, commercial support services and an exhibition centre.

Currently, most jewellery manufacturing takes place in congested areas with a lack of proper facilities for artisans or for the movement of goods. Most workers spend approximately 12 hours a day in small rooms that are not self-contained units and lack toilets or kitchens. Moreover, there is no proper worker accommodation, no training and no other ancillary facilities. Such manufacturing could relocate to jewellery parks, thus improving conditions and helping to develop the trade itself.

Jewellery parks would also help modernise the trade, as units would be better designed and there would be ample space available for modern machinery. Sitapura Special Economic Zone (SEZ) in Jaipur and Santacruz Electronics Exports Processing Zone (SEEPZ) in Mumbai, set up on 200 acres, boast manufacturing units with technology that has helped improve export potential. Currently, there are two jewellery parks operational in Ankurhati and another in Surat. Ankurhati focuses on plain gold jewellery whereas Surat engages in diamond cutting and polishing, and jewellery manufacturing. Three more jewellery parks will likely emerge over the next five years, two in Mumbai and one in Raipur.

### Hallmarking was made mandatory at last

The Bureau of Indian Standards (BIS) first introduced hallmarking in 2000. Through its networks of offices the BIS grants licences to certify gold jewellery under BIS Standard IS1417. BIS certification was brought in to stop under-carating in the country. According to our study in 2017, some 10-15% of jewellery sold was below the stated purity.<sup>37</sup> In 2018, the new BIS (hallmarking) regulation was introduced, laying the roadmap for the introduction of mandatory hallmarking within the trade and protecting consumer interests. Consultation between the BIS and the industry has helped to ensure the required infrastructure is in place.

The Department of Consumer Affairs, the ministry governing the BIS, issued a notification to make gold jewellery hallmarking mandatory on 15 January 2020. However, the intended launch date of January 2021 was postponed until June of that year due to the pandemic. Meanwhile, the industry had raised concerns about the lack of assaying centres in many towns; in response, the government announced the implementation of hallmarking in 256 districts (out of 742). Discussions between Metals Focus and the BIS indicate that the remaining districts will be subject to mandatory hallmarking in the next couple of years.

Under the new BIS guidelines, mandatory hallmarking is applicable to six purities: 14k, 18k, 20k, 22k, 23k and 24k. While the initial guidelines had only allowed 14k, 18k and 22k, the remaining two were added later after industry representations. Jewellery of other purities will not be allowed to be sold in the domestic market unless:

- the gold jewellery item weighs less than 2g
- the jewellery is for export and re-import
- the jewellery is made for exhibitions or is an item studded with Kundan, Polki or Jadau.

The guidelines also state that manufacturers, wholesalers and retailers with an annual turnover of more than Rs4mn need to be registered with the BIS if they are to sell hallmarked gold jewellery. Despite the many changes to the original guidelines – which were implemented after industry consultation – further challenges impeded their smooth implementation. Additional guidelines were therefore issued in June 2021 with significant clarifications:

- hallmarking at the first point of sale means the onus is effectively shifted to the manufacturer or wholesaler
- purchase of non-hallmarked jewellery is allowed
- jewellery hallmarked before 16 June 2021 does not need to be melted and re-hallmarked
- artisans involved in job work are not required to register with the BIS.

### Focus 3: Working conditions of artisans

India is one of the largest markets for gold and gold jewellery, with gold playing a significant role in representing the culture and art of India and expressing the owner's stature in society. From a marketing perspective, gold jewellery offers a glamorous look to customers, but on the other hand, the manufacturing process of gold jewellery and the hands creating it are often unnoticed.

The Indian gold manufacturing industry can be segregated into two forms: regulated (formal) and unregulated (semi-formal and informal). The former covers a formal hierarchy and processes, and often a corporate touch. The conventional system, which is unregulated, also exists side by side with the formal. Together, the sector is one of the largest employment generators with an estimated 4.65mn employees (as per Gem and Jewellery Skill Council of India).

Seeing the growth and value of the sector and potential employment opportunities, the government has also introduced skill development initiatives for the sector. The market employs a large number of artisans (karigars), who learn the craft through an informal but well-set system of apprenticeship, and a "karigar life cycle" that embeds the gold worker in the system for many years. We worked on a research project intended to explore Human Resource Management (HRM) and labour management practices in gold jewellery manufacturing. The research idea was to understand labour and talent management in the formal, semi-formal and informal sectors, and explore whether any convergence or divergence in the HRM/labour management practices can be observed.

Our analysis of the informal sector shows the existence of "precarious work", while formal sector companies have progressive practices that can qualify as best in class across different sectors. The latter is motivating the others, particularly semi-formal companies, to improve the working conditions of artisans and take initiatives to increase work productivity. Responsible outsourcing and adopting various practices for improving social security standards and safety conditions of the artisans are a few steps taken by formal companies. Another significant step being adopted is creating future skill sets and career paths. However, when compared with the universe of gold jewellery manufacturing such firms are very few.

In the current situation, the industry in general is facing a scarcity of experienced artisans and young talent. The new generation is not willing to join the industry. Reasons for this include the absence of basic amenities and hygiene at the workplace and poor reward practices. Most importantly, artisans feel that work recognition is absent, i.e. there is no appreciation for the sweat and hard work that they put in.

The average artisan's income is low when compared to other sectors, and as contractual employees, they often receive remuneration that is not sufficient as a starting point for a career. In addition, the variable pay doesn't add much to total earnings, which is also one of the main reasons for attrition in the industry.





### Focus 3: Working conditions of artisans *(Continued)*

Furthermore, existing artisans do not encourage their children to join the industry. Since the manufacturing process and talent pipeline have changed, we suggest that skill development is taken as a priority and should be implemented quickly for the sector to remain competitive. The government should set up training centres where the existing, as well as the new talent entering the industry, can be trained. Without some skill enhancement, the future of this sector in India is uncertain. Stakeholders associated with the industry have voiced repeatedly that, while there is job security in the industry due to ample employment opportunities, there is a lack of social security. As a good HRM practice we suggest that employers/manufacturers should take on the responsibility to introduce government social security schemes for both permanent and contractual karigars.

The labour dynamics in the sector resemble the gig workers paradigm. A section of artisans is not willing to be bound with employers/contractors. In fact, they prefer to work according to their own choice and convenience. Another section of artisans wants to work in a formal set-up, earning a fixed salary and other benefits, thereby enjoying more security. The set of artisans who are not comfortable working in a formal set-up believe their freedom will be compromised,

and we observed that they are fine compromising their living standards for flexibility and freedom offered by the informal sector. Many young entrants use the informal sector as a launch pad (for learning opportunities) to build more secure careers in the formal sector. We find that in the gold jewellery manufacturing sector formal, semi-formal and informal work all co-exist. Hence, clear segregation of work boundaries is not possible as the formal and semi-informal sectors directly or indirectly depend on the informal sector for production, or for artisans.

In this context, responsible outsourcing is an approach that can improve the conditions of existing artisans and secure the future of the industry. Stakeholders in the sector (industry, associations, trade unions, etc.) should work towards creating a responsible supply chain and contribute to training in advanced machinery and manufacturing practices for artisans, helping to enhance the artisans' overall skill sets and livelihood opportunities.

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**Novel Ansari, Research Associate, IIM Ahmedabad**



## Hallmark Unique Identification number could transform the market

The Indian government has focused on technology to transform the Indian economy and bring greater transparency to the social benefit delivery system. It is thus not surprising that it has announced the use of technology to ensure the authenticity of hallmarking through the introduction of the Hallmark Unique Identification (HUID) number. The HUID is a six-digit alphanumeric code unique to each piece of jewellery (Figure 2). The jewellery is manually stamped with this number at an assaying and hallmarking centre. The ID is automatically generated without any human interference to ensure that there are no malpractices.

Figure 2: Hallmarked jewellery with HUID



According to the BIS, the new hallmark consists of three symbols: the BIS logo, the purity and finesse, and the HUID number. Such traceability will enhance consumer confidence in the jewellery they buy. The government aims to create a central platform where consumers can look up an HUID number and see all details linked to that piece, notably the jewellery manufacturer, hallmarking and assaying centre, and the jeweller's name.

## BIS hallmarks for gold jewellery consist of several components



BIS  
standard mark

22K916

Purity of gold

AAAAAA

Six-digit  
alphanumeric code  
which will be  
unique for every  
jewellery article

## Mandatory hallmarking will level the playing field and increase demand

Aside from having funds for aggressive marketing campaigns and the ability to offer a wide choice of designs, one factor that has helped retail chain stores gain market share over the years has been the assurance they offer around purity. Chain stores have guaranteed that their gold jewellery is of the quality stated, and that consumers will receive full value when exchange or return takes place. Despite this, it is widely accepted that a large amount of jewellery sold in India is under-caratage. According to discussions between Metals Focus and refineries, gold that comes back as scrap for melting often ranges between 70% and 85% purity.<sup>38</sup> This has bred mistrust among many consumers. Our consumer insights study published in November 2019 highlighted that 28% of jewellery consumers who had not previously purchased gold cited a lack of trust as a barrier to purchase.<sup>39</sup>

This lack of trust has, in the past, benefited large, organised players but the introduction of mandatory hallmarking will help to level the playing field in terms of purity, and focus competition on elements such as design and customer service. Furthermore, mandatory hallmarking is likely to increase trust among young consumers. Our consumer insights study highlighted that trust is a major factor for gold jewellery purchases. The government has stated that increasing trust is one of the key objectives in the introduction of mandatory hallmarking. Metals Focus believes that hallmarking will increase demand over the longer term.

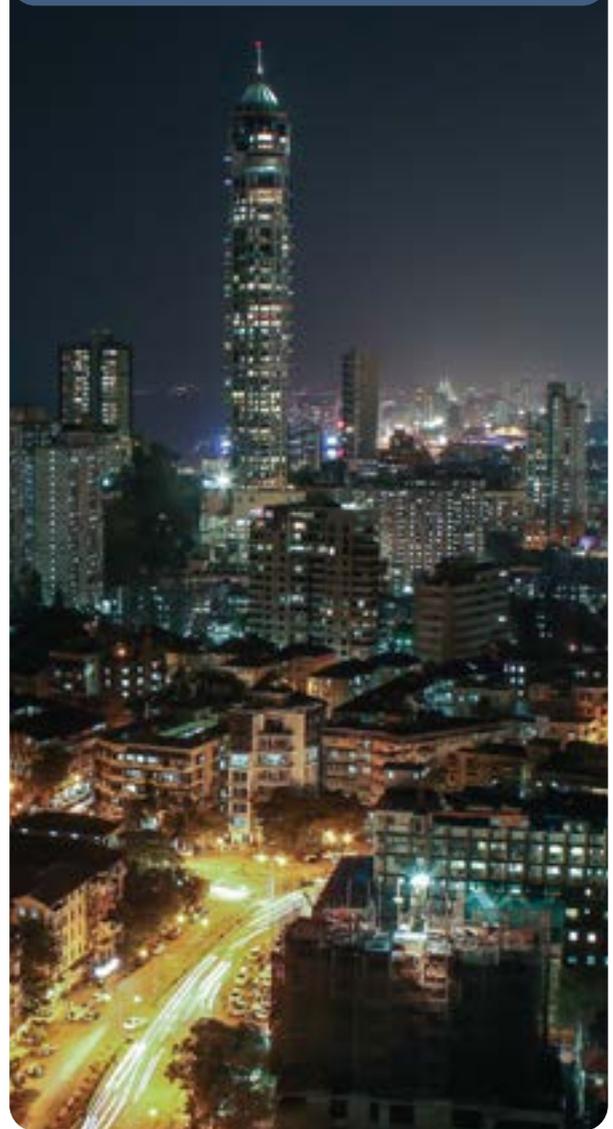


## Outlook

The Indian jewellery market has seen many structural changes over the last decade, some brought about by regulation and some by a shift in consumer behaviour. While the hallmarking regulations will provide a level playing field, national and regional chain stores are set to continue to gain market share because of their access to credit and the large inventory they carry. However, as many players start entering Tier 3 and Tier 4 cities, there should be a certain level of aspirational demand that they can tap into, allowing branded players to quickly gain market share. Small players need to become more transparent if they are to access credit, as banks and financial institutions are currently wary of lending to the gems and jewellery sector.

While the jewellery retail sector continues the trend it began over a decade ago and becomes increasingly organised, the manufacturing sector is only at the beginning of this journey. Government and industry are focusing on shifting manufacturing from congested centres to jewellery parks and this will aid organisation within the trade. Meanwhile, the growing concern among retailers and consumers about ethical standards and working conditions of artisans represents an industry threat. In response, many large players only want to work with organised manufacturers, and it is these who will see their market share strengthened going forward.

As many players start entering Tier 3 and Tier 4 cities, there should be a certain level of aspirational demand that can be tapped into



# Chapter 4

## Gold investment market and financialisation





India is one of the world's largest gold bar and coin markets. Investment demand for gold is driven by its safe-haven appeal and the ability to convert these products into jewellery at a later stage.

Over the last decade the government's focus on 'bank the unbanked' has witnessed tremendous success. But the subsequent increased use of banking services and the heightened awareness of financial products have created headwinds that could weigh on future gold bar and coin demand.

The government has also taken steps to mobilise the huge ~US\$1.4tn private stock of gold in India, most recently with the launch of the Revamped Gold Monetisation Scheme (R-GMS).<sup>1</sup> The gold loan market has flourished with a total of 2,950-3,350t being used as collateral.<sup>2</sup>

Now, spot gold exchanges need to develop gold-backed financial products to provide impetus to the financialisation of gold in India.



# Chapter 4 contents

<b>Executive summary</b>	<b>64</b>	<b>COVID's impact on investment demand</b>	<b>75</b>
The need to mobilise India's gold	64	The pandemic had a profound impact on investment behaviour	75
Demographic shifts and financial inclusion	64		
Gold-backed financial products	64	<b>Retail investment demand outlook</b>	<b>75</b>
Monetising gold in practice	64		
GMS and the future	65	<b>Gold in the financial system</b>	<b>75</b>
<b>Introduction</b>	<b>65</b>	<b>GMS is key to reducing import dependency</b>	<b>76</b>
<b>Bar and coin demand</b>	<b>65</b>	<b>Headwinds and recommendations for GMS</b>	<b>78</b>
A structural change in the investment market	65	The loan against jewellery market has played a key role in improving financial inclusion	79
Drivers of gold investment demand	68		
Investment motives for bar and coin remain different	69	<b>Gold spot exchange in India: a structural reform</b>	<b>81</b>
Jewellers are the favoured point of sale	70		
		<b>Gold-backed products can enhance financialisation</b>	<b>81</b>
<b>Threats to physical investment demand</b>	<b>70</b>	<b>Outlook</b>	<b>86</b>
Behavioural changes and new products	70		
Competition from equities	70	<b>Chapter 4: Appendix 1</b>	<b>134</b>
<b>Gold-related products that have gained prominence</b>	<b>70</b>		
The pandemic fuelled safe-haven demand for Indian gold ETFs	70		
Gold savings funds and multi-asset allocation funds provide additional opportunities to invest in gold ETFs	71		
Sovereign gold bonds have gained popularity due to additional fixed interest	73		
Young tech-savvy investors are driving growth for digital gold	74		

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# Gold investment market and financialisation

## Executive summary

### The need to mobilise India's gold

Indian households hold an enormous amount of gold – an estimated tonnage of more than 25,000.<sup>3</sup> It is no surprise, therefore, that the government is keen to get some of this gold into the economy. Mobilising it would cut the need for imported bullion and have a direct positive effect on the country's account deficit. But there are hurdles.

### Demographic shifts and financial inclusion

India is the second largest bar and coin market globally. Gold is highly valued, used as a means of household investment as well as an adornment for weddings, festivals and more. In a country where access to banking facilities has been limited – especially across large swathes of rural India – gold has historically been the investment of choice. But change is afoot. India's population is young and attitudes are shifting. This generation saves less than their parents; is technology savvy; and spends more on luxury goods and holidays. And the government's drive towards financial inclusion is bringing banking facilities and wider investment opportunities to a far larger audience than ever before.

All this could present headwinds for gold, yet it retains a special place in the hearts of the Indian population. It is much more than a precious metal. It has deep cultural significance, it is what will make beautiful wedding jewellery, it is a safe haven in times of distress, and it is a hedge against inflation.

### Gold-backed financial products

When the first gold ETF was launched in 2007 it was a notable success. However, the rising equity market proved too much of a temptation and demand was soon dented. Not until the pandemic caused economic alarm did the ETF market recover and by the end of 2022 gold ETF holdings stood at 38t.<sup>4</sup> Since then, ongoing geopolitical tensions have reinforced the need

for safe-haven assets and the digital gold investment market has responded. Now, 16 companies offer digital gold products in India with an estimated 5-6mn active gold accounts.<sup>5</sup> Gold savings funds and multi-asset funds offer another route into gold-backed ETFs, and sovereign gold bonds (SGBs; government securities) allow investors access to gold with a bonus interest payment at term end. These gold-backed financial products, and others, are expected to continue their rapid development.

### Monetising gold in practice

In contrast, the government's Gold Monetisation Scheme (GMS) was less than popular in its original iteration as it failed to fully understand the way in which Indian households held gold. Changes to the scheme have made it somewhat more accessible. The current version allows gold deposits to be held over five or seven years with interest paid in rupees at the end of the term. But only 6% of households are aware of the scheme and there are no incentives for banks to become involved in its operation.<sup>6</sup> The government has introduced policies to improve the country's gold-related infrastructure – including the establishment of domestic gold spot exchanges and plans for an India International Bullion Exchange – which are intended to make meaningful progress towards monetising India's stock of gold.

Historically, the loan against jewellery market has been strong but unorganised, and despite fulfilling the need to liquidate gold, such loans have traditionally carried high interest rates. While the majority of the market remains unorganised, over the past three years the number of organised lenders has increased from 35% to 40% (at the end of 2022) and the amount of loans arranged through banks has surged three-fold from pre-pandemic levels.<sup>7</sup> And with less paperwork and realistic interest rates they look set to rise further. Including the agricultural sector, the loan against jewellery market is now valued at between 2,950t and 3,350t.

## GMS and the future

Government policies, the pandemic, cheap internet access and smartphone ownership have all been significant contributors to the expansion of financial offerings in India. Gold-backed financial products offer investors good liquidity while serving to drive financial inclusion. But the key to making economic use of household gold doubtless lies in GMS. If meaningful amounts of gold are to be put back into India's economy much more will need to be done to stimulate interest and encourage participation in the scheme.

## Introduction

India has a long-standing and strong affinity towards gold that stems from its culture and local traditions. Gold fulfils a twin motive: adornment and investment. Historically, the popularity and growth of gold as an investment has been due to two main factors: the country's high savings rate and a lack of banking access across much of rural India. Indians have a high propensity to save, underlined by the fact that, since independence, the gross savings rate as a share of GDP has risen from 13% in 1975 to a noteworthy 30% in 2021.<sup>8</sup> But the low penetration of banking services and a lack of awareness about other financial products, such as equities, has led to a large proportion of investment flowing into physical assets such as gold.

A report by Jefferies highlights this low penetration of equities and related products: it suggests that Assets Under Management (AUM) in Indian equity mutual funds stand at just 12% of GDP; much lower than the global average of 63%.<sup>9</sup> Even though the number of demat accounts in India has grown sharply, touching 108mn in 2022, the share of household savings invested in equities (0.3% of GDP) and mutual funds (1.1% of GDP) remains low.<sup>10</sup> In the absence of gold-backed financial products, investment in gold has historically been limited to physical products – jewellery and bars and coins.

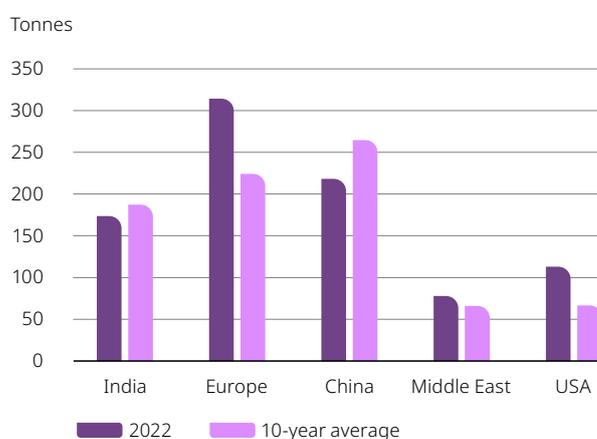
Metals Focus' discussions with the trade suggest that some investors prefer jewellery over bars and coins as the former serves both as an adornment and as an investment. Over the last few years gold investment products have seen their share of overall consumer demand fall, from 35% in 2013 to 22% in 2022. A brief recovery in 2020 (to 29%) appears to be a one-off, which owed more to the steep fall in jewellery sales – particularly wedding purchases – during the pandemic lockdown. From a longer-term perspective, declining demand for gold investment products is indicative of greater financial inclusion, increased awareness of other financial products on offer and changing demographics.

## Bar and coin demand

### A structural change in the investment market

In India physical assets make up the most significant part of household savings; this includes real estate, and gold (and silver) bars, coins and jewellery.<sup>11</sup> As a result, India has become the world's second largest bar and coin market, consuming an average of 187t annually over the last decade (**Chart 1**). In essence, gold bars and coins play a diverse role in fulfilling investment demand. Metals Focus' field research suggests that some 40-50% is eventually converted into jewellery. This means that investment products satisfy the dual role of savings while supporting jewellery purchases.

**Chart 1: India is one of the world's largest bar and coin markets**

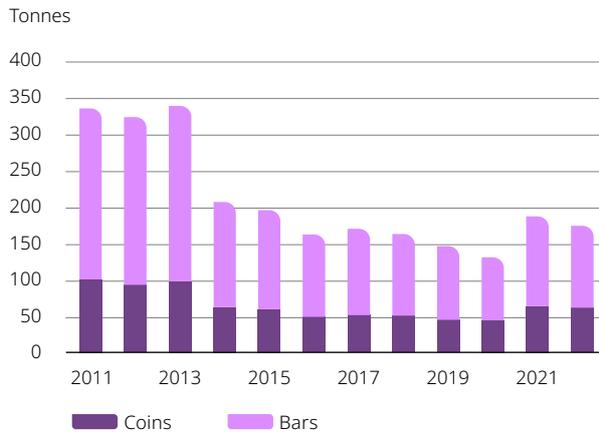


Source: Metals Focus, Refinitiv GFMS, World Gold Council

Retail investment in gold has suffered over recent years (**Chart 2**). Several factors account for this relatively subdued performance; notably: greater financial inclusion; the outperformance of gold by equities; new government regulations – such as high import duties and the clampdown on unaccounted money; and changing demographics.



**Chart 2: Government regulations and rising equity markets have impacted bar and coin demand in recent years**



Source: Metals Focus, Refinitiv GFMS, World Gold Council

Over the last nine years the government's focus on greater financial inclusion has enhanced the reach of banks across large parts of India. Much of this has been due to the introduction in 2014 of the Pradhan Mantri Jan Dhan Yojna (PMJDY), a scheme aimed at offering country-wide access to banking facilities. Over the past nine years over 482mn bank accounts have been opened, more than in any decade of the country's history.<sup>12</sup> Importantly, over 65% of these accounts are in rural and semi-urban communities.<sup>13</sup> The spread of the banking network across rural India has been helped by the growing availability of affordable internet access, which has allowed banks to implement technology more efficiently in the country's interior.

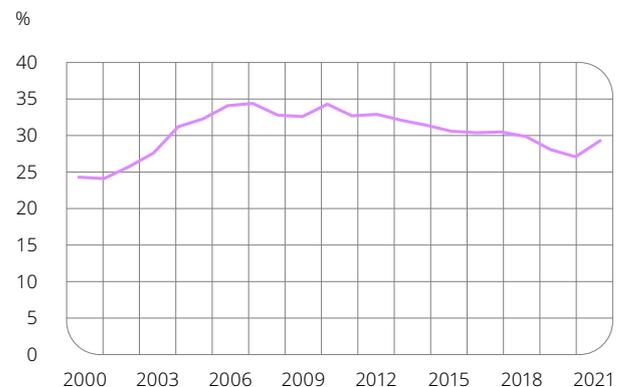
Households in lower and mid-income groups have traditionally considered gold a better form of investment than bank deposit accounts. But the changes mentioned above have had a tremendous impact on financial literacy and could create a rotation away from gold in favour of a range of other financial products (**Focus 1**). The rapid growth in internet penetration has also led to a surge in fintech players who provide easy access to financial services. This, combined with the strong performance of equities, has encouraged many investors to put their money into the stock market. Over the last decade, India's benchmark equity index, the Nifty 50, has generated returns of 210%, compared to 180% for gold.<sup>14</sup> Having said that, a large share of the upside

for gold has occurred only recently; between 2013 and 2018 the gold price consolidated in a narrow range generating single-digit returns. Overall, mutual fund investor accounts have increased from 40mn in 2015 to 143mn in 2023.<sup>15</sup> Demat accounts, used for direct equity trading, have also surged: from 24mn in 2015 to 108mn in 2022.<sup>16</sup> Despite this move towards equities in recent years, in absolute terms household savings in stocks and mutual funds make up ~10% of total household gross financial savings.<sup>17</sup> This suggests scope for significant penetration by equities if Indian stock markets continue to perform well.

On the regulatory front, successive governments have tried to address the challenge of unaccounted money in order to reduce the country's dependency on cash transactions. Cash purchases account for a meaningful share of gold transactions. But these have been affected by a series of government measures, from demonetisation to restrictions on cash purchases and mandate to provide PAN.<sup>18</sup> And these have contributed to the decline in bar and coin demand in recent years.

India's changing demographics are another important factor in retail gold purchases. India has a young population. Roughly 65% are below the age of 40 and they have savings habits that are often far removed from those of their parents.<sup>19</sup> Aside from a preference for equities and new financial products (including structured products, digital gold and cryptocurrencies) the younger generation has a greater propensity to spend. It is therefore not surprising that India's savings rate has fallen from 33% to 30% over the last decade or so (**Chart 3**).<sup>20</sup> Although rising incomes should benefit gold purchases, gold will have to compete with other high-value consumer products, such as electronics and mobile phones.

**Chart 3: India's domestic savings rate has declined over the last decade**



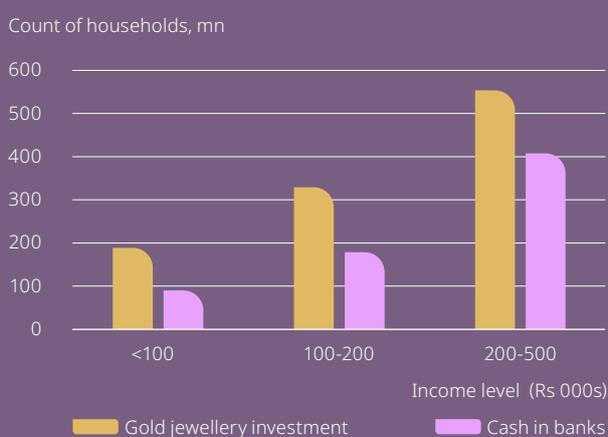
Source: World Bank, World Gold Council

## Focus 1: Financial inclusion and gold demand

Gold in India has historically been a preferred investment option, particularly among low-income households and the rural population. It has been the tool of choice to accumulate household wealth. While cultural affinity, wedding and festive gifting remain the primary factors driving gold demand in India, the lack of financial inclusion has been a major contributor for years. The household survey conducted by the India Gold Policy Centre (IGPC) reveals some interesting facts.

The results of the survey suggest that gold demand in low-income households is not necessarily driven by income levels but it's the lack of access to financial and investment products that has a larger bearing on demand. What's more, in the Indian context, households in lower and mid-income groups and in the rural belts of India consider gold a better mode of investment than bank deposits (**Chart 4**).

**Chart 4: Higher number of households among lower and mid-income groups invest in gold jewellery compared to banks**



Source: India Gold Policy Centre – IIM Ahmedabad, World Gold Council

The role of gold as an inflation hedge is the biggest comforting factor for them. More than any formal financial training, their actual experience and intuitive understanding of inflation has guided their investment planning for years. Here, gold has become their default option compared to other financial products, not surprisingly making gold their natural hedge against inflation and contingencies.

Further, the fungibility of physical gold to raise short-term funds for urgent household needs – tested again recently in the time of the pandemic – has further added to their trust in gold. As such, gold by default becomes a trusted alternative investment that has a proven track record and continues to be a favourite investment choice among households.

Another interesting point highlighted by the survey was the strong preference to buy plain gold jewellery, which has a better realisation value when melted or exchanged compared to a studded piece of jewellery. This is a good indication that gold is not only being purchased for adornment but is also considered as a de facto investment product.

Another study conducted recently by DVARA Research (a policy research institution in India) largely focused on understanding the kind of disparities that exist among Indian households and how those impact the pattern of choosing a particular financial product. The study found that households with low net worth were more likely to take an informal loan than households with high net worth. As a large amount of lending against gold happens in the informal sector, it further strengthens the fact that gold as an investment is preferred by low-income or rural households in India.





## Focus 1: Financial inclusion and gold demand *(Continued)*

Why do Indian households have a more disciplined approach to the consumption of gold despite a constant rise in its price over the years? Is this an indication of social backwardness or is it a result of macroeconomic social policies that have resulted in gold being available as the only investment option? India has done a lot in recent years on the financial inclusion front. Government-sponsored schemes, such as Pradhan Mantri Jan Dhan Yojna (PMJDY) or 'banking for all', have been instrumental in taking the lead. The focus, however, seems more on introducing banking channels to households in Indian villages. What has been missing until now is an effort to impart financial literacy. Households still do not have access to sufficient information and are not educated enough to take a decision on the alternatives available. Also, the financial institutions continue to adopt a safe approach, with marketing efforts focusing on income segments with a higher potential to invest. A long-term strategy to penetrate rural markets has still not been implemented. That said, it is just a matter of time, and we may start seeing the results of financial inclusion sooner rather than later. At that point, gold will be tested for its relevance in comparison to the other available alternatives.

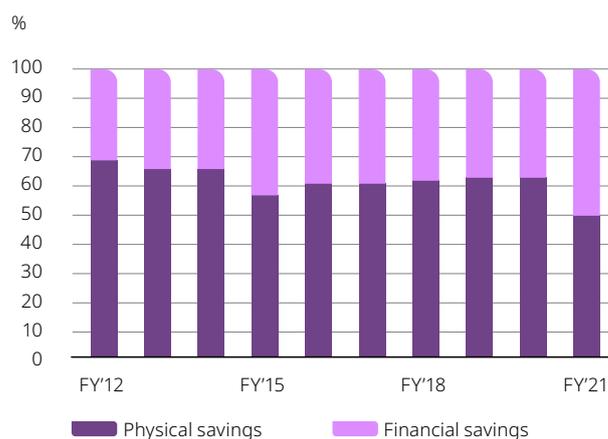
Although financial inclusion in India will affect the culture and lifestyle of households, it will take much longer to start seeing an impact on gold consumption. The affiliation to gold is not easy to crack. The status of gold as a safe haven, its track record of easy liquidity and as a hedge against inflation will continue to influence household investment decisions. With changing demographics, the rationality of consuming gold may change in the form it is bought. That is, instead of plain gold jewellery one may prefer investment gold. However, the preference for gold in the form of jewellery will remain greater while jewellery is still used as collateral for loans.

**Harish Chopra & Prof. Arvind Sahay**  
India Gold Policy Centre-IIM Ahmedabad

### Drivers of gold investment demand

Some of the factors supporting bar and coin demand are similar to those that support jewellery demand. Weddings and religious occasions are important. Economic factors also drive bar and coin demand both in the long and short term. In the long term, investment demand is determined by income. All else being equal, an econometric model using annual data from 1990 to 2021 shows that for a 1% increase in gross national income per capita, bar and coin demand increases by 1.1%.<sup>21</sup> With rising income levels, the allocation of Indian household savings to financial assets – such as banking deposits, insurance funds and mutual funds – has increased compared to physical assets (real estate, gold) resulting in headwinds for retail investment demand (**Chart 5**).

**Chart 5: Rising incomes have allowed households to allocate their savings to financial assets**



Source: Reserve Bank of India, World Gold Council

There are also short-term drivers of bar and coin demand. Our econometric model shows that keeping everything constant:

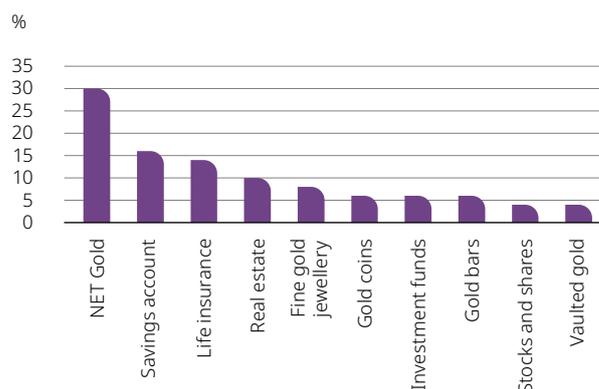
- a 1% increase in inflation increases demand by 4%
- a 1% fall in the gold price increases bar and coin demand by 1%
- a 1% increase in excess rainfall increases demand by 0.7%
- import duty and other restrictive measures reduced demand by 1.7% during the period they were in force.

There are other reasons why Indian investors have regarded gold as a preferred mode of investment, the most important being its role as a safe-haven asset, diversifier and a hedge against inflation, plus the liquidity it offers in terms of ease of selling back and its use as security for a loan:

- **Safe haven:** the importance of gold as a safe haven is elemental, especially in rural India where there is a legacy of weak banking penetration and a low awareness of financial services
- **Ease of converting into cash or its use for a loan:** while many financial instruments can be quickly liquidated it normally takes 24-48 hours for funds to be credited. To secure a loan, gold represents the most straightforward collateral, especially for small loans that require minimal paperwork
- **Diversification:** this driver is well understood given gold's negative correlation to equities. Specifically, as it relates to investors in India, the return on gold in local currency terms has enabled it to act as a hedge against rupee depreciation
- **Eventual conversion into jewellery:** almost unique to India, consumers buy gold for a marriage that they purchase initially in bar and/or coin form. This physical gold is acquired on a regular basis before eventually being exchanged for jewellery with the consumer paying (at a minimum) the making charge
- **Hedge against inflation:** the average annual return of 10% in rupee terms over the last four decades has often outpaced Indian consumer price inflation (CPI), which stands at 7.3% over the same period.<sup>22</sup>

Gold remains top of mind among Indian investors. When asked about where they would allocate an unexpected bonus, our 2019 consumer research study found that Indian investors would invest 30% of their bonus in gold (**Chart 6**).

**Chart 6: Indian investors would invest 30% of an unexpected bonus in gold**



Sample size: urban – 1,280; rural – 1,005.  
Source: Hall & Partners, World Gold Council

### Investment motives for bar and coin remain different

While the gold investment market is still contending with structural changes, the objectives behind buying bars and coins are largely unchanged. Bars remain the preferred choice for investment, whereas coins tend to be used for gifts and other festive-related purchases. The size of the Indian gold bar market is roughly twice that of coins.

In terms of composition, all bars are produced in 24-carat gold. Popular sizes for smaller investors include the Guinea (at 8g, 10g and 20g); larger weights, such as 50g and 100g, resonate with high-net-worth buyers. These are used either for investment or for converting into jewellery at a later date. Smaller sizes, including 2g and 5g, tend to be bought for gifting purposes. Overall, the market is dominated by minted bars weighing 100g or less, with a share of around 90-95%.<sup>23</sup>

Coins are extremely popular during festive seasons, notably Diwali and Dhanteras and the auspicious day of Akshaya Tritiya, which explains why 30-40% of coin sales take place during these periods. Also produced in 24-carat gold, popular sizes include 2g, 5g and 10g. Most coins feature inscriptions of gods and goddesses, particularly images of the goddess Lakshmi and elephant-headed god Ganesha. Coins are also used for gifting purposes during special occasions, notably for the birth of a child or at weddings.



### Jewellers are the favoured point of sale

The vast majority of bar and coin sales take place in jewellery stores. This reflects the jewellers' expertise and the esteem in which they are held by consumers. That said, over recent years there have been new developments, notably a growth in direct sales by gold refineries and an increasing use of online platforms. Many of the recently established refineries are now selling to consumers through retail stores and digital channels. E-commerce platforms have also made notable inroads into the market; Metals Focus estimates that some 3% of bars and coins are sold via sites such as Flipkart, Snapdeal and Amazon. Some 80-85% of offline sales of gold bars and coins are transacted through jewellers, with the balance bought direct from refineries.<sup>24</sup>

## Threats to physical investment demand

### Behavioural changes and new products

The traditional preference among Indian households for saving via physical products has benefited gold over several decades. It is worth noting that even as investors in urban India become more financially savvy, bars and coins remain a popular investment product. That said, the growing penetration of bank accounts and a broader access to financial products, along with the well-performing equity markets, have meant that physical gold investment has, at times, struggled.

The explosion of the digital economy has created a consumer base that is increasingly comfortable with online use. Among the large, young demographic there is a slow but structural shift in investment behaviour. Notably, while digital may have edged consumer preference away from physical gold investment, it has created opportunities for new gold-backed financial products to be marketed to a wide audience. And while investors have favoured equities over recent years, online trading gives them the ability to invest in whatever products they choose.

### Competition from equities

Indian stock markets arguably present the biggest threat to gold investment among urban investors. Equities have performed exceptionally well over the last five years, with the two benchmark indices, Sensex and Nifty, rising by 79% and 72% respectively through to 2022.<sup>25</sup> There has been a surge in investment from the middle class, much of which has been channelled through mutual funds where inflows have increased by 120% to US\$119bn over the last five years.<sup>26</sup> Investment in equities through the direct equity route has also risen significantly. Today, there are 108mn demat accounts in India; shares performed so well last year that about 25% of these accounts were opened in 2022 alone.<sup>27</sup> Metals Focus believes that many young tech-savvy investors are looking to trade equities as a secondary income source.

## Gold-related products have gained prominence

### The pandemic fuelled safe-haven demand for Indian gold ETFs

The first Indian gold ETF was launched by Benchmark Asset Management in March 2007,<sup>28</sup> closely followed by offerings from other banks and financial services providers. As the domestic gold price more than tripled – from Rs9,390/10g at the end of March 2007 to Rs30,169/10g at the end of January 2013 – inflows into these new gold ETFs surged.<sup>29</sup> But soon after, investors turned instead to the rising equity markets. Gold ETFs faced further challenges with the launch of the sovereign gold bond (SGB) in October 2015<sup>30</sup> and the Indian gold ETF market saw continuous outflows from 2013 to 2018.

But in 2019, as the gold price rose more consistently, sentiment in the gold ETFs improved – albeit marginally. It was in 2020 that momentum picked up significantly. The rising gold price, increased volatility in equity markets and economic uncertainty due to COVID fuelled safe-haven demand. Net inflows almost doubled, taking total gold ETF holdings in India to 28.3t by the end of 2020.

This positive momentum carried into 2021. Net inflows increased by 9.3t, taking gold holdings to 37.6t by the end of the year. Inflows into Indian gold ETFs during 2022 were driven more by tactical moves. A higher domestic gold price due to the weak rupee contributed positively to many investors' portfolios and some viewed these gains as opportunities to book profits. Others increased their holdings amid the volatile equity market and some utilised gold price dips to enter the market. By the end of 2022 there were 11 gold

ETFs in the country with a total AUM figure of Rs214.6bn (US\$2.5bn) and gold holdings of 38t (**Chart 7**).<sup>31</sup> The longer-term macroeconomic environment and rural-to-urban migration present future opportunities to further develop the gold ETF market in India (**Focus 2**).

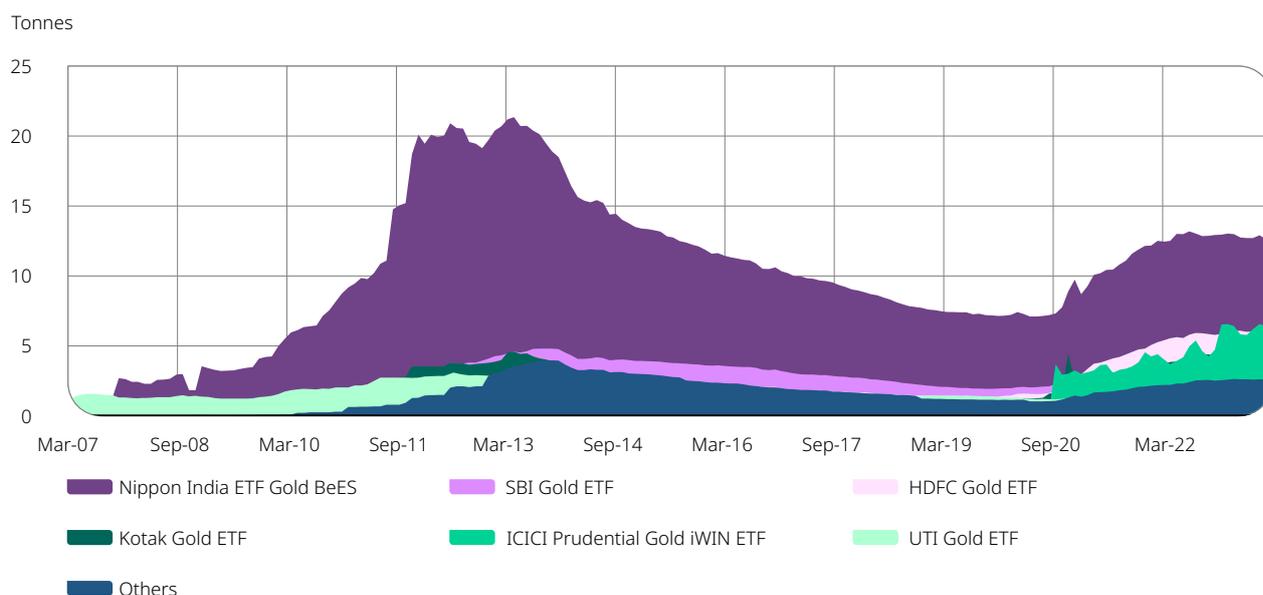
### Gold savings funds and multi-asset allocation funds provide additional opportunities to invest in gold ETFs

Gold savings funds are run by mutual fund houses, with the inflows invested in gold ETFs. Unlike direct investment in ETFs, investors use a systematic investment plan (SIP) rather than a demat account. However, some additional costs, such as an exit load (if funds are withdrawn in the first year), an expense ratio (the annual maintenance charge levied by the mutual fund) and fund commission, need to be borne by the investor, which tends to make these funds less competitive. At the end of 2022 there were 10 such funds with a combined AUM of approximately Rs68bn (US\$0.8bn).<sup>32</sup>

Multi-asset allocation funds provide an alternative route into gold ETFs. These funds fall into a hybrid category that allow investment in at least three asset classes. Securities and Exchange Board of India (SEBI) regulations state that a minimum of 10% allocation is required in three asset classes (allocations of less than 10% are permitted for additional asset classes). The inclusion of multi-asset classes increases diversification and may lower overall portfolio risk.

### Chart 7: Total holdings of Indian gold ETFs have increased since the pandemic

Holdings of Indian gold ETFs on exchanges



Source: Bloomberg, Respective gold ETF providers, World Gold Council

Allowed asset classes include stocks, debt, gold, commodities and REITs, among others. Investment in gold can be made through physical gold, gold-backed ETFs, or other gold-related investments such as derivatives or sovereign gold bonds. Ten multi-asset allocation funds were in existence at the end of 2022 – with a combined AUM of Rs146.5bn (US\$1.7bn) – all of which have an allocation to gold in their portfolios (**Table 1**).

### Table 1: List of multi-asset allocation funds with investment in gold

Total AUM and % of portfolio allocated to gold

Funds list	AUM (INR bn)	Allocation to gold (%)
SBI Multi Asset Allocation Fund	6.0	11.5
HDFC Multi Asset Fund	16.4	12.8
ICICI Prudential Multi Asset Fund	157.6	6.6
Axis Triple Advantage Fund	16.6	12.0
Quant Multi Asset Fund	5.3	26.8
UTI Multi Asset Fund	8.9	22.8
Quantum Multi Asset Fund of Funds	0.5	14.5
Tata Multi Asset Opportunities Fund	15.0	6.3
Motilal Oswal Multi Asset Fund	1.3	16.0
Nippon India Multi Asset Fund	11.4	14.5

Note: As of 31 December 2022. Allocation to gold refers to allocation in gold ETFs, gold futures and sovereign gold bonds.  
Source: Factsheet of individual mutual funds, World Gold Council



## Focus 2: Indian gold ETF market: history and outlook

Gold ETFs are one of the greatest inventions of this century in the financial sector. Not only do they allow investors to take direct exposure to physical gold in a convenient, efficient and safe way, but the liquidity of the gold ETFs is also superior to the underlying physical markets at the retail level.

Gold ETFs are a relatively new investment product. The world's first mutual fund was launched almost 100 years ago and the first ETFs almost 30 years ago, whereas the world's first gold ETF saw the light of day less than two decades ago. Moreover, gold is often considered a pariah in capital markets dominated by mainstream equity and debt markets. Add cryptocurrencies to that – the new competitor or pretender – and only time will tell.

In India, gold ETFs were permitted in 2007. The initial response was lukewarm as they were not considered a viable alternative to physical gold. However, gradually, as investors across the globe recognised the efficiency of investing through ETFs, assets under management in gold skyrocketed.

The credentials of gold ETFs were cemented as a bona fide portfolio hedge during the Great Financial Crisis of 2008 when gold's safe-haven attributes were at their best. There was a significant hiccup from 2011 to 2013 as the so-called 'taper tantrum' prompted tactical investors to pull out money from gold ETFs much to the detriment of gold prices and sentiment.

Inflows resumed in 2016 as heightened volatility in risk assets, geopolitics, low real rates, negative sentiment on the US dollar and high private and public indebtedness made gold an effective hedge against the associated risks. Four years later, global gold ETF assets under management had doubled and so had the gold price. 2021 and 2022 witnessed outflows from gold ETFs due to rate hikes by central banks.

What is heartening to note is that Indian investors have reaffirmed their faith in gold ETFs and, despite volatility in gold prices, we have witnessed inflows in 2021 and 2022.

In 2022, central bank net purchases of gold totalled 1,136t, the highest level of annual central bank demand since 1950. Also, the People's Bank of China (PBoC) reported the first increase in its gold reserves since September 2019, purchasing 62t in 2022 and taking its total gold reserves over 200t for the first time. If other central banks resume buying, we may witness a dramatic shift in sentiment towards gold.

Gold ETFs are now widely accepted investment products in capital markets across the world. However, retail participation in emerging economies like India and China remains abysmally low compared to retail physical demand, and makes up only a minuscule part of the mutual fund universe. There is a pressing need for investor education and media campaigns extolling the three virtues of gold ETFs – ease, efficiency and safety.

Gold ETFs have lost some flows to cryptocurrencies, especially Bitcoin. Despite the hype, cryptocurrencies remain a tiny fraction of the bullion market. But then it would be unwise to dismiss them as a passing fad because even if the 'tulip mania' in Bitcoin fades, the blockchain technology is here to stay. If it continues to evolve, it may provide solutions in various fields, possibly finance and investment. If Robinhood, Reddit and the likes are here to stay, it is only a matter of time before they are wooed by Wall Street and its peers across the world.

While gold cannot match the wild ride that Bitcoin offers its patrons, gold ETFs need to harness the blockchain machinery to their advantage, whether that means diversifying into gold-backed cryptocurrencies or using blockchain technology to democratise flows or other innovations that appeal to millennials.

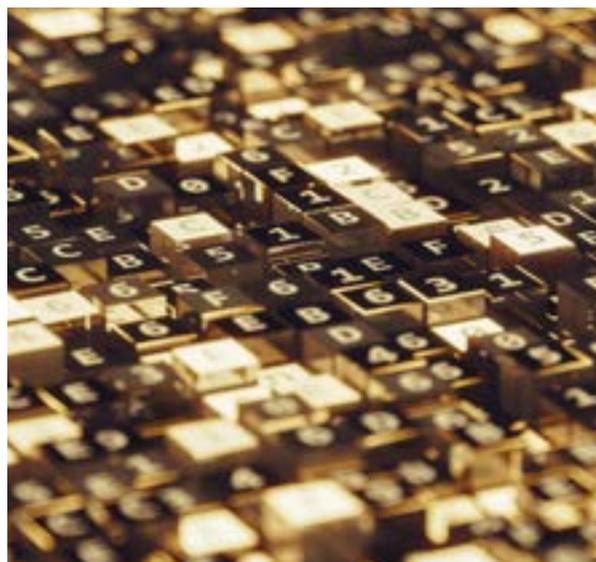
For now, asset-backed cryptocurrencies haven't really taken off by comparison to the indeterminate Bitcoin. Is having a quantifiable intrinsic value a disqualification in the crypto universe? If so, it is good news for gold that remains the king.

**Vikram Dhawan**  
Head Commodities & Fund Manager  
Nippon India Mutual Fund

### Sovereign gold bonds have gained popularity due to additional fixed interest

SGBs are government securities denominated in grams of gold and issued by the RBI. These bonds were introduced to provide an alternative to holding physical gold and so reduce the impact on the country's import bill. Investors pay the bond's issue price in cash, which is then redeemed, also in cash, on maturity. Each unit is equivalent to the price of 1g of gold. Importantly, investors receive the market value of the gold at the point of maturity, plus 2.5% interest per annum (Table 2).

The RBI started to issue these bonds through commercial and state banks from November 2015, since when some 62 tranches have been released at broadly regular intervals. These have accounted for a combined total of 98t of gold.<sup>33</sup>



**Table 2: Certain relevant features of physical gold, gold-backed ETFs, sovereign gold bond and digital gold**

Parameters	Physical gold	Gold-backed ETFs	Sovereign gold bond	Digital gold
Denomination	Various, including: 22k (916), 24k (995,999,9999)	Backed by 24k (995) gold bullion but most hold small quantities in cash or equivalent (usually less than 1%)	Denominated in grams of gold equivalent to 24k (999)	24k (995,999,9999)
Investment limit	Minimum may depend on availability or provider guidelines	Minimum equivalent to 0.5g	Minimum 1g and maximum 4kg for an individual	Minimum as low as Rs1 but may vary significantly by provider
Interest	No interest	No interest	2.5% per year, payable every six months	No interest
Duration	N/A	N/A	8-year tenure of the bond with an exit option available from 5th year onwards; investors may also be able to buy/sell on the secondary market	N/A
Custody and insurance	Professional vaulting and insurance at additional cost	As per SEBI regulations	N/A	Professional vaulting and insurance included in price of gold (subject to terms of respective provider)
Taxation	Normal rules of capital gains apply	Normal rules of capital gains apply	Exempt from long-term capital gains if held to maturity	Normal rules of capital gains apply
Regulatory authority	N/A	Regulated by SEBI	Issued by RBI	N/A

Note: Digital gold allows investors to buy physical gold online, have it stored in professional vaults and take possession of it should the need arise.

See Internet Investment Gold on gold.org

Important: The information above has been sourced from publicly available sources as indicated. The above is not a recommendation to invest/disinvest in any product listed above and should not be considered as investment or tax advice. If as a recipient of this document you are in any doubt about products highlighted above, please consult a person authorised under law who specialises in advising on investing in securities. Summaries of laws and regulation set out above are solely to provide the readers with general information and understanding of relevant Indian law. These do not constitute specific legal advice.

Source: Reserve Bank of India, respective ETF gold providers and digital gold providers



### Young tech-savvy investors are driving growth for digital gold

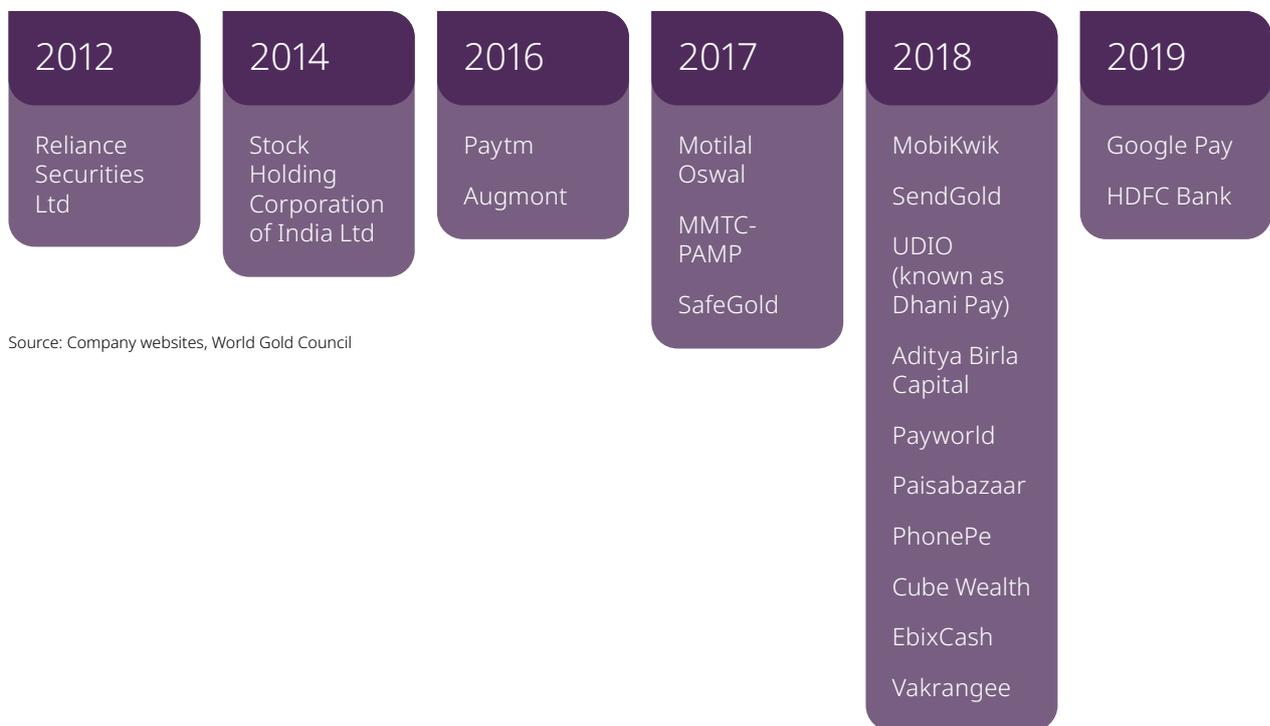
Even though online jewellery portals such as CaratLane, Candere, Flipkart and Amazon have existed for over a decade, the Indian online gold market remains at a nascent stage, accounting for less than 2% of total jewellery sales.<sup>34</sup>

In comparison, the digital gold investment market has picked up quite strongly over the last five years. While the first digital gold product was introduced in 2012 by Reliance, the advent of fintech companies in 2016 has fostered a quicker pace of gold investment in this segment (**Figure 1**). Today, some 16 companies offer digital gold products with an estimated trading volume in 2022 of around 4-5t compared to less than 0.5t in 2016.<sup>35</sup> The growth, albeit trivial in absolute terms, has been driven by young tech-savvy investors, typically between 18 and 35 years of age.<sup>36</sup> It is estimated that there are already some 5-6mn active digital gold accounts across various platforms.<sup>37</sup> Sales tend to peak during Dhanteras (Diwali) and Akshaya Tritiya due to the auspicious nature of these festivals; assets bought during these periods are thought to bring prosperity.

It is estimated that there are already some 5-6mn active digital gold accounts across various platforms<sup>37</sup>



Figure 1: Timeline for launch of digital gold platforms in India



Source: Company websites, World Gold Council

To understand the digital gold category it is essential to study its structure. Of the 16 companies that operate here, three – MMTC-PAMP, Augmont and Safe Gold – provide back-end support and supply gold. The remainder, who are focused on front-end digital platforms, are financial service distributors, stock and commodities brokers and digital wallet companies.

In the coming years Metals Focus expects the market to expand considerably. Key factors that will underpin this growth are increased financial awareness in urban centres and a greater penetration of smartphones.<sup>38</sup>

## COVID's impact on investment demand

### The pandemic had a profound impact on investment behaviour

In March 2020, the Indian government imposed a strict lockdown, severely restricting the movement of people and business activities and making it extremely challenging to buy physical gold (as well as other precious metals). As a result, many investors switched to financial gold products, including digital gold, ETFs and SGBs, all of which were aggressively marketed by service providers. Rising gold prices also helped promote the financialisation of the metal, attracting young investors towards gold-backed financial products.<sup>39</sup>

Although these products have existed for some time, the ease of investment – effectively at the click of a button – boosted their popularity during the pandemic. In particular, SGBs can be bought online through a bank's website or an app, with investors receiving a discount of Rs50/g for online purchases.

According to a report published by VIVO and CMR in December 2020, Indians spent 25% more time on smartphones post-COVID in 2020.<sup>40</sup> This development, along with relatively easy access to inexpensive internet services and reasonably priced smartphones, helped a higher number of people to access online investment products.

The wider acceptance of these products was evidenced by the surge in inflows. For instance, in 2020 a record 28t inflow was seen in SGBs, with 50% alone occurring in Q3 of that year, the highest since they were first issued by the RBI in 2015. Also in 2020, ETFs witnessed inflows of ~14t, their highest since 2011. And finally, the market for digital gold expanded to 4-5t in 2020 from 2-3t the year before.

## Retail investment demand outlook

Retail gold investment demand will continue to face headwinds from the popularity of equities and, in general, the availability of other savings instruments. That said, gold's price performance amid the COVID crisis reinforced its role as a safe-haven asset for Indian investors, and this further underpins its importance domestically as an investment asset. The proliferation of financial gold products and their greater transparency, together with improved ease of investment, will attract the younger generation towards gold. Steps already taken, including the introduction of bullion banking and the creation of a domestic spot exchange, will go a long way to attracting new gold investors. In particular, these help improve transparency across much of the gold ecosystem and ultimately lead to the introduction of new gold products, including savings, investments and lending against digital gold holdings. The inclusion of gold in the financial system in India will therefore be vital in helping to maintain and improve gold's attractiveness as an investment.

## Gold in the financial system

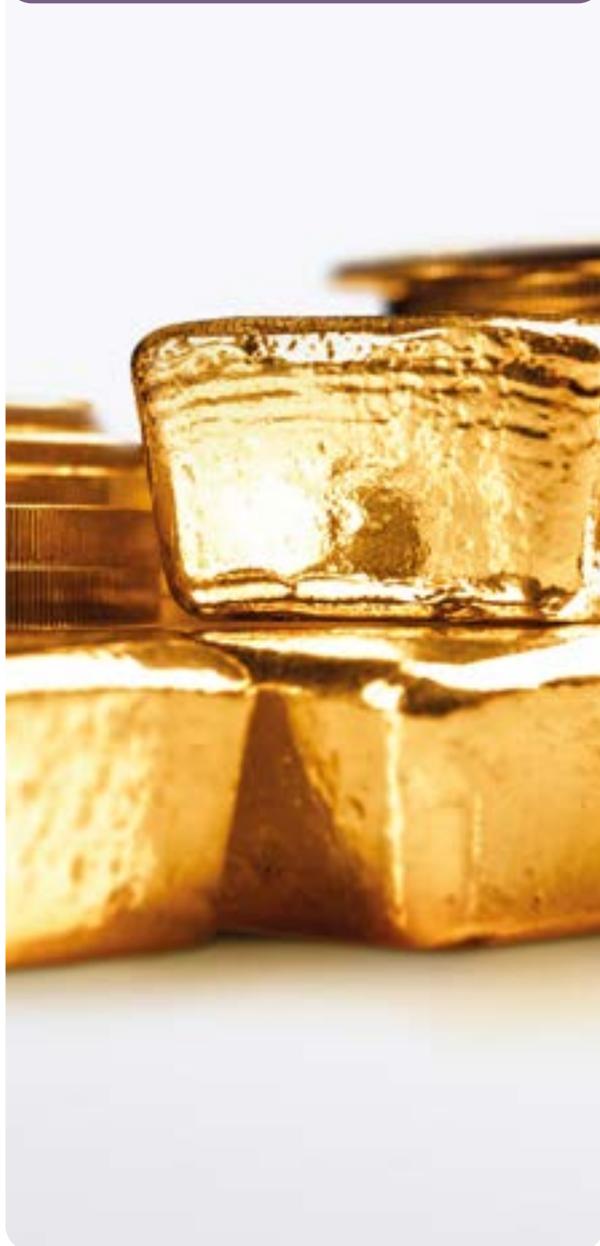
Monetising India's gold stock has historically been an important aim for the government given the adverse impact of gold imports on the country's current account deficit (CAD). Were the government able to monetise a small, but meaningful, portion of India's household stock of gold – estimated at between 23,000t and 25,000t (~US\$1.4tn) – this could have an impact on bullion imports. Importantly, it could give the government some leeway should it wish to reduce the import duty on gold, currently the highest in the world.<sup>41</sup> To this end, the government has taken several steps to mobilise household gold, including the launch of the Revamped Gold Monetisation Scheme (R-GMS) after the original format saw limited uptake. But, so far, only a modest amount of gold has been mobilised through it.

That said, there are other ways to monetise this stock, such as offering loans against jewellery, which are hugely popular in India. For instance, as of May 2022, consumer loans (for non-agriculture purposes) from commercial banks against gold jewellery surged to Rs738bn (~200-250t), nearly tripling from 2019 levels.<sup>42</sup> The share of Non-Banking Finance Companies (NBFCs) in this space is even higher, with outstanding loans estimated to be around 400-500t.<sup>43</sup>



Given that jewellery is a key and often indispensable part of Indian household assets, the growth of this market underlines the importance of gold in the country's financial eco-system and its potential to play a key role in improving the penetration of organised credit across large parts of India.

Monetising India's gold stock has historically been an important aim for the government



## GMS is key to reducing import dependency

It is no surprise that the government wants to access more of India's above-ground gold stocks. Doing so would help reduce import dependency and lessen the strain on the country's CAD.

To provide some history, India announced a Gold Deposit Scheme (GDS) in 1999, which allowed individuals to place gold in deposits with banks and earn interest. To increase its attractiveness, the scheme was exempt from capital gains, wealth and income taxes. Despite these exemptions, it saw little success, with only around 2t mobilised by 2015. At the time, the biggest drawback was the minimum deposit required, which was 500g. Metals Focus believes that this was set without fully understanding the gold market; the average household was unlikely to hold so much gold and could not participate. In addition, gold collected under the scheme was melted down, creating further challenges given the sentiment attached to jewellery – in particular, inherited jewellery. As a result, the scheme was mostly used by temple trusts.

In 2015, the government replaced GDS with a new scheme – the GMS – to address some of the drawbacks of the earlier programme. The GMS lowered the minimum deposit to 30g (either as bullion or non-studded gold jewellery) and increased the interest rate to between 2.25% and 2.50% for deposits exceeding five years. As with the earlier scheme, earnings from the GMS were exempt from capital gains, wealth and income taxes. Despite these advantages, gold mobilised through the scheme reached only ~21t over its lifetime.

A revamped GMS was announced in April 2021 to further improve collection.<sup>44</sup> The new format slashed the minimum deposit size to 10g and included bars, coins and non-studded jewellery, with no maximum deposit limit. To improve its reach, jewellers and refiners were allowed to act as mobilisation, collection and testing agents, provided they fulfilled certain conditions (e.g. certification by the BIS and other criteria set out by the Indian Banking Association).<sup>45</sup> An example of how jewellery retailers act as collection agents in Turkey is given in **Focus 3**.

### Focus 3: Borsa Istanbul's pivotal role in the Turkish gold market

Prior to 1984, there was no official mechanism to import gold into Turkey. It was only then that the Central Bank of the Republic of Turkey (CBRT) was authorised to import and export bullion without paying any duty. At the same time, other banks were allowed to sell bullion sourced from the CBRT in the domestic market. However, up until 1993 when the Gold Control Act was abolished, gold imports and exports were heavily regulated by the government and supply often fell short of what was a flourishing jewellery export sector along with growing local consumption. As the market was liberalised, 1995 saw the opening of the Istanbul Gold Exchange (IGE), which allowed members and the CBRT to import gold duty free, while paying only the Exchange fees for registering and withdrawing the metal (currently between 0.0006% and 0.001% depending on the type of transaction). Prior to this, only the CBRT was allowed to import bullion.

The freeing up of the gold trade paved the way for other changes and contributed to a period of rapid growth across much of the Turkish gold market. As a result, there are now an estimated 5,000 manufacturers, of which over 50 employ between 200 and 1,500 workers, with a further 35,000 gold retail outlets employing around 250,000 people. Finally, some 12,000 employees work in the country's gold mining industry, which produced 39t of gold in 2022.

After the formation of the IGE and abolition of the import duty, the IGE facilitated the trade in gold by setting standards for the bullion to be imported and establishing a framework for the gold market to operate in a more organised manner. This helped the industry to become more transparent; flows in and out of the country became clearer as there was no longer an incentive to bring in gold unofficially.

Furthermore, the IGE promoted the development of several gold-based financial products by enabling banks to trade physical gold in a more structured manner (rather than using the over-the-counter market, or OTC). During periods when Istanbul has traded at a noticeable premium or discount to London, the IGE helped the trade to benefit from arbitrage opportunities. In other words, the IGE connected Turkish commercial banks, gold bullion dealers and eventually the CBRT through participation in the Exchange.

A precious metals and diamond market (PMDM) was formed to take over the activities of the former IGE after it and the Istanbul Stock Exchange merged in 2013 to form Borsa Istanbul (BIST). Currently, only PMDM members of Borsa Istanbul can import gold bars of standard purity (of at least 995) and non-standard purity.

Under the new regulation implemented in February 2021 all members are required to comply with these regulations, including those regarding bullion imports, which are similar to those outlined in the LBMA's Responsible Gold Guidance. Gold refineries and/or their affiliated precious metals companies trading at the BIST are all members of the Precious Metals Market, so both good delivery (GDL) and non-GDL operations are covered.

As part of the Turkish Gold Monetisation Scheme, the PMDM has also been closely involved with trying to mobilise some 3,500t of 'under pillow' gold held by Turkish households. This gold is collected by local banks and deposited into gold deposit accounts at the PMDM and used according to the banks' requirements. From the time it started in mid-2012, it is estimated that around 110t of gold has been collected from the public (as at the end of 2021). In order to effectively run this scheme, local precious metals refineries have been involved. Currently, there are two LBMA GDL and four non-GDL refineries operating in the country. The two GDL operations run this mechanism by providing assaying experts to the banks during their gold collection days before refining the accumulated metal into standard 995 gold bars.

Aside from that, accredited gold jewellery retailers operate as Altın Değerleme Noktası (Gold Valuation Points). As of July 2022, there are 290 such jewellery stores in 66 cities, with the goal to increase that number to 1,500 in 80 cities in two years' time, working under the umbrella of Kuyumcu Altın Değerleme Sistemi (Jeweller Gold Valuation System or KAD-SIS) with the participation of seven banks. Through the full utilisation of KAD-SIS, the current 10-12t per year collection rate is aimed to be increased to 100t.

**Çağdaş Küçükemiroğlu**  
Consultant  
Metals Focus



The R-GMS allows consumers or institutions to deposit gold in a Medium-Term Government Deposit (MTGD), for a maximum duration of either five or seven years (with a minimum lock-in of three years), and a Long-Term Government Deposit (LTGD) for 12-15 years (with a minimum lock-in of five years). On maturity the principal repayment is made in gold while interest (2.25% for the MTGD and 2.5% for the LTGD) is paid in rupees. Premature withdrawals from the scheme are only permitted after the lock-in periods of three and five years.<sup>46</sup>

## Headwinds and recommendations for GMS

These changes have been welcomed by the industry, although several issues continue to be a hindrance to the success of GMS. Most significant is a lack of awareness. The India Gold Policy Centre's (IGPC) nationwide household survey on gold consumption showed that only 6% of households were aware of the scheme.<sup>47</sup> The results also indicate that poor understanding often leads to depositors comparing the interest rate on gold deposits with those on rupee bank deposits. In our view, it is important to educate consumers that the two are not comparable: rupee deposits will always attract higher inflows as money is lent to corporates at significantly higher interest rates.

Another important headwind is the psychological hurdle that comes with melting down jewellery. For Indian women in particular, jewellery often has an emotional and cultural attachment and they can be unwilling to part with jewellery that they know will be melted. As a large part of Indian household gold is in the form of jewellery this is a key issue. The initial thrust of monetisation should therefore be on attracting retail bars and coins to place on deposit (these are not melted). It is also important to mobilise more gold from temple trusts, which tend to have large gold stocks. While this is already underway, more must be done to attract these holdings rather than continue a reliance on small deposits of household gold.

Investors owning digital gold should be able to seamlessly deposit those holdings in a GMS

In terms of operational improvements, the dematerialisation (electronic) of MTGD and LTGD is a key missing piece in the GMS jigsaw. This is important in igniting investor interest as dematerialisation of gold holdings allows fungibility for investor portfolios. Furthermore, the role played by the RBI could also be reviewed; currently it provides a regulatory framework for gold deposits but it could manage all aspects of the programme.

Banks should be offered better incentives to run the scheme rather than just act as agents who collect gold on behalf of the government. If banks can independently take and service gold deposits instead of this being a government function, they may be able to earn healthier margins, which in turn could incentivise them to market GMS to their customers. One suggestion from the IGPC is that banks should be allowed to utilise the gold deposits they handle at their own discretion.<sup>48</sup> For instance, banks might be interested in minting coins to increase revenue, which would allow them to offer higher interest rates and meet the cost of mobilising this gold. Provided credit, liquidity and solvency risks are addressed, there appears to be little reason to discourage them from doing so.

It is also important to leverage the reach of digital gold products and be able to link digital holdings to GMS. Investors owning digital gold should be able to seamlessly deposit those holdings in a GMS, thereby enabling them to earn interest without the operational costs involved with physical gold. While digital gold holdings are still extremely modest, providing this kind of fungibility could attract more investors and help to ensure better participation in the scheme.

### The loan against jewellery market has played a key role in improving financial inclusion

While monetising gold holdings through schemes such as GMS has proved challenging, the gold loan market is long established and thriving. Historically, these loans were dominated by informal sector lenders such as pawnbrokers, money lenders and retail jewellers. However, the organised sector has experienced significant growth over the last few years due to the ease of obtaining loans and lower interest rates. This has helped to improve financial inclusion and facilitated access to credit for a large number of people who otherwise would have had to use informal credit sources with far more expensive interest charges. COVID helped to consolidate the role of this sector, as Indians chose to pledge their gold during the pandemic rather than sell it outright, which historically has often been necessary during times of distress.

To provide a backdrop, the loan against jewellery market in India, including agricultural gold loans, is estimated to be valued at around 2,950-3,350t of gold (**Table 3**).<sup>49</sup> The accelerated take-up of gold loans by consumers during the pandemic is indicative of a growing acceptance of such loans, especially among those who lack access to formal credit. In turn, this underlines gold's role in enhancing financial inclusion. The growth in the loan market is also partly due to the fact that lending against gold is slowly becoming more organised, enabling quick, transparent and hassle-free loans. Although 60% of the market remains unorganised, the share of organised lenders has risen from 35% in 2019 to 40% in 2022.<sup>50</sup>

**Table 3: Gold loan market size in India**

Gold loan book	Tonnes
Banks	200-250
Agriculture gold loans	400-500
NBFCs	400-500
Other finance companies gold holding	150-200
Total organised sector	1,150-1,450
Total unorganised sector	1,800-1,900
Total gold loan market in tonnes	2,950-3,350

Note: As of February 2023.

Source: Metals Focus, Reserve Bank of India, Various Studies, World Gold Council

The share of organised lenders has risen from 35% in 2019 to 40% in 2022





The organised space has thrived over the last few years. Since 2014 both banks and NBFCs have been permitted the same loan-to-value ratio (LTV) of 75%, allowing NBFCs to compete against banks on a level playing field. By current estimates the total outstanding loan book for the organised sector (including agricultural gold loans) is about 1,200-1,300t. Within this, loans offered by banks are equivalent to 200-250t for non-agricultural purposes and around 400-500t for agricultural purposes – these are included in priority sector lending by banks.<sup>51,52</sup> Nevertheless, NBFCs provide the majority of gold loans to consumers due to their quicker processing times, greater flexibility and reduced paperwork, compared to the banks (Table 4).

Even though banks lag behind NBFCs in the non-agriculture loan sector, their loan book has grown strongly since 2019. To put this into perspective, loans offered by scheduled commercial banks against gold jewellery have surged (Chart 8).<sup>53</sup> This in turn was helped by government policies during the pandemic, including a rise in the permissible LTV for such loans from 75% to 90% between August 2020 and March 2021.<sup>54</sup> This was applicable only to banks, not to NBFCs.

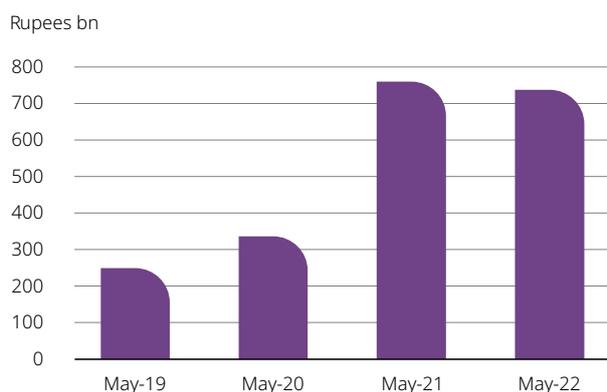
NBFCs provide the majority of gold loans to consumers due to their quicker processing times, greater flexibility and reduced paperwork

Table 4: Key features of gold loan offerings by NBFCs, banks and money lenders

Parameters	NBFCs	Banks	Money lenders
LTV (loan to value)	75%	75%	>75%
Processing fee	Nil or minimal processing fees, no appraisal fees	Both processing and appraisal fees for high ticket items	Nil
Interest rate	11-24% per year	7.5-14% per year, 4% for agricultural loans	25-50% per year
Maximum loan amount	No limit	Rs300,000 for agricultural loans	No limit
Penetration	High	Low	High
Disbursal	Cash/Cheque	Cheque	Cash
Turnaround time	5-10 mins	1 hour	>10 mins
Documentation required	Minimum documentation (ID proof)	Complete KYC documentation	Minimum documentation
Repayment plan	Flexible	EMI based	-
Regulatory body	RBI	RBI	not regulated by RBI

Note: As of February 2023.  
Source: Metals Focus, World Gold Council

**Chart 8: Bank loans against gold jewellery saw a sharp uptick after the pandemic**



Source: Reserve Bank of India, World Gold Council

## Gold spot exchange in India: a structural reform

The government announced its intention to establish a system of regulated gold exchanges back in the 2018-19 budget. At that time the Finance Ministry formed an expert committee on the integration of the commodity spot and derivatives markets.<sup>55</sup> The committee suggested that regulation of the pan-India electronic spot exchanges – which involve clearing, settlement and risk management – should be entrusted to a regulator such as SEBI. Acting on this recommendation, in the 2021 budget the Finance Minister appointed SEBI as the regulator of domestic gold spot exchanges. As per SEBI's framework for domestic gold spot exchanges, an Electronic Gold Receipt (EGR) would represent gold. The EGR comes with trading, clearing and settlement features similar to stock or securities, and removes investor fear of traders defaulting as it carries a transaction guarantee. Trading denominations can be 1g, 2g, 5g or 10g, or more.

In the 2020-21 budget the government announced its intention to set up an India International Bullion Exchange (IIBX) in the Gujarat International Financial Services Centre (GIFT-IFSC) to provide an additional trading exchange for global market participants.<sup>56</sup> The domestic gold spot exchange will provide liquidity and price transparency, ensure quality and prevent counter-party risk for investors. Launched in July 2022, the IIBX, combined with the domestic spot exchange, could lead to an improved GMS, while establishing India as a bullion trading hub along the lines of the Shanghai Gold Exchange (**Focus 4**).

## Gold-backed products can enhance financialisation

Currently, less than 0.6% of India's gold is held in financial form (gold ETFs, SGBs, etc.).<sup>57</sup> This leaves huge potential to increase the penetration of gold-backed financial products, which could possibly benefit the Indian economy in several ways:

- gold-backed financial products can offer improved liquidity (e.g. via round-the-clock access and instantaneous fund transfer), and savings potential (since they are often structured to allow small-unit savings/investment)
- considering the quantum of gold holdings across a wide economic demographic, monetisation of gold could aid financial inclusion, allowing poorer, unbanked households to access credit more quickly and easily
- gold-backed financial products have the advantage of providing transparency, accountability and standardisation of gold in the economy
- increased penetration of gold-backed financial products should encourage monetisation of physical gold holdings, contributing to an expansion of credit and boosting both investment and economic development.

Around the world, various gold-backed financial products are on offer (**Focus 5**). Indian gold spot exchanges could develop gold-backed financial products modelled on best practice, which may provide impetus to the financialisation of gold in India.



## Focus 4: How the advent of the spot exchange transformed China's gold market

Due to historical factors and economic considerations, gold purchase and gold distribution in China fell under the unified planning and arrangement policy of the People's Bank of China (PBoC) before 2002. Along with the country's development of a market-oriented economy and the desire to improve the financial market system, liberalisation of the Chinese gold market was put on the agenda. Against this backdrop, with the approval of the Chinese State Council, the PBoC officially established the Shanghai Gold Exchange (SGE) on 30 October 2002, marking the full opening up of the Chinese gold market. In September 2014, the SGE launched the international board, which became a vital link between the Chinese and the global gold market. In April 2016, SGE introduced Shanghai Gold, the world's first gold benchmark price denominated in Renminbi, markedly raising the pricing power of China's gold market.

After more than two decades of effort, the SGE has established a multi-layered gold market system, comprising price matching, price inquiry, Shanghai Gold Benchmark Price and gold leasing markets in terms of trading modes. The total trading volume of gold contracts listed on the SGE stood at RMB13.08tn (34.8k tonnes) in 2021, ranking third in the world.

The price matching market is currently the largest in terms of trading volume, wherein financial institutions, gold producers, gold consumers and other institutional and individual investors can trade 14 spot gold contracts. Au100g, Au99.99, Au99.95, Au99.5, iAu100g, iAu99.99, iAu99.5 and PGC30g require the full amount of trading; while Au (T+D), mAu (T+D), Au (T+N1), Au (T+N2), NYAuTN06 and NYAuTN12 allow margin trading. Investors can trade different contracts depending on their trading purpose, financial profiles and investment experience. The most actively traded contract is the gold deferred contract (Au T+D). In addition to the general practices of margin trading, bilateral trading (long and short) and daily mark-to-market, Au (T+D) allows deferred delivery. This means that delivery can be taken either on the transaction day or any other trading date afterwards on the condition that the investors meet the margin. In my opinion, such characteristics give investors and the industry chain a more diversified portfolio and convenience in capital management, hedging and risk control.

The SGE had 286 members at the end of 2021, including 154 ordinary members consisting of 30 financials and 124 generals, and 132 special members composed of 8 foreign financials, 95 internationals and 29 brokers, trusts, small and medium-sized banks and other institutions. Non-members can trade via an SGE membership as the broker. Commercial banks are responsible for most of the trading volume of both brokerage and proprietary trading. At the date of writing, SGE has 71 certified vaults (many of which are commercial bank vaults) in 36 cities and regions throughout China. SGE adopts a 'unified dispatching' model for gold delivery, which benefits gold industry enterprises' financing, production, processing, wholesaling, and import and export activities with convenience and cost-efficiencies.

Every retail bank sets up a precious metals business department to deal with precious metals trading, customer management, marketing and investor education. I think this has been critical for the growth and prosperity of the spot trading market. Commercial banks launched the gold accumulation plans (GAP) and paper gold business, both of which are physically backed (at a certain ratio as required) and locally stored. Investors can sell back or take delivery of various gold products, including jewellery, displays, and gold bars and coins, with extra payment for labour costs. Paper gold trading was popular among Chinese gold investors in previous years until several commercial banks suspended their SGE brokerage trading business for individual accounts.

The price inquiry market, serving as an essential platform for institutions to trade customised derivatives, offers a wide range of products, including spot, forward, swap and options for gold. These various financial instruments satisfied institutional investors (often with large transactions and risk management requirements) with diversified investment allocation. The trading volume of the price inquiry market over recent years has rapidly increased. The leasing market allows the gold market to perform its investment and financing functions better via interbank gold leasing transactions and gold leasing transactions between banks and enterprises. In my opinion, the gold leasing service improves the efficiency of the capital. It broadens the financing channels, reduces financing costs and enriches the risk management tools for enterprises in the industrial chain.

The emergence of the gold spot contract is a milestone for developing China's gold market. First, it is regarded as a price reference for the domestic gold industry, including the physical gold sales and scrap business. The subscription and redemption of domestic listed gold ETFs are also linked to the spot gold contracts or Shanghai Benchmark Gold prices. Second, it provides an alternative gold trading avenue for Chinese investors and enables their involvement in global gold trading markets. It leads investors to pay closer attention to global political and economic developments and financial investment market dynamics. Third, it promotes investment diversification for Chinese gold investors via various investment avenues, including GAP, paper gold trading, ETFs and gold-based wealth management products.

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## Focus 5: Selected gold products available globally

Apart from traditional investments in gold such as bars and coins, there are several gold products available globally. Among them, ETFs, gold accounts, digital gold and paper gold are widely available in many countries.

**Turkey** has a wide array of gold banking products, exceeding most countries. First introduced over two decades ago, the market for gold banking products has grown appreciably.

### Gold-to-Gold Participation Account

Offered by Islamic banks, the deposited gold earns a return in gold via the bank's investment of this gold in products allowed by its Sharia Board. Although in theory there is a profit-sharing mechanism, in practice a return is guaranteed within a certain scale.

### Gold account

Gold is traded in Turkish lira (TL) or US\$, without the issues associated with taking delivery. The entry cost is minimal, either TL1 or US\$1. It is not mandatory for all gold accounts to be physically backed. Gold is bought and sold via bank branches, mobile banking, internet branches and phone banking.

### Gold current account

Gold can be bought or sold at any time. There is no interest rate and no maturity date. The minimum transaction is just 0.01g. Some banks allow gold to be withdrawn in physical form, or the investment can be converted into other gold banking products.

### Gold savings account

The account can be opened with a maturity date ranging from one month through to three months or one year. Non-Islamic banks pay interest, which works via a profit-sharing mechanism at Islamic Finance Institutions in a similar fashion to the gold-to-gold participation account. In both cases, there is a 15% withholding tax. The minimum account opening amount is usually 50g.

### Gold bonus credit card

This is a co-branded credit card offered by Atasay Jewellery and Garanti Bank. Card users earn Atakulche (Atasay's gram gold brand) from everyday purchases. The accumulated gold can then be physically redeemed at Atasay Jewellery stores in denominations of 0.5g,

1g, 2.5g, 5g, 10g or 20g. The gold can also be accumulated in a Garanti Bank gold savings account through automated monthly regular purchases from a credit card.

### Gold Milyem card

This is offered by TEB (a subsidiary of BNP Paribas) to jewellers to help finance their purchases. Jewellers' payment dues are charged as spot gold credit or divided into gold instalment credit within the credit limits designated for the jeweller using a specially designed POS machine. The minimum transaction amount is 20g.

In the **UAE**, Emirates NBD bank offers a non-interest-bearing gold account for individuals with no physical delivery option. Rakbank also offers a gold account for individuals with a minimum account opening amount of 1g with the option to redeem for physical gold at select Rakbank branches for a minimum of 10g, and the maximum amount allowed to be withdrawn per day is 5kg. This account does not earn interest as well.

In **Malaysia**, banks offer a gold cheque service tied to this account, which can be given as a gift for special occasions such as birthdays, festive seasons or corporate events. It is available in 1g and 2g denominations, valid for three months after issuance and there is a fee of RM5.30 (around US\$1.20) per cheque.

In **Jordan** a savings account can be opened for gold and silver. Partial liquidation is allowed twice a year. The account does not earn interest.

In **Saudi Arabia**, Saudi National Bank (SNB) offers Shariah-compliant gold accounts for individuals. If the customer wants physical delivery, gold can be received as four nines kilobars only, and an SAR250 (US\$66.50) fee applies for each bar.

In **China**, there are several available options for gold investors, mainly:

### Paper gold trading via commercial banks

Investors can choose to take delivery of physical gold at a counter. However, more than 20 commercial banks announced the suspension of the new opening of individual accounts for gold and silver trading in late 2020 for risk control reasons. Likely, this option will completely disappear soon.

### Gold accumulation plan

This is offered by commercial banks in China and is physically backed and locally stored. Investors can sell back or take delivery (in various available gold products: jewellery, displays, gold bars and coins).

Elsewhere, banks in **Hong Kong** offer Gold Passbook Accounts for gold trading services that enable clients to buy and sell gold through the account. However, there is no exchange of physical gold.

There are plenty of options available in **Japan** as well. Gold accumulation plans are offered by a small number of players who typically have a physical (i.e., bar/coin) presence. All are physically backed and locally stored with an option to sell back or with delivery.

That aside, over the last three years, physically backed gold-based tokens have also been announced to capitalise on the interest in blockchain technologies. Gold-pegged cryptocurrencies are designed in a similar way to stablecoins, but rather than being backed by any particular currency such as the US dollar, they are backed by the value of physical gold. The ratio of gold backing differs, however. For instance, some tokens, such as the Perth Mint Gold Token (PMGT), are backed at a ratio of 1:1, in which one token is equivalent in value to 1g of gold, whereas others use different ratios. The PMGT is one of the few cryptocurrencies validated by a government. Although some of these products involve costs such as exchange fees and demurrage (shipping) fees, most do not have any transaction fees or storage costs.

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## Outlook

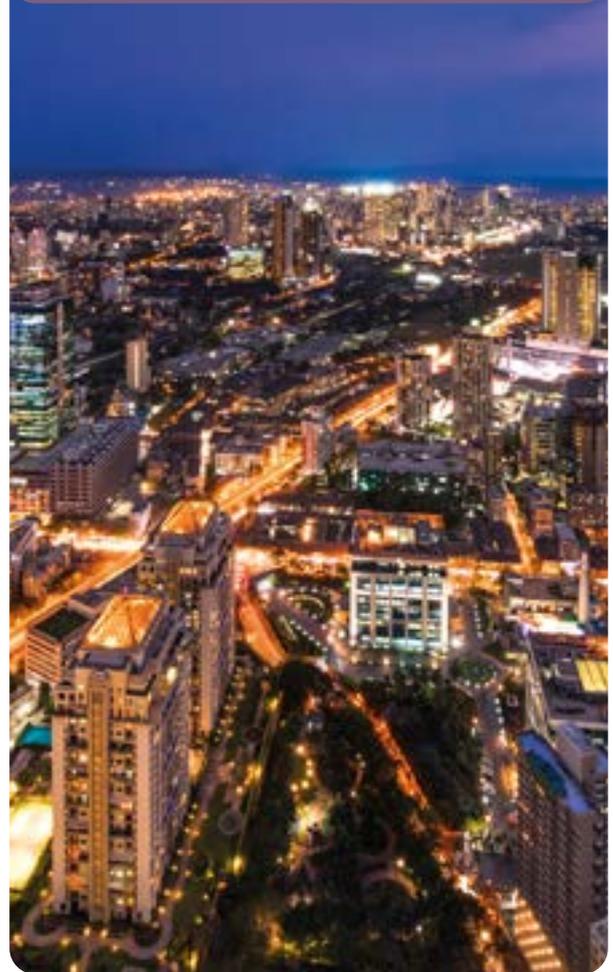
Given India's large stock of household gold savings, monetising gold effectively will remain key to reducing import dependency. To do this, ensuring the success of GMS will be imperative, both for the government and the industry. With gold ever vulnerable to rising import duties in India, increased participation in GMS is perhaps the only long-term solution to mitigate the adverse impact of gold imports on India's CAD.

The increasing share of organised players is extremely positive news for financial inclusion. This will enable better access to credit for a large part of the population of India who have previously had to rely on unorganised sources for their financing needs.

In the coming years the rising penetration of the banking sector across India could act as a headwind to the growth of the loan against jewellery industry as consumers increasingly secure access to other forms of credit, such as personal loans. That said, given that personal loans are not collateral-backed, the banking system will always find it preferable to provide loans against gold as their associated credit risk is much lower.

We expect organised players to see their market share grow, potentially securing half of the overall market in the next five years. If the gold spot exchanges can develop gold-backed financial products, these too will likely provide impetus to the financialisation of gold in India.

The increasing share of organised players is extremely positive news for financial inclusion



# Chapter 5

## Bullion trade





With very little mining and modest levels of recycling, India is heavily reliant on bullion imports to meet its domestic demand. Indian official imports have continued to grow despite high import duty with official imports averaging 760t over the last decade.

Doré imports have become an increasingly important part of the gold import landscape in India. With lower duty on gold doré, the share of gold imports has increased from 11% in 2014 to 29% in 2020.<sup>1</sup> Higher import duty on bullion has encouraged unofficial imports with the East/North-East and South states acting as the main conduit for unofficial imports into the country.



# Chapter 5 contents

<b>Indian official imports</b>	<b>90</b>	<b>Official import trends</b>	<b>94</b>
Despite the high import duty, official imports have continued to grow	90	Banks cede market share to refiners and nominated agencies	94
<b>Bullion imports</b>	<b>91</b>	<b>Gold value chain</b>	<b>96</b>
A range of companies can import gold	91	Value chain as diverse as the country	96
<b>Gold trading volumes</b>	<b>92</b>	<b>Bullion banking in India</b>	<b>98</b>
<b>Gold doré imports</b>	<b>93</b>	Bullion banking is a catalyst for change in India's gold market landscape	98
Doré imports have become an increasingly important part of the gold import landscape	93	<b>Key import locations</b>	<b>98</b>
Limited availability and competition are key roadblocks to sourcing gold doré	93	<b>Unofficial imports</b>	<b>99</b>
Duty benefits and increasing exports from South America have mitigated the challenges of sourcing gold doré	93	Bullion import regulations have, at times, encouraged unofficial flows into India	99
Responsible sourcing of gold doré and India Good Delivery Standards will facilitate growth in the Indian refinery industry	94	<b>Outlook</b>	<b>100</b>

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# Bullion trade

## Indian official imports

**Despite the high import duty, official imports have continued to grow**

India is the world's second largest gold consumer.<sup>2</sup> However, the country is heavily dependent on imports to fulfil this demand. Over the five-year period 2016-20, imports made up 86% of India's gold supply, while recycling accounted for 13% and mining accounted for just 1%. Higher gold imports can have a negative impact on the country's balance of trade and have, at times, led the government to implement measures to try to curb gold imports.

Although the gold market was liberalised in the 1990s, efforts to curb gold imports only began in 2012. In the financial year (FY) 2012-13, the Indian economy witnessed a slowdown to 4.5% from 6.7% growth in FY 2011-12, and with it a widening of the current account deficit (CAD) to around 4.8% of GDP from 1.3% in FY 2007-08.<sup>3</sup> The authorities partly attributed this to rising gold imports, which had surpassed 900t in 2010. As a result, over a period of just eight months, between January and August 2013, the government raised the import duty on bullion five-fold, from 2% to 10%.

Later, other stringent regulations governing imports were introduced. One of the key measures taken to restrict imports was the '80:20' rule, under which 20% of all gold imported had to be exported as jewellery.

While the 80:20 rule was rolled back in November 2014, import duty remained at 10% for nearly eight years before being further increased to 12.5% in July 2019. This was not an isolated move targeting gold, but part of a broader revenue-raising budget: taxes on many imported items, including electronics, increased along with personal income tax – the higher rate of which jumped from 35% to 42.7%. So, rather than being designed specifically to curb gold demand, the increase in duty was part of a wider tax-raising initiative with the objective of improving the government's fiscal position. In the last Union Budget of February 2021,

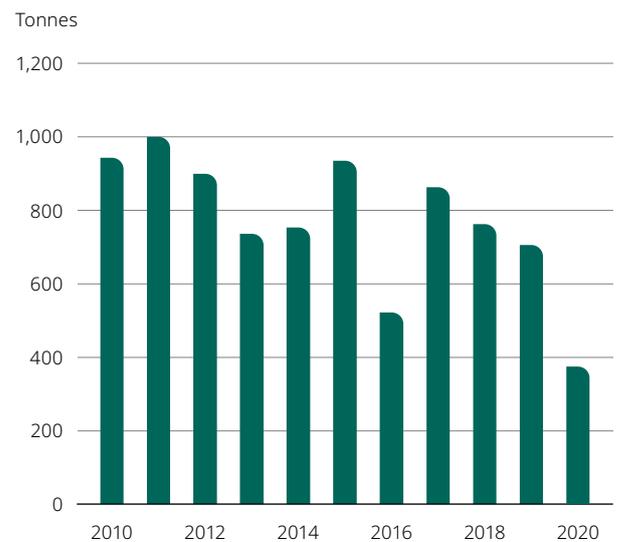
total import duty on a gold bar was reduced to 10.75% – compared to 12.875% before the budget<sup>4</sup> – in light of the significant increase in the gold price since the previous duty increase.

Since the first duty hike in 2012, India has imported some 6,581t of gold, averaging 730t per annum (**Chart 1**). There have been several noteworthy developments over this time, including a significant increase in doré shipments and a change in the nature of gold smuggling.<sup>5</sup>

Note: Metal recovered from an ore body formed into unrefined bars is known as 'doré'. These unrefined bars contain gold as well as other metals (such as silver or copper). The gold doré bar contains less than 5% impurities.

**Chart 1: India's official gold imports have averaged 730t since the first customs duty hike in 2012**

Indian official imports from 2010 to 2020



Note: Indian official imports in fine gold content terms.  
Source: IHS Markit, Metals Focus, World Gold Council

## Bullion imports

### A range of companies can import gold

Even though gold imports are taxed, the regulations are nowhere near as severe as they were during the period of the Gold Control Act.<sup>6</sup> Today, three agencies regulate the trade: the Reserve Bank of India (RBI); the Director General of Foreign Trade (DGFT); and the Ministry of Finance. Under current guidelines, banks, nominated agencies (including trading houses) and exporters can import refined gold.<sup>7</sup> Banks are authorised by the RBI, whereas nominated agencies and exporters fall under the Foreign Trade Policy (FTP) and hence are licensed by the DGFT. The DGFT also manages doré import licences.

There are no restrictions on quotas for importing gold into India

Aside from the companies named specifically as nominated agencies there are two important groups of importers: Four Star Trading Houses and Five Star Trading Houses.<sup>8</sup> Four Star and Five Star Trading Houses are firms that have excelled in international trade and have successfully contributed to the country's foreign trade. Each are defined by their 'export performance': specifically, the value of their exports during the current and previous two financial years. According to the Foreign Trade Policy 2015-2020, Four Star Export Houses should have an export performance of US\$500mn in at least two of the previous three years, rising to US\$2bn for Five Star Export Houses.

There are no restrictions on quotas for importing gold into India, provided the necessary duties are paid. There are, however, certain conditions on Four and Five Star Trading Houses with a nominated agency certificate; these were introduced by the DGFT in October 2017. Under the restrictions, the import of gold by Four Star and Five Star Trading Houses is subject to "actual user condition", meaning they can only import gold for their own use and are permitted to import gold as input solely for the purposes of manufacture and export by themselves during the remaining validity period of the nominated agency certificate.<sup>9</sup> The restrictions on gold imports by Star Trading Houses were intended to streamline bullion imports and check round tripping.<sup>10</sup> There have also been other regulations that have impacted the bullion industry in the last five years (Table 1).

**Table 1: Regulations for Indian bullion industry between 2017 and 2020**

Notification date	Comments
August 14, 2017	Ban on export of medallions and coins above 22k
August 25, 2017	Import of gold coins and medallions from South Korea restricted
October 18, 2017	No nominated agency certificate to be issued/renewed for Four Star and Five Star exporters and the import of gold by Four Star and Five Star exporters is subject to actual user condition
September 26, 2019	Advance Authorisation shall not be issued for gold coins and medallions export. Advance Authorisation Scheme allows duty-free imports of bullion which are meant for exports
December 18, 2019	Import of gold doré and bullion moved to restrictive list and import is allowed through nominated agencies as notified by the RBI (in case of banks) and the DGFT (for other agencies). However, import under Advance Authorisation and supply of gold directly by the foreign buyers to exporters against export orders are exempted
February 1, 2020	Tax Collected at Source (TCS) of 0.1% on sale of goods above Rs5mn in a year by a seller whose turnover exceeds Rs100mn

Source: Department of Commerce, Ministry of Finance, World Gold Council



Currently, 16 banks, five nominated agencies, six trading houses and various exporters whose export performance matches the government’s threshold limits for Five Star and Four Star Trading Houses are allowed to import gold (Table 2).<sup>11</sup> The banks usually import gold on a consignment basis, while trading houses and nominated agencies do so on a direct payment basis.<sup>12</sup>

Table 2: Companies importing gold in India

Banks	Nominated agencies/Trading houses
Axis Bank	Metals and Minerals Trading Corporation Ltd (MMTC)
Punjab National Bank	Handicraft and Handloom Export Corporation (HHEC)
Union Bank of India	State Trading Corporation (STC)
Bank of Baroda	Project and Equipment Corporation of India Ltd (PEC)
Bank of India	Diamond India Limited (DIL)
Federal Bank Ltd	EOU and SEZ gems and jewellery units, for their own consumption
HDFC Bank Ltd	Five Star Trading Houses (only for self use)
ICICI Bank Ltd	Four Star Trading Houses (only for self use)
Indian Overseas Bank	
IndusInd Bank Ltd	
Industrial and Commercial Bank of China	
Kotak Mahindra Bank	
Karur Vyasa Bank	
RBL Bank	
Yes Bank Ltd	
State Bank of India	

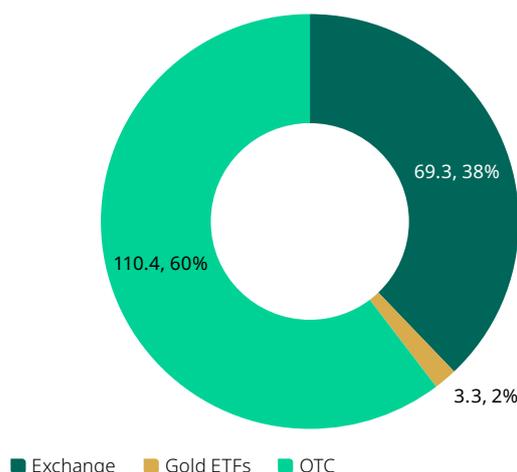
Source: RBI, World Gold Council

## Gold trading volumes

The gold market is large, global and highly liquid. Gold’s average daily trading volume was US\$183bn in 2020.<sup>13</sup> Over-the-counter (OTC) trading and trading on exchanges constitute the majority of gold trading volumes. Trading on exchanges is more transparent than bilateral trading on the OTC market. Trading on the OTC market can be opaque and affects price discovery. In 2020, the average daily trading volumes on futures and spot exchanges was US\$69.3bn, with gold ETFs generating average trading volumes of US\$3.3bn (Chart 2). India’s contribution to these totals was just US\$1.2bn and US\$3.4mn respectively.<sup>14</sup> Bilateral trading on the OTC market, however, is far more opaque and, with estimated daily trading volumes of US\$110.4bn, can affect price discovery.

Chart 2: Gold is liquid across key investment platforms

Average daily trading volumes of gold in 2020, US\$bn



Note: Average daily trading volumes from 1 January 2020 to 31 December 2020. Source: Bloomberg, Nasdaq, World Gold Council

Gold’s average daily trading volume was US\$183bn in 2020



## Gold doré imports

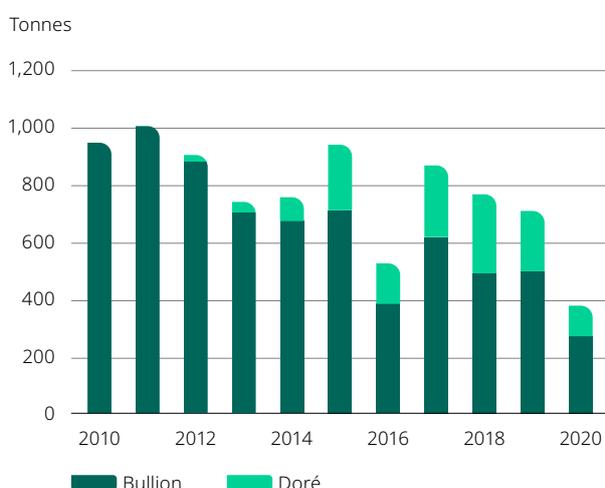
### Doré imports have become an increasingly important part of the gold import landscape

One important change that has taken place in India's gold market is the growth in gold doré imports. The increase in doré imports reflects the government's accommodative stance towards gold refining. Before the Union Budget of 2016, the duty differential between refined gold and gold doré was 1-2%, which often allowed Indian refineries to pay considerable premiums to miners for doré imports.<sup>15</sup> Post the July 2019 budget, the duty differential reduced to 0.65% between refined gold and doré imports. And in the Union Budget of February 2021 the duty differential between refined gold and doré imports has increased slightly to 0.66%, with refined gold taxed at 10.75% and doré taxed at 10.09%. As a result of duty benefit, doré imports increased from a mere 21t in 2012 to 276t in 2018.<sup>16</sup> Doré imports fell to 212t in 2019 due to a combination of slowing demand and the domestic market trading at a discount (for a considerable period), which at times made it unprofitable for refineries to import doré.

The duty benefits also led to a massive expansion of refining capacity in India, with the number of refineries growing from three in 2012 to 32 in 2020.<sup>17</sup> In the last five years, gold doré imports made up 30% of total official gold imports (**Chart 3**). Currently, some 25-26 refineries are active,<sup>18</sup> with a combined refining capacity of 1,200-1,400t.<sup>19</sup> Of these, 23 refineries imported doré in 2020 and the top five refineries accounted for more than 70% of India's doré imports.

### Chart 3: Gold doré made up 30% of total imports in the last five years

Indian imports by bullion and gold doré from 2010 to 2020



Source: IHS Markit, Metals Focus, World Gold Council

The top five refineries accounted for more than 70% of India's doré imports

### Limited availability and competition are key roadblocks to sourcing gold doré

According to Metals Focus, in 2018, globally, only around 1,565t of gold doré was available on the open market for export and refining, well below what was needed to satisfy demand. Of the total global gold mine production of 3,505t, some 85% was recovered to account for 2,980t of gold doré. But an important share of global doré can be defined as captive – it does not reach the international market. This covers doré mined in China (404t), Russia (297t), South Africa (130t) and Ontario in Canada (120t).<sup>20</sup> With another 465t of gold production as a by-product and from concentrates, this leaves around 1,565t of doré on the open market; significantly less than 2018's global mine supply total.

The second challenge facing Indian refineries concerns the growing competition in sourcing this limited amount of doré. Global refining capacity has grown in recent years through a combination of new plants and upgrading of existing installations. And global recycling has declined sharply, from a record total of 1,629t in 2012 to 1,283t in 2020. Competition for doré is fierce.

### Duty benefits and increasing exports from South America have mitigated the challenges of sourcing gold doré

The duty advantage on gold doré has helped Indian refineries to pay premia for gold doré to the miners and compete with other global refineries on aggressive terms. Indian refineries have also been able to form a strong relationship with gold doré exporting countries in South America, such as Peru and Bolivia, and set up offices in these countries. The increasing exports from these countries have helped to meet the doré demand from refineries in India.



Indian refiners will play a more prominent role in the gold industry



**Responsible sourcing of gold doré and India Good Delivery Standards will facilitate growth in the Indian refinery industry**

As part of the global Financial Action Task Force (FATF), India is obliged to follow responsible sourcing. Good progress is already underway on this front. The country's only LBMA-accredited refinery processes ~45-50% of gold doré imports and the wider gold industry is working closely with the OECD to develop due diligence audit systems and rules for sourcing gold doré aligned to the OECD's guidance. Also, the local exchanges, including the Multi Commodity Exchange of India (MCX), the Bombay Stock Exchange (BSE) and the National Stock Exchange (NSE), have issued guidelines for India Good Delivery Standards whereby they will accept bullion bars produced by the Bureau of Indian Standards-accredited domestic refineries against settlement of gold futures contracts. Responsible sourcing and India Good Delivery Standards will facilitate the growth of Indian refiners. Also, with the set-up of bullion banking in India, India Good Delivery bars will be accepted by banks and the domestic gold spot exchange in India. With these developments, Indian refiners will play a more prominent role in the gold industry rather than relying on duty differentials.

## Official import trends

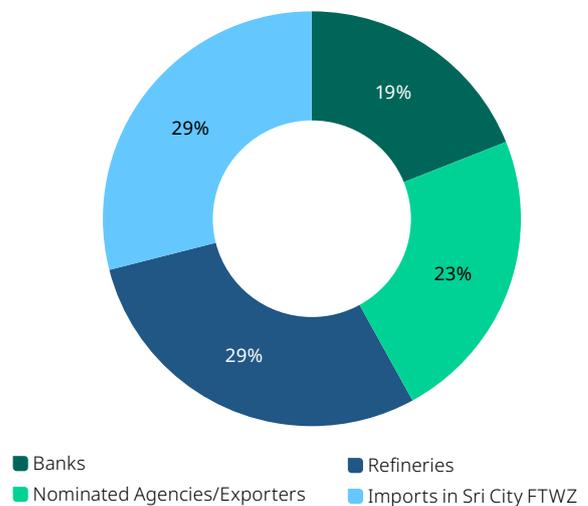
### Banks cede market share to refiners and nominated agencies

There have been some interesting changes in the share of importers and origin of imports over the last five years. The banks' share of official imports shrunk from 40% in 2017 to 19% in 2020 as the business shifted to refineries. There are two main reasons for this shift: bullion banks like Nova Scotia exited their precious metals business; and many large bullion dealers, previously clients of the banks, set up their own refineries.

As doré imports have grown, refineries have become far more prominent importers, achieving a 29% share of India's official imports in 2020.<sup>21</sup> Imports into the Sri City Free Trade Warehousing Zone (FTWZ) made up a further 29% of imports in 2020. These imports landed in FTWZ to avoid delays, thanks to automated customs assessment in the clearance of imports, and to take advantage of customs duty available on imports.<sup>22</sup> Nominated agencies and exporters made up 23% of official imports in 2020 (Chart 4).

**Chart 4: Refineries and Sri City FTWZ accounted for the majority of imports in 2020**

Indian imports by category of importers in 2020

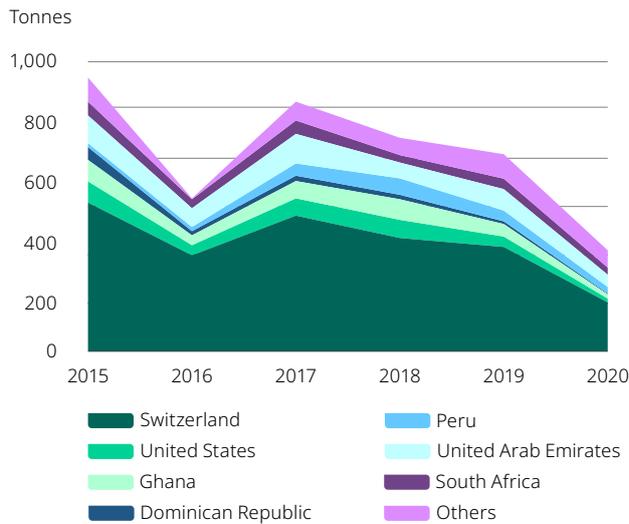


Source: IHS Markit, Metals Focus, World Gold Council

In 2020, India imported 377t of gold bars and doré from over 30 countries; 55% of the imports came from just two countries – Switzerland (44%) and the UAE (11%). The ramp-up in doré imports has seen new countries emerge as suppliers of gold to India, including Peru, Bolivia and the Dominican Republic (Chart 5).

**Chart 5: Switzerland is the largest gold exporter to India**

Top gold exporting countries to India from 2015 to 2020



Source: IHS Markit, Metals Focus, World Gold Council

Some two-thirds of imported gold is in the form of 995 cast kilobars or 100g bars. 999 purity bars account for much of the remaining one-third of imports. Over the last few years, 100g bars have gained in popularity, with increased demand from small dealers or manufacturers.

100g bars have gained in popularity, with increased demand from small dealers or manufacturers



In 2020, India imported 377t of gold bars and doré from over 30 countries





## Gold value chain

### Value chain as diverse as the country

India's gold value chain is multi-faceted. It varies both by segment and by the size of the company involved. Put simply, large participants are more likely to be vertically integrated. There can also be considerable overlap between various value chains, an example of which would be retailers selling both jewellery and investment products. For example, a bullion dealer would not sell jewellery and there are some retailers who do not sell bars and coins as margins are lower and they involve high capital blockage.

Given the dependence on imports, the first link in the value chain covers gold imports. This segment is represented by banks, trading houses and refineries. Once the gold is imported it is sold either to a bullion dealer, a manufacturer or a retailer, depending on the size of the transaction. Importantly, only sizeable players buy gold directly from the banks, who in turn sell the bullion to smaller dealers.

The fact that gold importers are few and often restricted to large cities means that bullion dealers form an important link between importers and consumers. There are three distinct layers of bullion dealers in India:

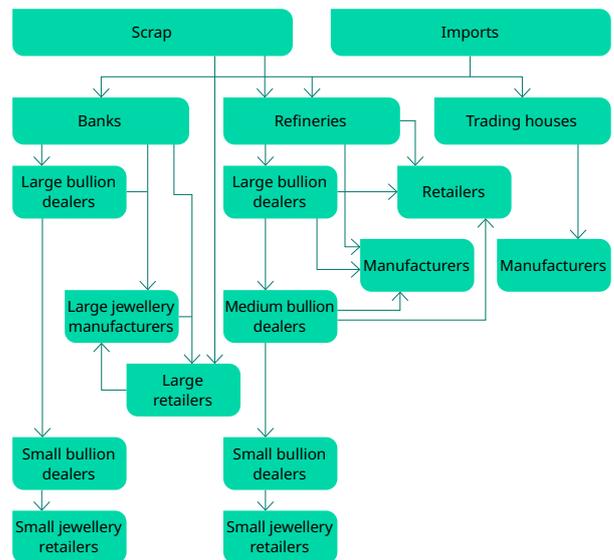
- **First level bullion traders:** there are 8-10 very large bullion dealers in metro and Tier 1 cities who buy gold directly from the importer. They work with local refineries who convert the imported kilobars into 100g bars
- **Second level bullion dealers:** the 100g bars are sold to around 30-50 medium-sized dealers in Tier 2 and Tier 3 cities, and jewellery manufacturers. These bullion dealers work with local refineries to convert 100g bars into small denomination bars of 50g or 10g
- **Third level bullion dealers:** small manufacturers and retailers buy gold from the third level bullion dealers located in semi-urban and rural areas who tend to sell 50g and 10g bars bought from medium-sized dealers.

The bullion business also changed significantly after Goods and Services Tax (GST) was introduced (**Focus 1**).

Bullion dealers are an important link in meeting investor requirements. Larger dealers mint their own coins and bars, which are sold locally via a network of smaller bullion dealers; this gold is sourced from importers and local refineries. The latter also mint their own coins, which are sold to bullion dealers for onward distribution.

The other important layer in the value chain consists of participants that work with the jewellery trade. Both large manufacturers and retailers tend to buy gold from importers. Retailers such as Tanishq, Malabar, Kalyan, Joyalukkas and Senco often buy gold from banks or nominated agencies, whereas medium-sized, regional jewellery retailers purchase directly from refineries and large bullion dealers. Finally, small retailers and manufacturers tend to buy from medium-sized bullion dealers (**Figure 1**).

Figure 1: Process flow diagram for gold value chain in India



Source: Metals Focus, World Gold Council

## Focus 1: Impact of GST on bullion trade

The implementation of the Goods and Services Tax (GST) in India during 2017 was one of the biggest tax reforms India has seen. The GST regime has transformed the Indian economy into a digital and standardised one, which in turn has helped to create a seamless information flow and a common dataset – available both centrally and to the states – and has made direct and indirect tax collections more efficient. The objective of GST is to remove the imperfections prevalent in indirect taxes and improve tax compliance. In effect, it mitigates the tax-cascading effect for the consumer, which had increased cost.

To provide some context, GST subsumed most national and local taxes into one single tax rate applicable across India. Before GST, gold attracted 10% customs duty, 1% excise duty and 1-5% Value Added Tax (VAT), depending on the state; the highest being 5% VAT in the state of Kerala. In 2017, GST for gold was fixed at 3% (replacing the excise duty and VAT), while the 10.75% import duty on gold remains.

Along with simplifying the tax structure for all industries, it also brought around a profound shift in the operations of bullion dealers across much of the country and effectively led to consolidation in the industry where large and organised players have benefited at the expense of small and unorganised bullion dealers.

To explain this in detail, traditionally, apart from the large bullion dealers, smaller entities were scattered across India, catering to local jewellers. Before GST came into effect, bullion dealers wanting to sell in different states needed to obtain a VAT registration for each and bear an irrecoverable central government sales tax. Some states like Maharashtra charged a

stamp duty, while states like Kerala had an entry tax. As a result, large bullion dealers in some states restricted themselves to working in their locality as they could not compete with local dealers due to tax differentials.

Additionally, jewellers in some states had to pay a 1% entry tax if they brought in jewellery fabricated elsewhere. As a result, small regional jewellers preferred to buy bullion from local players, which would then be fabricated within the state. This helped avert the 1% tax and thus benefited margins. This in turn led to an increase in the number of regional bullion hubs. Further to this, jewellery bought from another state also attracted Octroi (a city entry tax levied by a few states) and regular border checks, making it risky and often time consuming to transport inter-state. Importantly under the pre-GST regime, tax paid in one state could not be offset against tax paid elsewhere. Now, under GST, this is no longer the case as bullion dealers can claim input tax credit, which lends itself to increased cross-state flows and transactions.

Now, with GST, the tax advantages that helped local bullion dealers have diminished and smaller players are unable to compete on price. The pricing power now sits with refineries and bigger bullion dealers who are able to deal directly with buyers across any state. Naturally, this has led to consolidation in the industry and large players have gained market share.

**Surendra Mehta**  
National Secretary  
Indian Bullion and Jewellers Association Ltd





## Bullion banking in India

### Bullion banking is a catalyst for change in India's gold market landscape

India is the second largest consumer of gold in the world, but the Indian gold market faces multiple challenges, such as a lack of quality assurance, the unorganised state of the market and a lack of trust in international markets. Bullion banking is one of the key pillars to address these challenges and help establish India's position among leading global and regional markets. However, India will need to address a few developmental roadblocks in building a bullion banking ecosystem; namely, regulatory restrictions, lack of infrastructure and limited bullion banking expertise. The local gold industry is working with the government on a broad set of reforms to address India's gold market challenges; with regulatory support from the government India can build a successful bullion banking industry.

### An effective bullion banking industry could transform India's gold market through:

- **greater access to the bullion market for banks and other financial institutions:** banks could have greater access to the bullion market, including gold spot and derivatives trading. Banks could be encouraged to pursue product innovation and attract retail participation in the bullion market. With bullion banking, insurance companies could offer gold and gold futures products to customers
- **boosting essential policy reforms:** bullion banks can make a meaningful contribution to other gold-related reforms:
  - they can boost participation in the gold spot exchange by acting as clearing and trading members, and liquidity providers
  - they can boost participation in the gold monetisation scheme through increased mobilisation of gold from the public
  - they can help establish the assaying infrastructure that is a prerequisite for an organised gold market.
- **increased liquidity for bullion trade:** the set-up of bullion banking could increase liquidity for bullion trade through:
  - interbank lending and borrowing in both the local and the global bullion markets
  - central bank lending bullion to commercial banks and other entities.

The timing of bullion banking reform in India could not be more propitious. The Indian gold spot exchange is expected to launch in the near future – a key moment in the development and formalisation of the domestic gold market. India would reap significant benefits, both within its gold market and across the wider economy, if it were able to build a robust bullion banking industry.

## Key import locations

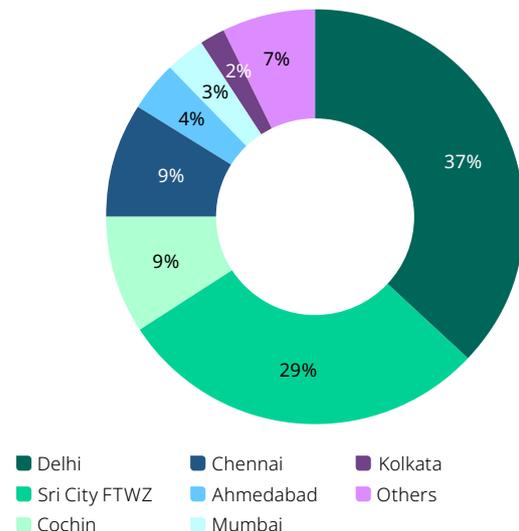
Gold officially shipped into India comes via air into 11 cities. In addition to these cities, gold is also imported in Sri City FTWZ, located in the town of Satyavedu in the state of Andhra Pradesh. These airports are near to key manufacturing and trading hubs, namely:

- **North:** New Delhi, Jaipur
- **West:** Mumbai, Ahmedabad
- **South:** Bengaluru, Chennai, Cochin, Coimbatore, Hyderabad, Trivandrum, Sri City FTWZ
- **East:** Kolkata

In 2020, 84% of imports came through airports located in North and South India, with the remaining 16% coming through airports in West and East India (Chart 6).

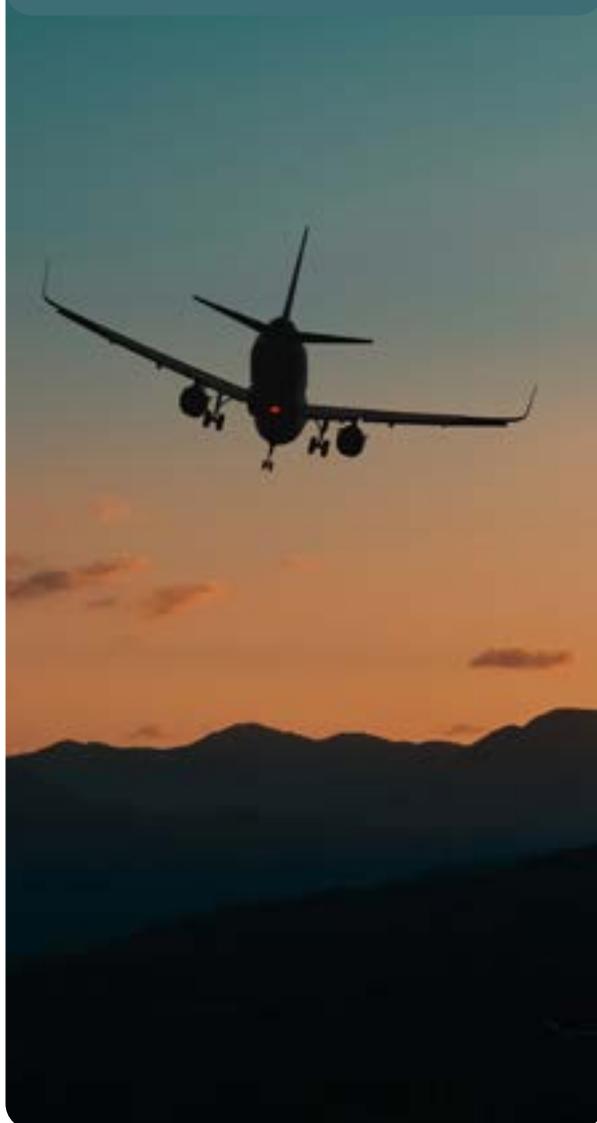
### Chart 6: 84% of official imports came through airports located in North and South India

Imports in 2020 by airports



Source: IHS Markit, Metals Focus, World Gold Council

65-75% of gold smuggled into India comes by air, 20-25% by sea and the rest by land



## Unofficial imports

### Bullion import regulations have, at times, encouraged unofficial flows into India

There is a long history of unofficial flows of gold into India. During the Gold Control period between 1960 and 1990 gold was largely smuggled into India, typically arriving by sea from the western part of Asia (including the Middle East) and the CIS. The gold landed in Maharashtra, Gujarat and some parts of Southern India. After the Gold Control Act was abolished in 1990 these unofficial flows effectively disappeared, until the increase in the import duty in 2012 helped revive the smuggling trade.

The dynamics of the unofficial trade have changed during the last five years. Structural changes, including demonetisation and the introduction of GST, led to a drop in unofficial flows from 119t in 2015 to 100t in 2018.<sup>23</sup> Smuggling then recovered to 117t in 2019 as the duty hike provided a renewed incentive to buy gold unofficially, before collapsing to 22.3t as COVID-19 hit in 2020 (Table 3).

**Table 3: Unofficial bullion imports in India (tonnes)**

2015	2016	2017	2018	2019	2020
119	116	105	100	117	22.3

Source: Metals Focus, World Gold Council

In recent years, gold smuggling has shifted away from the sea in favour of air and land routes. Two key reasons for this are increasing vigilance across India's 7,517km coastline, and the impact of gold price volatility, given the time taken to deliver seaborne freight to its destination (as the smuggler often bears the price risk).



Previously, the western borders and coastlines of India provided a major entry point for smuggled gold. However, greater vigilance in policing these borders has shifted flows towards the East and North-East. Around 70-80% of gold smuggled into India lands in the East/North-East and South states:<sup>24</sup>

- **East and North-East states:** by volume, 40-45% of smuggled gold lands in the states of West Bengal, Manipur and Mizoram, the majority of which comes from Bangladesh, Myanmar and China. The growth of smuggling through these routes is due to a combination of:
  - the liberal trade policies of India's eastern neighbours, e.g., Myanmar, which removed the prohibition of gold exports in 2018
  - the introduction of the Free Movement Regime between India and Myanmar in 2018, which allows for ease of cross-border travel
  - the unorganised nature of smuggling operations in the East and the North-East has created a lower barrier to entry than exists in South India.
- **South states:** the Southern states of Kerala, Tamil Nadu, Andhra Pradesh and Telangana account for 30-35% of India's smuggled gold by volume. Gold smuggled into these states comes from the UAE and South-East Asia
- **Rest of India:** the remainder of India contributes 20-30% of the smuggled volume of gold, and this is mainly sourced from the UAE.

A variety of routes are used to smuggle gold into India. The majority – around 65-75% – comes in by air, around 20-25% by sea and 5-10% by land.<sup>25</sup> Smuggling is usually carried out by low-income workers returning home; they receive carrier fees as well as a sponsored air ticket. Smuggling via land or sea routes tends to occur through the relatively porous borders that India shares with its neighbours, notably Myanmar, Nepal, Bangladesh and Sri Lanka.

## Outlook

Imports will remain the critical source of supply to India's gold market for many years. Banks will continue to face competition from refineries in their overall market share for official imports in India. Measures such as a ban on the export of gold medallions above 22k and conditions imposed on gold imports by Four Star and Five Star Trading Houses will streamline bullion imports. In the short term, lower customs duty on gold may boost consumer demand and curb unofficial imports.

Looking ahead, banks and refineries may be allowed to export bullion in the future and Indian bullion imports may flow through the India International Bullion Exchange (IIBX), moving away from the current consignment model for bullion imports in India.

The outlook for doré imports is promising but with headwinds. Indian refineries already face challenges in sourcing doré, but duty benefits and increasing exports from South America have mitigated the risk of sourcing gold doré to some extent. Responsible sourcing of gold doré and India Good Delivery Standards look set to enable growth within the Indian refinery industry.

# Chapter 6

## Gold refining and recycling





As India's demand for gold outpaces its domestic mine supply, demand is fulfilled by imports as well as gold recycled locally. Recycling in India is a Rs440bn industry making up 11% of the average local annual supply.<sup>1</sup>

The number of refineries in India has increased over the past decade and this has boosted local job creation. Local refineries have also enjoyed enhanced profitability through imports of gold doré, due to its advantageous duty differential.<sup>2</sup> To position India as a competitive refining hub, policy measures have to create other advantages, including export of bars, consistent supply of doré or scrap and a strong framework of standards and infrastructure.



# Chapter 6 contents

<b>Executive summary</b>	<b>104</b>	<b>Recycling trends</b>	<b>110</b>
The refining industry in India	104	Recycling is an important source of supply for jewellers	110
The key role of recycling	104	Jewellery is the largest source of recycling	111
Standards and sourcing	104		
Looking ahead	104		
<hr/>		<hr/>	
<b>India's gold refining landscape</b>	<b>105</b>	<b>Drivers and challenges to gold recycling in India</b>	<b>113</b>
Tax advantages have underpinned the growth of India's gold refining industry	105	Key drivers of recycling in India	113
The refining sector has grown over the last decade but expansion is slowing	106	Challenges to gold recycling in India	114
Most refineries focus on kilobars and minted products	108		
<hr/>		<hr/>	
<b>Responsible sourcing and India Good Delivery Standards</b>	<b>109</b>	<b>Outlook</b>	<b>114</b>
India's legislative landscape enables responsible sourcing of doré	109		
India Good Delivery Standards should boost the local refining industry	109		
The Revamped Gold Monetisation Scheme will further encourage IGDS	110		
		<hr/>	
		<b>Chapter 6: Appendix 1</b>	<b>135</b>

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# Gold refining and recycling

## Executive summary

### The refining industry in India

India's gold refining industry has seen significant growth over recent years. It is estimated that from 2013 to 2021 capacity increased by 1,500t (500%). But the contribution of the informal sector should not be overlooked; it perhaps accounts for as much as an additional 300-500t.

Advantageous customs duty on gold doré fuelled the industry's growth while it lasted. But the introduction of the Goods and Services Tax (GST), as well as the impact of the pandemic and other macroeconomic factors, affected refining profitability, especially among smaller players. Even today, the remaining small-scale refineries face stiff competition for a limited amount of imported gold doré.

### The key role of recycling

The country ranks fourth in global gold recycling. Over the past five years 11% of India's gold supply has come from 'old gold', driven by movements in the gold price, future gold price expectations and the wider economic outlook. But gold recycling faces headwinds. Anticipated growth in the Indian economy could mean higher incomes and less distress selling. And while fashion-conscious consumers tend to keep their gold jewellery for shorter periods of time and are more confident of gold's value when they sell, refineries cannot always make use of this gold.

Collection centres for recycled gold – set up by some of the larger refineries – are few and far between, and refineries are reluctant to buy direct from jewellers who deal largely in cash as source verification is impossible. Until these issues are resolved it seems that a sizeable percentage of India's gold recycling industry will remain unorganised.

### Standards and sourcing

The gold refining industry is a big employer, recognised as such by the government and supported by beneficial fiscal policy, such as the lower customs duty on unrefined gold doré compared with refined bullion. Sourcing guidelines have been introduced to ensure that gold doré comes direct from the country where it is produced. Gold recycling has been aided by the introduction of the India Good Delivery Standards (IGDS; 2020), which help refineries to establish a chain of custody and produce bars that meet the requirements of commodity and stock exchanges. The Revamped Gold Monetisation Scheme (R-GMS) allows interbank lending of gold against gold metal loans; it also enables jewellers to act as Collection and Purity Testing Centres (CPTCs) and larger refineries to act as centres for collection, testing and assaying.

### Looking ahead

India's demand for gold shows no sign of abating and while demand outweighs supply, recycling will continue to be key. The refining industry in India, currently stabilising after a period of change, is looking to the future. Some refineries choose to sell direct to investors and although only 5% of transactions are currently made digitally, doubtless this will increase as investors recognise the price advantage of buying direct. The raft of government guidelines, standards and processes will help refineries improve the traceability of recycled gold and become less dependent on gold doré imports, as well as limit the unorganised collection of scrap gold and increase efficiencies in recycling.

India's demand for gold shows no sign of abating so recycling will be key

# India's gold refining landscape

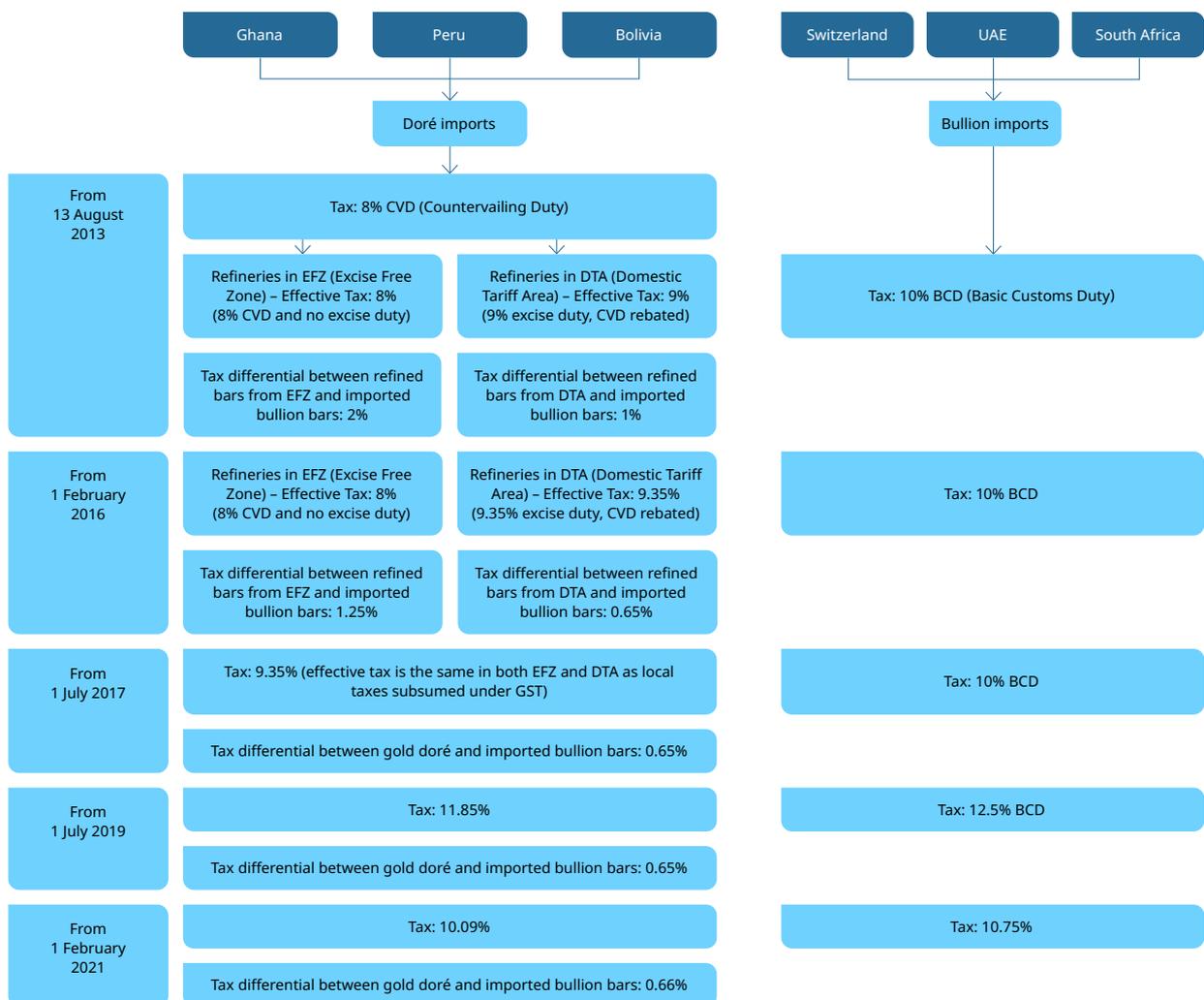
## Tax advantages have underpinned the growth of India's gold refining industry

The import duty differential that doré has enjoyed over refined bullion has spurred the growth of organised refining in India. To provide some context, in August 2013 the Indian government adopted a more accommodative stance towards domestic gold refining, introducing a duty differential between refined gold bullion and doré.<sup>3</sup> From 13 August 2013 to 31 January 2016 the duty on gold bullion was 10% with a duty differential of 1-2% for refineries depending on the zone in which they operated. Post the Union Budget of 2016 the duty on gold doré imports for refineries in the Excise Free Zone (EFZ) and Domestic Tariff Area (DTA) was 8.75% and 9.35% respectively, while the customs duty on bullion was maintained

at 10% – narrowing the gap for refineries to 0.65% and 1.25% respectively. Spurred by these tax incentives, around half of India's new refining capacity since 2014 has opened in the EFZs, mostly in the state of Uttarakhand (**Chapter 6: Appendix 1**).

The Goods and Services Tax (GST), introduced on 1 July 2017, subsumed other local levies – such as the excise duty and state-level value added taxes – and meant that there was no additional benefit to refiners in the EFZs as they now faced the same tax burden as those within the DTAs (9.35%). With the customs duty maintained at 10% post GST, the duty differential between gold doré imports and refined bullion remained at 0.65%. Changes to the import duty on gold doré since then have followed those on refined gold; the former still benefits from a differential. For instance, even after the duty cut in 2021, the gap between import duty on gold doré (10.09%) and refined bullion (10.75%) has remained at 0.66% (**Figure 1**).<sup>4</sup>

Figure 1: A stylised illustration of gold doré/bullion duty differential



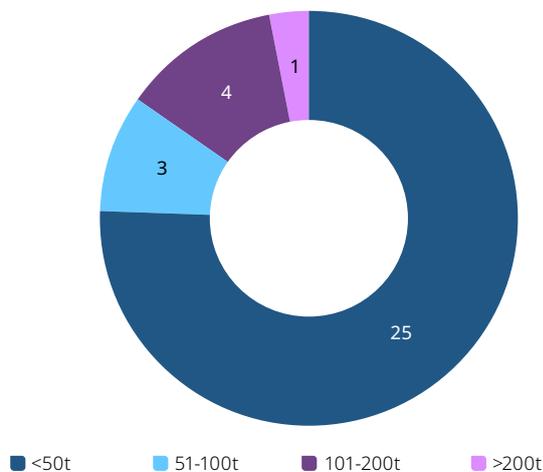


### The refining sector has grown over the last decade but expansion is slowing

India's gold refining landscape has changed notably over the last decade, with the number of formal operations increasing from fewer than five in 2013 to 33 in 2021.<sup>5</sup> As a result, the country's organised gold refining capacity has surged to an estimated 1,800t compared to just 300t in 2013.<sup>6</sup> The majority of these refiners have an annual capacity of less than 50t (Chart 1).

**Chart 1: The majority of Indian gold refineries have an annual capacity of less than 50t**

India's gold refineries by capacity (tonnes)



Note: As of January 2022.  
Source: Metals Focus, World Gold Council

But the informal sector still accounts for a sizeable volume, perhaps as much as an additional 300-500t.<sup>7</sup> It is worth noting that the scale of unorganised refining has fallen as the scrap market has responded to the government's tightening of pollution regulations (which led to the closure of many local melting shops) and as more retail chain stores recycle old gold using organised refineries.

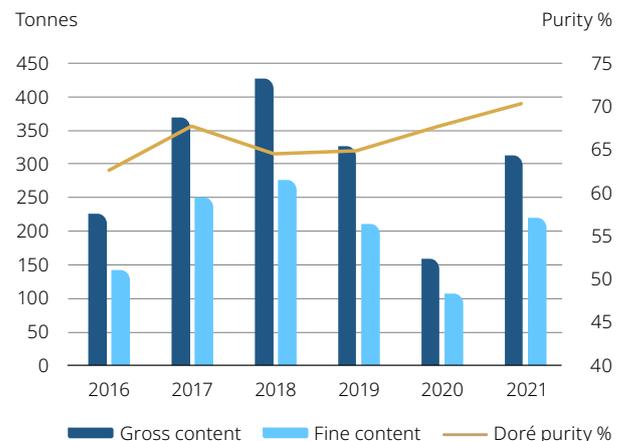
## Refining capacity surged from 300t in 2013 to 1,800t in 2021



This growth in refining capacity has facilitated a dramatic rise in doré shipments: from just 50t in 2013 to a record 276t in 2018.<sup>8</sup> In 2020, imports fell sharply to 159t, largely due to the impact of COVID-19. However, in 2021 – as a sense of normality gradually returned – they rose to 220t (Chart 2). As a result, gold doré's share of overall imports has risen from just 7% in 2013 to around 22% in 2021.

**Chart 2: Indian gold doré imports recovered in 2021**

Indian gold doré imports (tonnes) and purity (%)



Source: Metals Focus, World Gold Council

The expansion of the Indian refining sector has slowed in recent years as GST eliminated the advantage enjoyed by EFZs and led to a cutback in new capacity within these zones. New refinery capacity was further discouraged when the Uttarakhand government levied an entry tax of around 0.2% in March 2016 in an attempt to narrow the duty differential between DTAs and EFZs.<sup>9</sup>

Other factors have also impeded growth in the refining sector. Duty differential in EFZs had encouraged many companies to start refineries but once those advantages disappeared, many closed, leaving only genuine operations in existence.<sup>10</sup> Some refineries importing doré were unable to meet the accreditation standards set by the Bureau of Indian Standards (BIS) and the National Accreditation Board for Testing and Calibration Laboratories (NABL), and they too were forced to shut.<sup>11</sup> And finally, the persistent gold market discount – due to slowing economic growth, weak gold demand and the pandemic – meant that some doré imports became unprofitable even with the duty differential (**Chart 3**). Changes to policy and taxation might have helped such refineries. For example, if they had been allowed to export bullion bars and been able to reclaim customs duty and GST on exported bullion bars, their operations may have had the capacity to withstand times of weak domestic market demand or periods when the refinery had to close, such as the nationwide industry strike in 2016 or the COVID-19 lockdown in 2020.

Indian refineries face growing competition for a limited amount of doré and this too has impacted the industry's growth. This is a particular challenge for small-scale refineries who struggle to source gold doré from large-scale mines due to a lack of finance and the scale of their operations. The situation could be alleviated if nominated agencies (such as MMTC and Diamond India Pvt Ltd) and banks were allowed to import gold doré. In addition, the Indian government could facilitate joint ventures with overseas mining companies to guarantee the secure off-take of gold doré. Such steps should help facilitate the growth of refining in India.

### Chart 3: The persistent discount in the domestic gold market has created headwinds for doré imports

National Commodity & Derivatives Exchange Limited (NCDEX) polled premia/discount for domestic gold spot price vs landed gold price in India



Source: NCDEX, World Gold Council



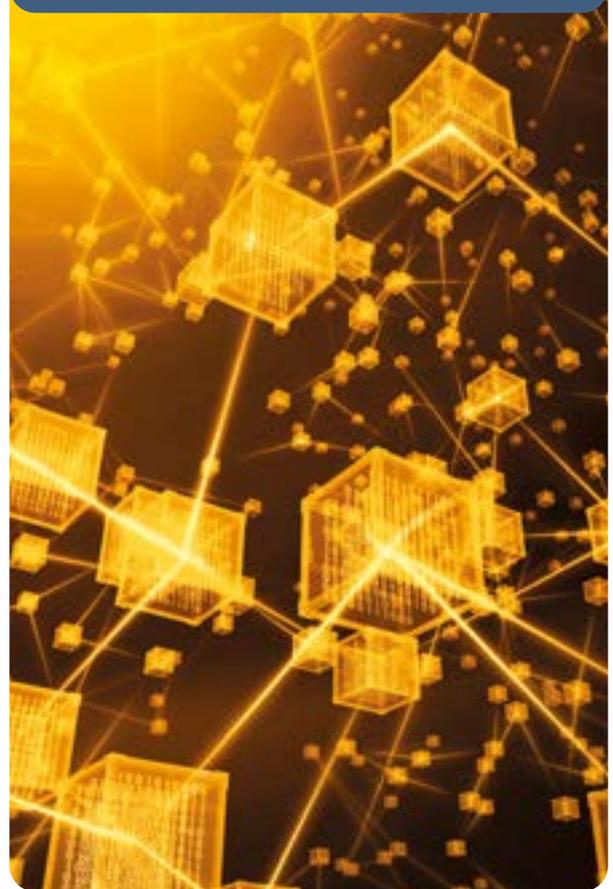
### Most refineries focus on kilobars and minted products

Only a small number of Indian refineries (MMTC-PAMP, Bangalore Refinery, Kundan and India Govt. Mint) have the capability to process speciality items such as chemicals, alloys and salts. These refineries also treat industrial scrap. The remaining refineries offer more traditional bars and coins – notably cast and minted.<sup>12</sup>

In general, Indian refineries tend to focus on producing kilobars and small minted bars. The former is predominantly sold to manufacturers, wholesalers, large retailers and institutional/high-net-worth investors, whereas minted bars are offered to small/medium retailers and individuals. Metals Focus' discussions with refineries revealed that 80%-85% of their business is in the form of cast bars (100g and kilobars), with the balance in minted products of 100g and below.<sup>13</sup> Interestingly, a large proportion of 100g cast and minted products are used by manufacturers particularly in Chennai and Ahmedabad.

Minted products include 2g, 5g, 8g, 10g, 50g and 100g, the most popular of which are 5g and 10g and account for more than 60% of sales.<sup>14</sup> Retail premiums on these bars and coins vary between 2% and 8% depending on the weight and point of sale.<sup>15</sup> Investors tend to pay less when buying direct from a refinery and many refineries now sell direct to investors via apps and websites or, more recently, through financial intermediaries such as Google Pay and Paytm. While digital gold and e-commerce have lifted online sales, less than 5% of overall gold purchases are transacted digitally<sup>16</sup> with 80%-85% of investment products still purchased from jewellery stores.<sup>17</sup> Although jewellery retailers still account for the majority of investment product sales, this figure has declined from its previous level of more than 90%. Sales by jewellers fell as refineries began selling direct via online and in store, enhancing their profit margins by removing a step in the sales chain. And with small bars and coins now being sold predominantly during key festivals, jewellers prefer not to increase their inventories when margins do not justify the holding cost. Overall, margins on these products have been curtailed through competition and many jewellers have chosen to stop selling bars and coins altogether.

While digital gold and e-commerce have lifted online sales, less than 5% of overall gold purchases are transacted digitally



# Responsible sourcing and India Good Delivery Standards

## India's legislative landscape enables responsible sourcing of doré

In recent years the gold industry has increasingly focused on responsible sourcing. The government has lent weight to this focus through the introduction of guidelines on sourcing doré. These ensure that gold is sourced directly from the country where it is produced. The Ministry of Finance also stipulates a minimum weight of 5kg per bar, with importers requiring a packing list and an assay certificate issued by the mining company.<sup>18</sup> This legislation aims to help the industry establish a chain of custody. And for refiners, the intention is to ensure that the imported doré is genuine and is not, for example, recycled gold.

## India Good Delivery Standards should boost the local refining industry

Prior to 2020 only London Bullion Market Association (LBMA) accredited 99.5% purity gold bars were accepted by the domestic commodity exchanges for delivery. However, in 2020, to help promote the government's initiative of Atmanirbhar Bharat (Self-reliant India), the India Good Delivery Standards (IGDS) were introduced by the BIS. The standards specify a range of measures such as fineness, weight, markings and dimensions (Table 1).

**Table 1: India Good Delivery Standards as per BIS**

Parameter	Description
Fineness	995 or above, no negative tolerance
Refining process	Aqua regia or Electrolysis
Dimensions	Length – 113-117mm
	Width – 51-55mm
	Height – 6.5-10.5mm
Weight	1,000g, no negative tolerance
Marks	Prominently stamped "1 Kg gold or 1,000g gold" on the face of the bar
	Identification of the refiner
	Fineness
	Stamping weight marks
	Serial number
	Year of manufacture

Source: Bureau of Indian Standards, Metals Focus, World Gold Council

These standards help BIS-accredited Indian refineries deliver their bars to the commodity/stock exchanges. To that effect, the National Stock Exchange (NSE), Bombay Stock Exchange (BSE) and the Multi Commodity Exchange (MCX) have recognised eligible refiners who satisfy the criteria of each exchange. Currently, only select refineries are eligible to deliver to these exchanges such as:

- MMTC-PAMP Pvt Ltd: MCX
- Gujarat Gold Centre Pvt Ltd: NSE
- Kundan Care: NSE, MCX
- M D Overseas: NSE, BSE and MCX
- Augmont: NSE, BSE, MCX
- Parker Precious Metals: BSE
- Sovereign Metals Ltd: BSE

This initiative will lessen the dependency of refiners on doré as they are now able to deliver bars refined from recycled gold onto the exchange, in the process benefiting from more transparent price discovery due to the higher number of refineries now able to deliver bars on local exchanges. A collective effort is required from both the BIS and industry players to ensure that, over the next five years, all refineries become IGDS-compliant, standards are implemented and overall trust is enhanced.

The implementation of IGDS will likely boost the organised scrap market as it will allow refineries to aggressively source scrap in the domestic market, especially from organised retailers. Currently, scrap collection in India is largely unorganised, with jewellers often the first point of collection. Most jewellers also have their own melting shops, so can convert jewellery into crude bars that are sent to manufacturers or artisans. But this trend is diminishing: in 2015, an estimated 70%-75% of the recycling industry was unorganised; by 2021 this had declined to 60%-65%.<sup>19</sup> With locally refined bars now meeting delivery requirements, the share of organised refining is likely to increase further, as the prospect of better price discovery encourages jewellers to convert crude bars into good delivery bars for delivery onto an exchange. This will be particularly helpful to jewellers who want to reduce their bullion inventory – for example, during periods when demand slumps – as delivering onto the exchange will be easier and enable better price realisation, particularly when discounts in the spot market are high as was the case during 2020.<sup>20</sup>

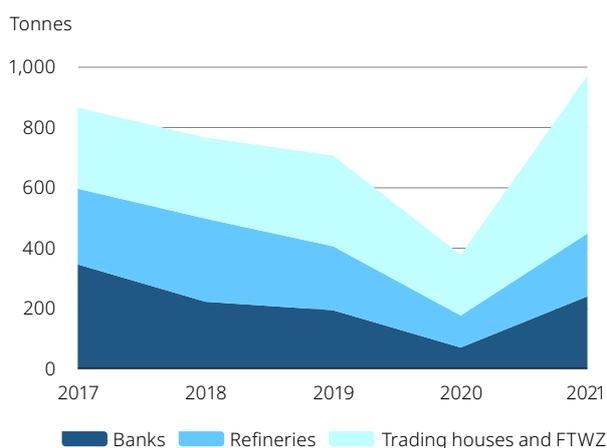


### The Revamped Gold Monetisation Scheme will further encourage IGDS

2021 saw other policy announcements specifically relating to the gold refining sector. These include a Revamped Gold Monetisation Scheme (R-GMS) and banks being allowed to buy locally refined IGDS bars.<sup>21</sup> R-GMS will enable interbank lending of gold against gold metal loans (GMLs) and allow for repayment using Indian refined gold (IGDS). This has several positive implications for the country's refining industry (as discussed in the following paragraph). R-GMS also allows jewellers to act as Collection and Purity Testing Centres (CPTCs). As they are often the primary collection centre for consumer scrap, the scheme could enable better monetisation of gold.

Allowing banks to buy locally produced IGDS bars and accept repayment of GMLs with Indian refined gold will reduce the need to lease gold from overseas – a process that can be quite expensive. It will also encourage refiners to increase output to meet this new demand. Previously, banks were only allowed to import gold on a consignment basis, as they were not allowed to source locally refined gold as per domestic regulation. To provide some context, import share of the banks fell from 40% in 2017 (348t)<sup>22</sup> to 24% in 2021 (240t) – leaving aside 2020's exceptional conditions when banks imported just 70t of gold (Chart 4).<sup>23</sup> Increased demand from banks will mean that refineries will have to ramp up both doré imports and local scrap collection. This may eventually result in the share of refined gold in India's import mix falling even further.

**Chart 4: Banks share of official imports has declined with growth in refining**



Source: Indian Customs, Metals Focus, World Gold Council

Under R-GMS refineries will act as collecting, testing and assaying centres. They will also be responsible for delivering gold to banks to be used for leasing under the GML. R-GMS allows all Scheduled Commercial Banks (SCBs) to be custodians but only BIS-approved refiners to refine this gold, which could benefit the industry as a whole. Importantly, the deposits under the scheme can now be dematerialised (converted to a digital certificate) enabling them to be tradeable and mortgageable.

Finally, banks will also be able to import gold via the international bullion exchange and domestic gold spot exchange, once these exchanges are operational.

Overall, these developments bode well for Indian refiners, especially those that are both BIS- and LMBA-accredited. Additionally, as refiners compete for local scrap we expect to see a notable increase in scrap collection centres, which in turn will take market share from unorganised players. At present we estimate that organised refineries account for less than 20% of scrap collection but we believe this will increase to some 35%-40% over the next four to five years.<sup>24</sup>

## Recycling trends

### Recycling is an important source of supply for jewellers

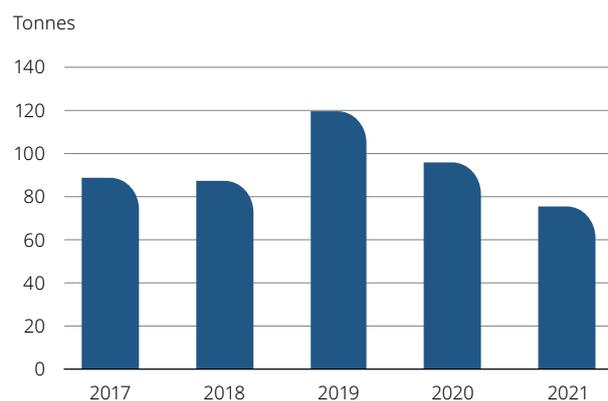
Recycling is an important component of gold supply, accounting for 11% of the total Indian gold supply over the last five years (Chart 5). Gold sold back for cash is usually linked to consumer sentiment and the economic backdrop. However, over the years the share of gold sold for cash has remained broadly steady, despite the economic slowdown of 2012-14 and the pandemic. This is due to the vibrant gold loan industry in India, which makes it straightforward to borrow funds against gold rather than selling it.

The pay-out received after selling back gold differs according to the type of jewellery being liquidated and where it is sold but will usually be 3%-5% lower than the prevailing gold price.<sup>25</sup> As a guide, 22k gold will be paid at a rate that includes the entire weight of the contained gold, whereas non-hallmarked items will be paid at a rate that decreases in line with the caratage. Pay-outs decline further in rural India due to low consumer awareness, and here pay-outs can be 5%-10% below those given in urban centres. Metals Focus' discussions with refineries and scrap collectors

revealed that the average purity of gold collected in South India is about 90%, in the North it is around 85%, while in the West and East it is 86%-89%.<sup>26</sup> It is worth noting, however, that as awareness about hallmarking has grown, purities have risen. And with mandatory hallmarking now in force, consumers should increasingly receive a fairer price for their gold.

**Chart 5: Recycling accounted for 11% of total Indian supply in last five years**

Recycling volume in tonnes



Note: Total supply includes official imports, unofficial imports and mine production. Total supply excludes round tripping (RT) and bullion export volumes. Source: Metals Focus, World Gold Council

One significant development over the last few years has been the increased organisation of scrap collection (**Focus 1**), which is eroding the bargaining power of jewellers and other scrap buyers. This new trend is encapsulated by some of the large corporates, such as MMTC-PAMP and Muthoot, who are setting up collection centres across the country.

### Jewellery is the largest source of recycling

There are three sources of gold recycling: jewellery, manufacturing scrap and end-of-life industrial scrap. Metals Focus' recycling data captures "old scrap". In the context of jewellery, this is jewellery that is either sold back for cash or a retailer's unsold stock that is melted down. It does not include jewellery that a consumer exchanges with the retailer for a new piece, where the consumer only pays the labour charge. Metals Focus' definition also excludes process or manufacturing scrap that is collected from fabricating jewellery and coins.

Old jewellery scrap represents the largest source of recycling in India, with an approximate 85% share of the total.<sup>27</sup> Major refineries have set up scrap collection

centres where organised retailers usually send scrap for recycling, while individuals generally visit their local retail jeweller to recycle their gold. These jewellers also collect scrap from pawnbrokers/money lenders and gold loan companies. Gold loan companies tend to offer loans against jewellery over time periods ranging from one to 36 months. Should the borrower default, the company will auction the gold to jewellers, scrap aggregators or refineries. For many refineries, jewellery scrap from pawnbrokers/money lenders and gold loan companies forms the lion's share of their jewellery scrap intake.

The other key component is old bars and coins that people either sell or exchange for jewellery; Metals Focus estimates these make up about 10%-12% of scrap gold supply. While consumers often visit retail jewellers to exchange their bars and coins for jewellery, these investment products are seldom melted and converted into fresh minted products. Metals Focus' discussions with the trade reveal that many independent jewellers in small towns and cities tend to sell them back to new customers.

Finally, industrial scrap is generated from end-of-life electronic products, such as printed circuit boards, mobile phones, connectors and contact points. This industrial segment accounts for less than 5% of total Indian scrap supply. The industrial scrap market in India is largely unorganised and only a small proportion finds its way to refineries. This may be largely due to the fact that only a handful of Indian gold refineries have the capability to refine industrial scrap.

Mandatory hallmarking now means consumers should increasingly receive a fairer price for their gold





## Focus 1: Growth of organised recycling in India

India's gold refining landscape has witnessed a significant shift over the past few years owing to the push towards organised recycling. But even against this backdrop, organised refineries have been hampered by the presence of local scrap collectors who have dominated the traditional gold recycling market, despite the favourable duty on doré imports and advancements in refining capacity.

One of the challenges in sourcing scrap is the fact that this part of the industry is still primarily reliant on cash. This reliance has deterred organised refineries such as MMTC-PAMP, who have steered clear of cash transactions in the scrap trade. In addition, scrap suppliers – such as local jewellers – usually require a fast turnaround time and so prefer to process scrap locally rather than sending it to an organised refinery further away. Furthermore, as local scrap sellers (for example, jewellers) are extremely cost-sensitive, organised refineries – with their relatively higher refining charges – are less popular than small-scale ones; consequently, the amount of scrap available to organised players like MMTC-PAMP is limited.

As the country's only refinery with LBMA accreditation for both gold and silver, MMTC-PAMP maintains the highest global standards for refined gold products. As jewellery manufactured by MMTC-PAMP's rigorous refining process is of such a high quality, manufacturers can significantly reduce the rate of rejection due to quality issues.

That apart, to address other challenges in the industry, MMTC-PAMP has adopted measures to improve scrap collection. The company has set up several collection points called Purity Verification Centres, where scrap is weighed on authenticated scales and value is measured from industry-best German XRF (X-Ray Fluorescence Technology) machines, in order that the customer receives the total value of the gold. After deducting the service charge the customer is paid the full value of their gold via instant bank transfer. As logistics improve, even customers who live in cities without collection centres can now send their gold direct to the refinery.

That aside, as the jewellery industry has become more organised we have seen small jewellers increasingly opt to recycle gold with organised refineries. The implementation of strict pollution control norms in some cities has also negatively impacted smaller refineries and helped push business to the organised players.

While the recycling industry is gradually becoming more formalised, the challenges mentioned earlier remain, impeding the progress of organised refining in India. Despite the considerable progress made with regard to scrap collection, Indian refineries continue to depend largely on processing imported doré.

**Vikas Singh**  
Managing Director and CEO  
MMTC-PAMP India Pvt Ltd



## Drivers and challenges to gold recycling in India

### Key drivers of recycling in India

Despite being the fourth largest recycler in the world, India recycles little of its own stock of gold (**Table 2**). On average, the country accounts for about 8% of the global scrap supply.<sup>28</sup> Recycling is driven by current gold price movements, future price expectations and the economic backdrop. When the gold price jumps people tend to sell their gold holdings either to gain from the price rise or to avoid spending on new gold jewellery. Research from Metals Focus found that the percentage of consumers exchanging old jewellery increases when the gold price rises, and when the economy is under stress – as we saw during COVID-19 – gold is sold to meet everyday needs. Surprisingly, during the pandemic, although scrap levels were elevated, distress selling was not a major contributing factor. In India, people prefer to pledge their gold with banks and non-banking financial companies (NBFCs) rather than making an outright sale.

**Table 2: India is the fourth largest gold recycling country**

Gold recycling volumes of top six countries (tonnes)

Country	2017	2018	2019	2020	2021
China	143	146	169	189	168
India	88	87	120	96	75
Turkey	85	113	116	75	52
Italy	80	77	86	87	80
United States	82	81	85	72	78
Egypt	76	47	50	50	44
World	1,111	1,132	1,273	1,292	1,150

Note: Gold recycling captures scrap generated in the country of origin. It excludes scrap generated as a result of the exchange of old for new jewellery at the retail level. It also excludes production/process scrap.

Source: Metals Focus, World Gold Council

Our econometric analysis revealed that in the short run, quite intuitively, a 1% increase in price pushes recycling up by 0.6%. Conversely, positive GDP growth in the same year and the previous year pushes recycling down by 0.3% and 0.6% respectively. In addition, a 1% increase in jewellery demand pushes recycling down by 0.1%.<sup>29</sup>

A policy that enables households to recycle gold through banks and exchanges – with appropriate incentives – in return for standard gold coins that can be used to purchase jewellery could augur well for a sustainable growth in recycling. Discussions with retailers also revealed that the average time consumers keep their jewellery has fallen noticeably over the last four or five years, falling from around eight to 10 years to around three to five.<sup>30</sup> This reflects a new transparency in buyback transactions from organised jewellers, enabling consumers to receive the full value of the gold content in their old jewellery when they sell or exchange. This enhanced trust between jeweller and buyer, along with changing fashion trends, has encouraged consumers to replace their jewellery pieces more frequently.

While this enhanced trust does not automatically translate into higher scrap volumes, it is a key determinant in the consumer's decision-making process when exchanging or selling their old jewellery.

Recycled gold has accounted for 11% of total Indian gold supply over the last five years



### Challenges to gold recycling in India

Despite the gradual move towards a more structured and process-driven industry, the majority of India's gold recycling trade remains unorganised. This is largely due to:

- **the prevalence of cash transactions in the scrap market:** one of the main difficulties for organised refiners has been the inability to source meaningful quantities of scrap from jewellers. This is because small jewellers prefer cash, particularly those based in more rural areas. Given that accredited refineries need to be able to show a clear source for the scrap they buy, they prefer not to purchase with cash and to work only with organised jewellers or bullion dealers
- **logistical hurdles to scrap collection:** many refineries have opened additional scrap collection centres over the years but these are still few and far between and often located in bigger towns or cities. As a result, the process of sending scrap to a refinery can be cumbersome and more time consuming than melting it locally. Small jewellers who have only small scrap volumes need to wait longer before they accumulate a meaningful quantity of scrap to be sent for processing. Unsurprisingly, they tend to use their local melting shop or small-scale unorganised refinery with faster turnaround times
- **GST loss on sale of old gold:** the current GST regulations do not allow consumers to reclaim the 3% tax they would have paid when they initially bought their jewellery. This loss of GST on gold is significant and could be a barrier to consumers looking to create liquidity by selling old gold.<sup>31</sup>

### Outlook

Recycling is driven by trends in the local rupee gold price and the prevailing economic environment. The Indian economy is expected to grow in the coming years and higher incomes may reduce outright selling by consumers as the need for distress selling lessens. And as NBFCs expand across rural India, consumers will find it easier to pledge their gold rather than selling it outright. This will bring more people into the institutional credit system and further discourage selling back gold to raise cash.

That said, the recycling market will be supported by initiatives such as the revamped GMS, which will attract gold held by Indian households, some of which will eventually be recycled. Furthermore, Metals Focus' research suggests that holding periods of jewellery will continue to decline as younger consumers look to change designs more frequently; a trend that could contribute to higher levels of recycling.



# Chapter 7

## Gold mining in India



India has a long history of mining gold, but at a low level: 2020 gold mine production was just 1.6t. Legacy processes are in part to blame: investment in the sector has been discouraged by unwieldy processes.

The government has taken measures to address this through regulatory changes in recent years such as the 2019 National Mineral Policy and early amendments to the long-standing Mines and Minerals Act.

The effects of these measures will not be realised for some time – developing and commissioning a mine is a lengthy process. But, provided that the government's efforts to streamline the industry are successfully implemented, new policies should eventually stimulate growth. In our view, there exists significant potential to kick-start gold mining in India.



# Chapter 7 contents

<b>Gold mining history</b>	<b>118</b>
India has a rich heritage of gold mining, albeit on a small scale	118
<hr/>	
<b>Indian gold mineral reserves and resources</b>	<b>120</b>
<hr/>	
<b>Future of gold mining in India</b>	<b>121</b>
India's gold mining industry has been hampered by onerous legacy processes and under-investment	121
Regulatory challenges	121
Taxation policies	121
Infrastructure	121
With the right investment and regulatory progress, the industry has potential to grow	121
The government has recently taken steps towards addressing these challenges	122
<hr/>	
<b>The economic impact of gold mining</b>	<b>123</b>

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[gold.org/goldhub/research/gold-mining-in-india-gold-market-series](https://gold.org/goldhub/research/gold-mining-in-india-gold-market-series)



# Gold mining in India

## Gold mining history

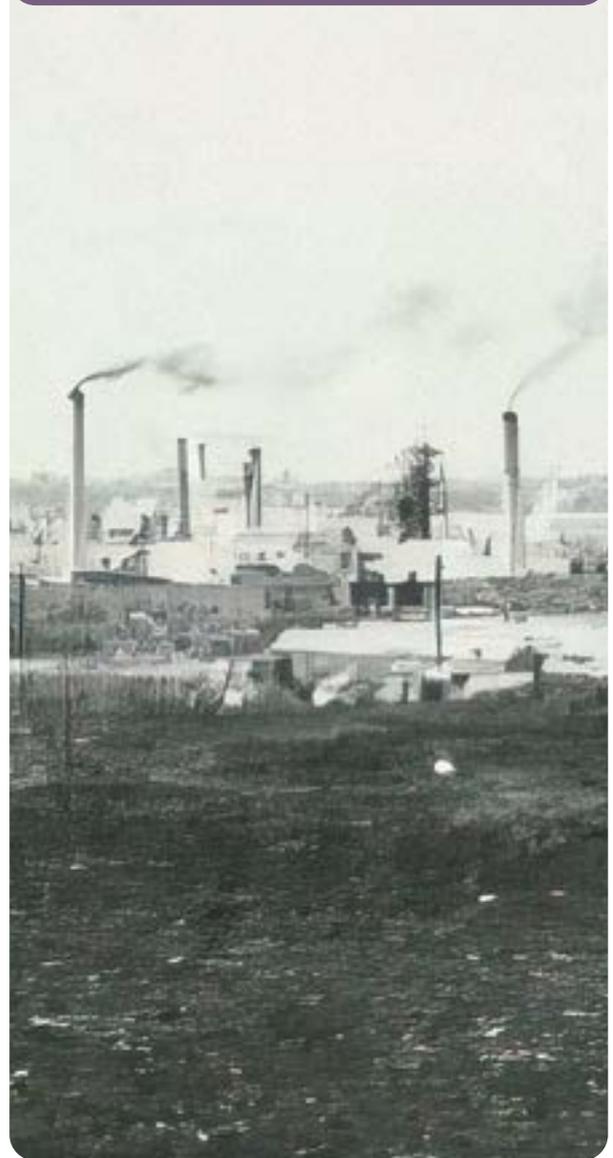
**India has a rich heritage of gold mining, albeit on a small scale**

The geology of the Indian Peninsula (south of the Himalayas) is predominantly made up of four Archaean cratons, Proterozoic belts and sedimentary basins alongside the much younger basalts of the Deccan traps. The Dharwar craton, in the south of India, is the most significant geological formation for gold mineralisation, with lesser occurrences also identified in the other Archaean cratons and Proterozoic units in the country. Gold mining in India dates back to the first millennium BC and throughout the twentieth century was dominated by the Kolar Gold Field, near Bengaluru. The field is hosted within the Kolar Greenstone Belt, a 3-6km wide by 80km long band of greenstone geology – a terrain similar to that which hosts many of the world’s most significant gold discoveries. The Belt predominantly lies along the south-east edge of the state of Karnataka, but also under parts of Andhra Pradesh and Tamil Nadu (Figure 1).

The Kolar Gold Field closed in 2001, having produced more than 800t of gold during its 120-year history.<sup>1</sup> During its first two decades of operation (1884-1904) the average grade of the ore produced from shallow underground working was an impressive 45g/t, while over its total life span the average ore grade was 15g/t. By comparison, gold grades from South Africa’s prolific Witwatersrand Basin averaged around 9g/t over a similar timeframe.<sup>2</sup>

In subsequent years, gold was primarily extracted from three mines within the East Kolar region: Champion, Mysore and Nundydoorg. By the late 1990s, however, mining had become uneconomic due to reducing grades and increasing costs, and the Kolar operations were finally abandoned in 2001. By this point production had reportedly reached a depth of 3,200m (one of the deepest gold mines in the world), while workings stretched along a 7.3km strike and included 100 shafts and 1,400km of underground development.<sup>3</sup>

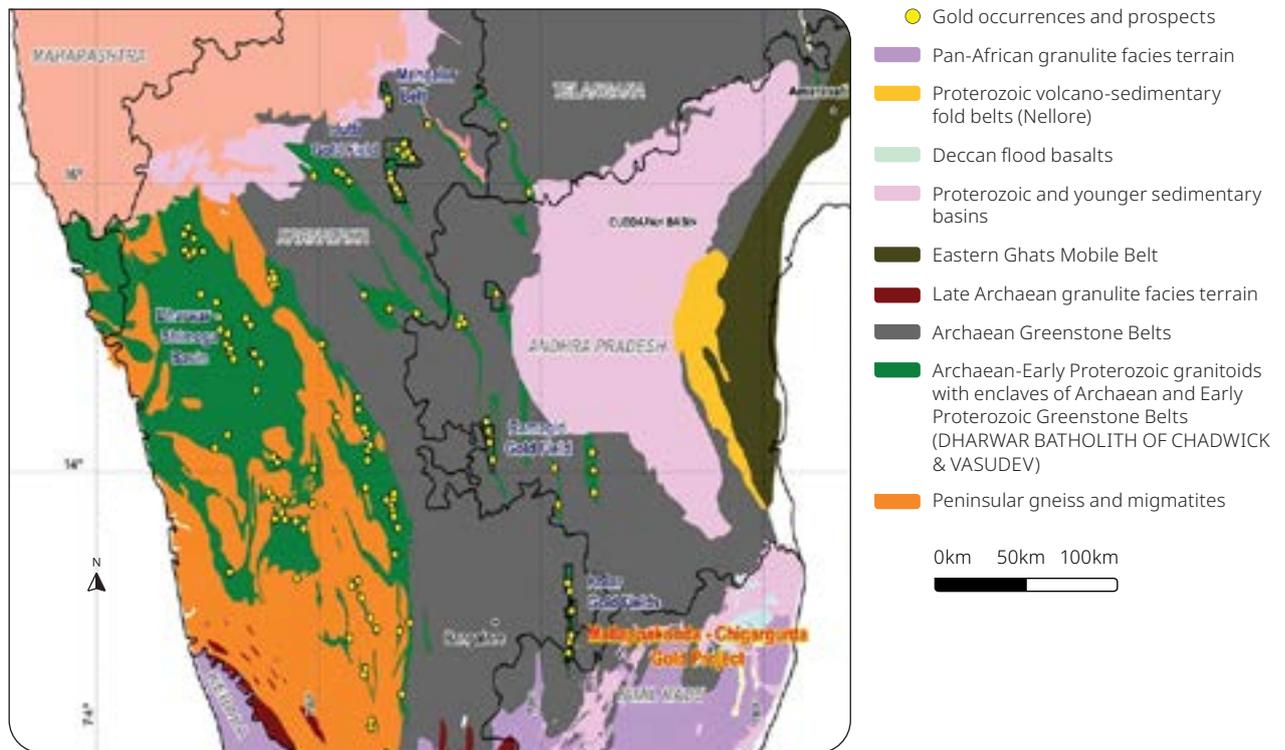
800t of gold was produced at the Kolar Gold Field over its 120-year history<sup>1</sup>



Kolar Gold Field, 1913

### Figure 1: Southern India has gold-favourable geology

Geological map of Dharwar craton including the Kolar Greenstone Belt



Source: Kolar Gold

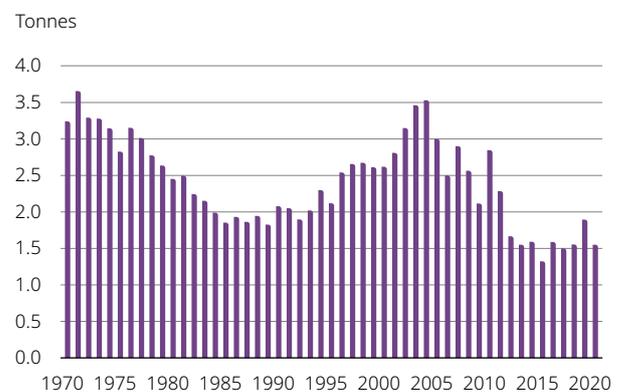
The other significant gold producer in India has been the Hutti Gold Mine, located in the Raichur district of Karnataka.<sup>4</sup> The operation initially entered production in 1902, although it subsequently closed in 1918 because of a paucity of funds due to World War I. Since its restart in 1947, through to 2020, it has produced some 84t of gold and is currently the only significant gold producer in India.

Ore from the main Hutti mine is now supplemented by satellite feeds from the Uti (open pit) and Hira-Buddinni (underground) deposits. Higher grade ore processed at Hutti in 2019 was responsible for boosting India's gold output by 22% y-o-y to 1.9t; gold reserves are sufficient to support production at the current rate for another 30 years.<sup>5</sup>

Gold mining production declined marginally to 1.6t in 2020 as the mine closed in April of that year due to COVID-19 (**Chart 1**).

Historically, gold has also been produced from other deposits, including as a by-product of domestic copper production, although these additional sources have produced limited volumes. The main source of India's gold from other deposits is Birla Copper's smelter at Dahej in Gujarat, which processes domestic and imported copper concentrate.<sup>6</sup> The plant has an installed gold capacity of 15t per year, although output was below this level in 2020 at 6t.<sup>7</sup>

**Chart 1: Indian gold mine production from primary sources 1970-2020**



Note: Mine production includes production from primary sources only and does not include output from secondary sources, e.g., Birla Copper Smelter, which processes domestic and imported copper concentrate.  
Source: Indian Bureau of Mines, Ministry of Mines, Metals Focus



## Indian gold mineral reserves and resources

Gold has recently been discovered in a broad range of locations across India, although the majority of economically extracted mineral reserves are located in Karnataka. According to data published by the Ministry of Mines, India's current defined gold reserves total 70.1t (17.2Mt at 4.1g/t).<sup>8</sup>

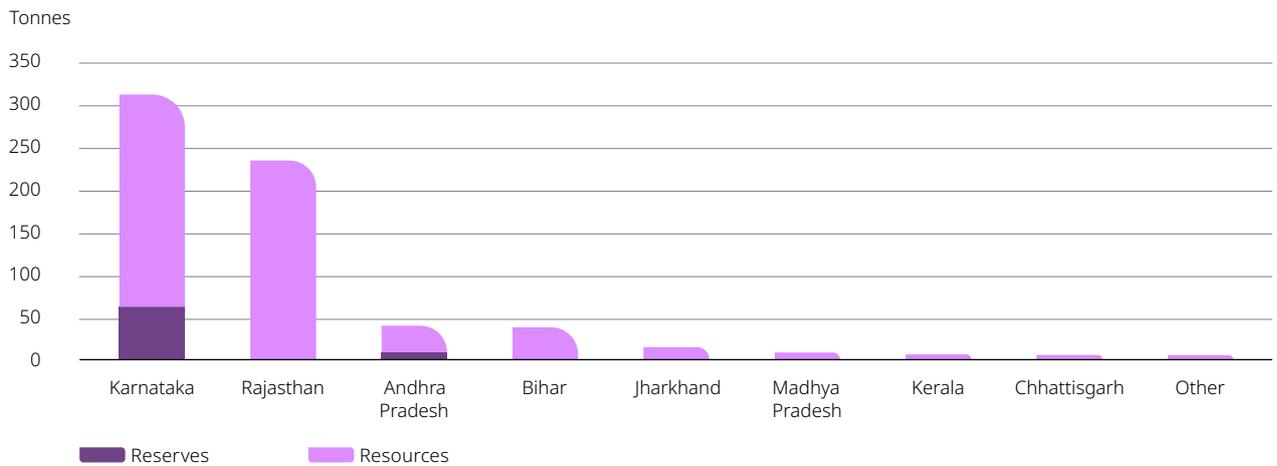
The majority of these reserves are located in the state of Karnataka and account for 88% of the total; a further 12% are situated in Andhra Pradesh; and an insignificant amount (less than 0.1t) is found in Jharkhand.

In addition to the aforementioned reserves, 584.7t of gold (484.6Mt at 1.2g/t) is defined in the primary (hard rock) resource category, while 5.9t (26.1Mt at 0.2g/t) has been defined within placer deposits (**Chart 2**).<sup>9</sup> These resources are more geographically diverse, with 47% located in Karnataka, 35% in Rajasthan and 6% each in Andhra Pradesh and Bihar. The remaining 6% is spread across a further eight states.

88% of India's gold reserves are in the state of Karnataka



**Chart 2: Indian gold reserves and resources are concentrated in Karnataka and Rajasthan**



Source: Indian Bureau of Mines, Metals Focus

## Future of gold mining in India

### India's gold mining industry has been hampered by onerous legacy processes and under-investment

Until recently there had been no real policy push to promote domestic mining in India, despite it being one of the world's largest consumers of gold. After legislation was passed in 2003 allowing private organisations to apply for mining leases, a few private and locally listed companies began operations. But the market is not an easy one to enter.

Three areas have been problematic in the development of the industry:

- regulatory challenges
- taxation policies
- infrastructure.

#### Regulatory challenges

Until recently regulatory provisions made it difficult to transfer mining leases or prospecting licences between companies. In addition, prospecting licence holders are not entitled to a preferential claim to a mining lease even if exploration is successful in identifying a viable deposit. This discourages grassroots exploration as even if a deposit is successfully found, the company may not be able to develop it or sell it on.

The process of securing approval for a mining licence is usually lengthy, involving multiple agencies and requiring 10-15 approvals for a single licence. Applications are often subject to substantial delays, leading to lengthy and costly hold-ups in project development. All of this dissuades investment, particularly from multinational companies who can invest their resources into countries with similar geological perspective but with less legacy burden.

#### Taxation policies

The Indian government has reduced taxation on corporate profits over the last few years. However, import tax on mining equipment and other direct and indirect taxes remain high compared to other countries.<sup>10</sup> In the absence of domestically produced alternatives, project developers have little option other than to import specialist mining equipment, much of which comes from a small number of manufacturers. High import taxes increase capital cost and deter development.

#### Infrastructure

Many of the key gold mining areas are in remote locations in states with poorly developed infrastructure. In particular, inadequate road and rail links can make moving materials to and from sites difficult and costly.

As a result, there has been limited investment in gold exploration over the past 15 years, particularly from the private sector. As of March 2018, only 11 gold mining leases were in place across the whole of India.<sup>11</sup> In 2019, mining activity was in progress in only four of these permit areas, three of which – Hutti, Uti and Hira-Buddinni – are located in Karnataka and are operated by Hutti Gold Mines. The fourth active mine is Kunderkocha in Jharkhand, and is operated by Manmohan Industries. Production from the Kunderkocha mine is trivial, with output of just 3kg in the FY 2018-19.

#### With the right investment and regulatory progress, the industry has potential to grow

There are a couple of nascent projects that should reach fruition in the coming years, particularly if government measures are successful in simplifying onerous processes for the sector.

As these new projects enter production Indian gold output will increase, albeit from a very low base. Deccan Gold Mines had been expecting to bring its flagship Ganajur Main project in Karnataka into production in late 2020.<sup>12</sup> However, this project has been delayed several times over recent years and ongoing permitting issues may cause further delays to its start date.<sup>13</sup> Output is expected to average 0.9t per year once the mine is operational. Meanwhile, Geomysore Services India has been developing the Jonnagiri project in Andhra Pradesh.<sup>14</sup> A mining lease was granted for Jonnagiri in October 2013 and the feasibility study for the project indicates that it will produce an average of 0.7t of gold per year. Geomysore expects to begin production in late 2021 if land acquisition and permitting are completed on schedule. These two projects combined have the capability to double annual mined gold production in India, albeit to a still very modest 4t per year.

The Indian government has reduced taxation on corporate profits over the last few years



Apart from these two projects there is nothing that is likely to increase India's gold output over the next few years. Over the longer term, a number of deposits have been identified by private companies and the Geological Survey of India, and these may be developed in the future. However, substantial investment would be required to bring these projects to production – something that has been lacking in the sector over recent years. Without such investment, the long-term growth of India's gold output will remain muted, but streamlined processes and policy certainty should help to encourage investment in gold mining.

### **The government has recently taken steps towards addressing these challenges**

In recent years the Indian government has proposed and implemented various policy changes designed to help develop the gold mining sector by addressing the three most problematic areas outlined above.

In March 2015, parliament approved an amendment to the Mines and Minerals (Development and Regulation) Act 1957 (MMDR), which allowed private companies to bid for mining leases via a competitive auction process and extended the period for major mining leases from 30 to 50 years.<sup>15</sup> Under the auction process, a total of 103 mining blocks were allocated between February 2016 and June 2020, of which four are gold mining deposits.<sup>16</sup>

In February 2016, London-listed Vedanta Resources became the first private company to successfully bid for a gold mine in India – the Baghmara gold mine in Chhattisgarh – with potential gold reserves of 2.7t of contained metal. Further amendments were also accepted in May 2016, under which captive mining blocks can be transferred without the need for auction.<sup>17</sup>

In recent years the Indian government has proposed and implemented various policy changes designed to help develop the gold mining sector

In June 2016, the government approved the National Minerals Exploration Policy (NMEP) in an attempt to stimulate mining exploration.<sup>18</sup> The policy allows private companies to enter into a transparent bidding process, conducted via e-auction, to carry out exploration of mineral-bearing areas. The company that has won the bid is entitled to a share of royalties paid to the relevant state government. Furthermore, in March 2019 the government announced the implementation of the new National Mineral Policy (NMP 2019) in an attempt to reduce bottlenecks and encourage development in the sector.<sup>19</sup> This policy applies to non-coal and non-fuel minerals, and aims to increase the value of minerals produced in India by 200% over a seven-year period.

The salient features of the NMP 2019 are:

- to incentivise exploration through a “Right of First Refusal” when the auction takes place.<sup>20</sup> The principal benefits will be a seamless transition between the awarding of the reconnaissance permit through to the prospecting licence and the award of the mining lease. There are also plans to auction combined permits that will cover all of these steps
- a more streamlined permit award method with simple, transparent and accountable processes and clear deadlines, all of which should encourage exploration
- the creation of dedicated mineral corridors to make it more straightforward to transport minerals from mining areas to processing locations
- the granting of ‘industry’ status, which will bring the mining sector better access to banking finance and lower taxes, and should encourage the private sector to become more engaged with financing all aspects of mining, from prospecting and exploration to mine development
- for minerals that cannot be extracted in India, procedures will be introduced to allow public and private entities to acquire mineral assets in other countries
- a long-term import and export policy for minerals will be developed to help the private sector with its long-term planning
- areas that have been reserved for Public Sector Units (PSUs), but remain unused, will be rationalised and made available to the private sector
- efforts will be made to align royalties, levies and taxes with overseas mining jurisdictions to help make India a more attractive destination for inward exploration and mining investment.

In May 2020, the Finance Minister also announced measures to enhance private investment in the Indian mineral sector as part of the Self-Reliant India Movement,<sup>21</sup> including:

- the introduction of a seamless exploration, mining and production regime
- 500 mining blocks that are to be offered through an open and transparent e-auction process
- the abolition of any distinction between captive and non-captive mining blocks, which will allow for the transfer of mining leases.

In January 2021, the cabinet approved proposals for changes to the MMDR 1957, which were broadly in line with the measures announced as a part of Self-Reliant India<sup>22</sup> and the Act was approved by parliament in March 2021. The move will help pave the way for a more transparent auction of 500 mining blocks of various minerals, including gold, and will help facilitate a more seamless transfer of leases.

## The economic impact of gold mining

Gold mining has the potential to provide significant sustainable socio-economic development for India, not just through investment in exploration of and mining for gold, but also through the legacy of training a skilled workforce. Furthermore, mining helps to bring infrastructure investment to a region, initiating and supporting associated service industries, many of which often persist long beyond the working life of the mine.

Mining can also provide significant employment opportunities to rural areas. Currently, Hutti Gold Mines employs over 4,000 workers and contractors, and it is estimated that each of those workers supports around five dependants.<sup>23</sup> Our report, *The social and economic impacts of gold mining*, showed that 70% of total expenditure by gold producing companies was via payments to local suppliers and contractors, and wages to employees.<sup>24</sup> This highlights the important impact even a small gold operation can have on its community.

In May 2020, the Finance Minister announced measures to enhance private investment in the Indian mineral sector





Given that India is one of the world's largest gold-consuming countries, it makes sense for it to develop mining capacity. But change is needed for this to happen: legacy hurdles must be reduced considerably and investment encouraged. There are promising signs with the changes to the MMDR and the introduction of the NMEP and NMP. If this trend continues, India's mine production is expected to increase. That said, we see this materialising only over the longer term as potential investors will, for the foreseeable future, wait to see how successfully the new policies are implemented and how effective they will be.

The potential longer-term scale and economic impact of Indian gold production can be estimated by comparisons with other gold producing nations. India's current resources, when compared to production and resource levels in other countries, could reasonably be expected to support annual output of approximately 20t per year in the longer term. Should such a level be reached, it would generate almost US\$50mn in revenue per year for India from royalty payments at current gold prices. Royalty rates from primary gold production in India are set at 4% of the LBMA gold price.<sup>25</sup>

This would also provide direct employment for an estimated 3,000-4,000 people in addition to those currently employed in the industry. However, new mines would be more mechanised and therefore far less labour intensive than current mining at Hutti. To develop a gold mining industry of this magnitude, India would need to attract investment in excess of US\$1bn to convert resources into reserves and ultimately construct mines.

Hutti Gold Mines employs 4,000+ workers and contractors

It is estimated that each supports five dependants



The current state of the gold mining industry in India and the timescales required to undertake the necessary work to develop mines suggest it would likely take up to 10 years for Indian output to reach these levels. However, an expansion of this magnitude is dependent on legacy hurdles being lifted and India being transformed into an attractive destination for gold mining investment over the next few years.

It is important to remember that the Indian gold mining industry has to compete for investment funding with other gold producing countries. Many of these countries already have a robust and well-established framework to support exploration and mining, and many are equally or more geologically prospective for gold than India. It is only when investors can see real evidence of India managing its gold mining assets more efficiently that we can expect inward investment to emerge. And at that point, the country's gold mining sector will enjoy a much brighter future.

US\$1bn investment is needed in India to scale up and convert resources into reserves and construct mines



# Appendices





# Appendices

## Chapter 1: The Drivers of Gold Demand

### Appendix 1: Modelling Indian gold demand

#### What drives Indian gold demand

Gold is a global asset, bought and sold by consumers and investors at various times and for various reasons. This diverse nature of gold can sometimes lead to a lack of understanding about its behaviour, but in reality, it responds to the basic laws of economics and the equilibrium of supply and demand. The question is, then, what drives supply and demand in turn?

To answer this from an Indian perspective, we undertook an econometric analysis using macroeconomic variables to explain the long- and short-term dynamics of supply and demand over the past two decades.

Our objective was to obtain new insights using a quantitative approach and to verify whether anecdotal evidence and common wisdom actually match reality.

#### A brief introduction to Error Correction Models

We often discuss that although we see short-term changes in demand, it is long-term dynamics that drive the gold market. To understand this, we use a common econometric approach to modelling called Error Correction Models (ECMs). This type of model allows us to find variables that explain deviations in gold demand (or supply) from its long-run equilibrium.

In general terms, the model can be written in two parts:

#### Long-run equilibrium

$$y_t = \delta_0 + \delta_x x_t + u_t$$

In this case,  $y_t$  represents annual demand (or supply) for gold, and the model suggests that there is a long-term relationship with  $x_t$ ; note that  $x_t$  may represent one or multiple variables;  $\delta$  represents the long-term elasticity. The relationship between  $y_t$  and  $x_t$  deviates

from its equilibrium each period by a certain amount, which we denote as  $u_t$  (also called the error term);  $u_t$ , in turn, is influenced by short-term fluctuations in macroeconomic (or other) variables.

#### Short-term fluctuations

$$\Delta y_t = \beta_0 + \beta_x \Delta x_t + \beta_z z_t - \lambda u_{t-1} + \epsilon_t$$

This equation deals with the annual deviations from the long-term equilibrium. In this case,  $\Delta y_t$  represents year-on-year changes in demand (or supply) and links fluctuations in  $x_t$  (namely  $\Delta x_t$ ), as well as an additional set of variables ( $z_t$ ), and a fraction of the 'error-correction term'  $u$  in the previous period ( $t-1$ ). In other words, short-term fluctuations in demand (or supply) are driven by various macro factors, but the system also mean reverts to its long run depending on how far it deviated from equilibrium the year before. The  $\beta$ s are the short-run long elasticities and  $\lambda$  shows the strength of the reversion to the mean.

#### Selecting the relevant data and historical period

In our analysis – given that Indian gold production is negligible – we focused on jewellery, investment and technology demand, and we included gold recycling on the supply side.

There is available annual data for most of these series going back to 1980, but we restricted our analysis to the period from 1990 to 2020. The reason is two-fold:

- Gold imports were banned until 1992 and consumers resorted to smuggling to satisfy demand
- Our analysis typically focuses on consumer demand rather than fabrication. We only have consumer demand data going back to 1995. And while we use fabrication data to estimate consumer demand for the first part of the 1990s, the further back we go the less reliable the approximation becomes.

While using data since 1980 and modelling the structural shift that happened in the 1990s is possible, we believe that using the shorter period better represents the reality of the Indian market today and, as we note later, using the longer period (where applicable) delivers very similar results.

## Modelling the long- and short-term dynamics of the Indian gold market

Our analysis focuses on five gold demand and supply series:

1. Consumer demand (jewellery plus bars and coins)
2. Jewellery
3. Bar and coins
4. Technology
5. Recycling

### Consumer demand

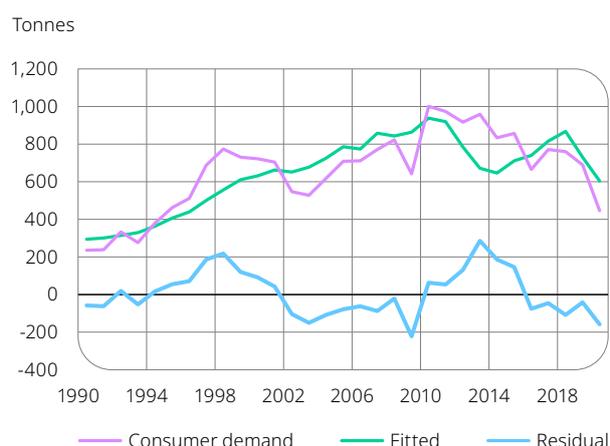
Our model suggests that over the long run (i.e., in equilibrium) annual gold demand is driven by income<sup>49</sup> and price – all in logs. We included a variable to capture the level of import duty on gold, which has gradually increased since 2012 and has resulted in a small contraction in long-term demand driven by government policy. The long-run equation is shown by:

$$d_t = \delta_0 + \delta_1 \text{income}_t + \delta_2 \text{price}_t + \delta_3 \text{tax}_t + u_t$$

Income is gross national income per capita, and the gold price is measured in rupees. The customs duty variable rose gradually from 1% prior to 2012 to 10% by 2014. The customs duty was further raised to 12.5% in July 2019. **Chart 12** and **Table 1** show the model fit and relevant coefficient estimates.

**Chart 12: Long-term Indian gold consumer demand is influenced by income and price, and suppressed by government import restrictions**

Annual gold demand (in tonnes) from 1990 to 2020



Source: Metals Focus, Refinitiv GFMS, World Gold Council

**Table 1: Income plays an important role in driving up gold demand, while higher gold prices reduce it**

Summary statistics from long-term cointegrating demand relationships

	Constant	Income	Price	Tax
	$\delta_0$	$\delta_1$	$\delta_2$	$\delta_3$
Estimate	1.39	0.91	-0.42	-6.94
Standard error	0.61	0.16	0.17	1.4
T-stat	2.3	5.6	-2.5	-5
R <sup>2</sup>	77.6%			

Note: Based on annual data from 1990 to 2020.  
Source: World Gold Council

When the system is in equilibrium (in other words when there is long-run stability and no deviations from exogenous shocks, present or past), a 1% increase in income results in a 0.9% increase in demand. However, a 1% increase in price reduces demand by 0.4%. And long-term demand has fallen by 7% for every 1% increase in gold import duty.

Our model suggests that over the long run annual gold demand is driven by income and price



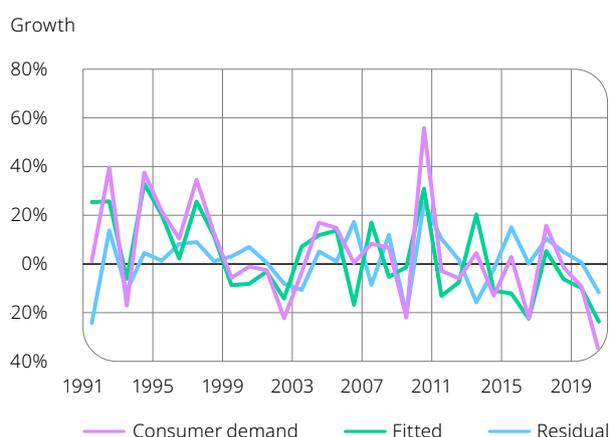
Over the short run, the system deviates from the long-term equilibrium. Our model suggests that changes in annual demand are driven by inflation, short-term price movements, excess rainfall and the level of taxes. Deviations from the long-run equilibrium also have a mean reverting effect. The equation is shown by:

$$\Delta d_t = \beta_1 \pi_t + \beta_2 \Delta p_t + \beta_3 \text{rainfall}_t + \beta_4 \text{tax}_t - \lambda u_{t-1}$$

$\Delta d$  denotes y-o-y changes in demand,  $\pi$  inflation,  $\Delta p$  y-o-y changes in the rupee gold price, and rainfall is the excess rainfall relative to the long-term average since 1900; import taxes are assumed fixed prior to 2012 and then increase with changing government policy.<sup>50</sup> **Chart 13** and **Table 2** show the short-term model fit, relevant coefficient estimates and other statistics.

**Chart 13: In the short term, gold demand responds to inflation, price, rainfall and the level of taxes**

Y-o-y changes in gold demand from 1991 to 2020



Source: Metals Focus, World Gold Council

**Table 2: Higher inflation and more rain result in higher annual consumer demand, while higher prices and taxes lower it**

Summary statistics from short-term demand dynamics

	ECV	Inflation	Price	Rainfall	Tax
	$-\lambda$	$\beta_1$	$\beta_2$	$\beta_3$	$\beta_4$
Estimate	-0.61	2.62	-1.15	0.15	-1.22
Standard error	0.15	0.43	0.22	0.27	0.47
T-stat	-4.17	6.09	-5.3	0.54	-2.61
R <sup>2</sup>	67.8%				
Direction	86.7%				

Note: Based on annual data from 1990 to 2020.  
Source: World Gold Council

In the short run (in this case one year), a 1% consumer price inflation pushes gold demand up by 2.6%; an additional 1% of rain during the monsoon season increased demand by 0.2%. Conversely, a 1% increase in price reduces short-term demand by 1.2% and, holding everything else constant, higher taxes since 2012 have reduced gold demand by 1.2%.<sup>51</sup> Finally, lower than average demand in any given year raises demand in the subsequent year. Notably, while the R<sup>2</sup> is a respectable 68%, the model correctly shows the direction of demand growth almost 87% of the time – in other words, the macroeconomic variables used offer a good guide to the direction annual demand will take, even if the magnitude estimate is slightly off.

### Jewellery

Consumer demand is primarily driven by jewellery, which makes up 77% of Indian annual demand.<sup>52</sup> It is therefore not surprising that our analysis resulted in a very similar model. The long-run equation is shown by:

$$d_t = \delta_0 + \delta_1 \text{income}_t + \delta_2 \text{price}_t + \delta_3 \text{80:20 rule} + u_t$$

Given the similarities, we summarise the coefficient estimates in **Table 3**.

**Table 3: Long-term jewellery demand responds to income, price and import restrictions**

Summary statistics from long-term cointegrating demand relationships

	Constant	Income	Price	80:20 rule
	$\delta_0$	$\delta_1$	$\delta_2$	$\delta_3$
Estimate	2.54	1.01	-0.66	-5.21
Standard error	0.57	0.15	0.16	1.3
T-stat	4.5	6.7	-4.2	-4
R <sup>2</sup>	74.3%			

Note: Based on annual data from 1990 to 2020.  
Source: World Gold Council

## Jewellery is more responsive to the gold price



The interpretation is quite similar to that of consumer demand, except that jewellery is more responsive to the gold price and the rising import duty has less of a dampening effect (in fact, its effect was not particularly significant, statistically speaking).

The jewellery short-run equation can be shown by:

$$\Delta d_t = \beta_1 \pi_t + \beta_2 \Delta p_t + \beta_3 \text{80:20 rule} - \lambda u_{t-1}$$

**Table 4** summarises the relevant estimates and statistics.

**Table 4: Higher inflation results in higher annual jewellery demand, while higher prices and taxes lower it**

Summary statistics from short-term demand dynamics

	ECV	Inflation	Price	80:20 rule
	$-\lambda$	$\beta_1$	$\beta_2$	$\beta_3$
Estimate	-0.61	2.64	-1.36	-1.04
Standard error	0.16	0.43	0.22	0.46
T-stat	-3.83	6.16	-6.25	-2.23
R <sup>2</sup>	68.1%			
Direction	83.3%			

Note: Based on annual data from 1990 to 2020.  
Source: World Gold Council

## Investment

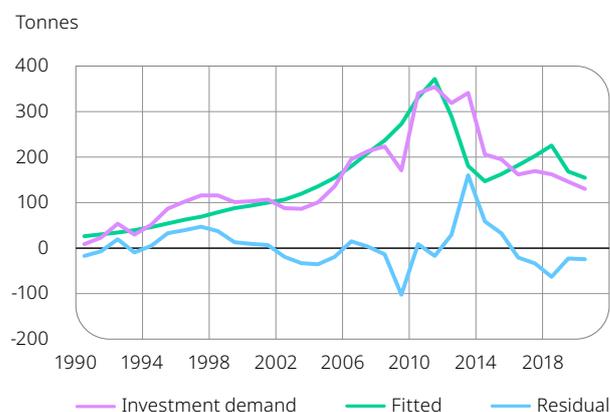
We define investment demand as annual purchases of bars and coins. While there are some similarities to the drivers of jewellery demand, there are also some notable differences, which we explore here. Our model suggests that over the long run (i.e., in equilibrium), annual bar and coin demand is primarily driven by income<sup>53</sup> and not price. In addition, higher import duties have taken a more significant toll on investment demand than on jewellery. The long-run investment equation is shown by:

$$d_t = \delta_0 + \delta_1 \text{income}_t + \delta_2 \text{80:20 rule} + u_t$$

**Chart 14** and **Table 5** summarise the results.

**Chart 14: Long-term Indian bar and coin demand is driven by income, not price, and is suppressed by government import restrictions**

Annual gold demand (in tonnes) from 1990 to 2020



Source: Metals Focus, World Gold Council

**Table 5: Income growth pushes bar and coin demand up, but prices do not have a statistically significant influence in the long run**

Summary statistics from long-term cointegrating relationships

	Constant	Income	80:20 rule
	$\delta_0$	$\delta_1$	$\delta_2$
Estimate	-6.54	1.13	-14.31
Standard error	1.09	0.11	2.53
T-stat	-6	10.3	-5.7
R <sup>2</sup>	81.1%		

Note: Based on annual data from 1990 to 2020.  
Source: World Gold Council

In equilibrium, a 1% growth in income moves long-term bar and coin demand up by 1.1%. Price is not a significant driver of investment in the long run. We believe the reason for this is three-fold. First, bar and coin demand in India is complementary to jewellery; once jewellery purchases are made, additional income may go to long-term savings in the form of bars and coins irrespective of price. Second, for investment purposes higher prices may be an indication of momentum that counteracts the dampening force typically found in 'normal' (and 'superior') economic goods. Third, higher import duties have had a larger impact on bar and coin demand than they have had on jewellery, reducing demand by 14.3t for every percentage point increase. This finding supports the hypothesis that gold demand is mainly for jewellery, and bars and coins are supplementary.

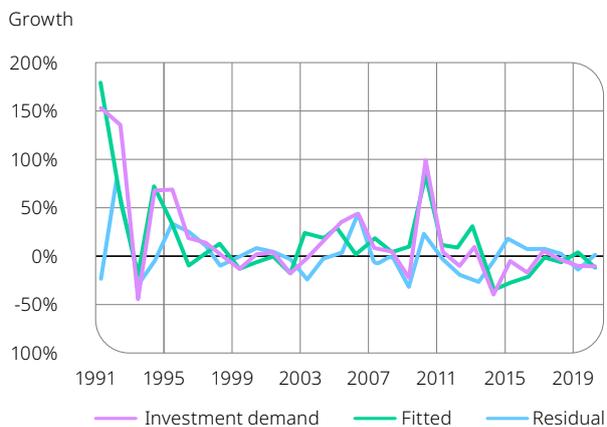
Over the short run, just as with jewellery, our model suggests that changes in annual bar and coin demand are driven by inflation, short-term price movements, excess rainfall and the level of taxes. Deviations from the long-run equilibrium also have a mean reverting effect. The equation is shown by:

$$\Delta d_t = \beta_1 \pi_t + \beta_2 \Delta p_t + \beta_3 \text{rainfall}_t + \beta_4 \text{tax}_t - \lambda u_{t-1}$$

Chart 15 and Table 6 show the relevant results.

**Chart 15: In the short run, inflation, rainfall and price all affect investment demand**

Y-o-y % changes in gold bar and coin demand from 1991 to 2020



Source: Metals Focus, World Gold Council

**Table 6: Inflation, taxes and rainfall weigh more on bar and coin demand than they do on jewellery; price weighs less**

Summary statistics from short-term demand dynamics

	ECV	Inflation	Rainfall	Tax	Price
	$-\lambda$	$\beta_1$	$\beta_2$	$\beta_3$	$\beta_4$
Estimate	-0.67	3.96	0.66	-2.27	-0.87
Standard error	0.12	0.72	0.44	0.77	0.35
T-stat	-5.67	5.52	1.49	-2.95	-2.47
R <sup>2</sup>	73.6%				
Direction	73.3%				

Note: Based on annual data from 1990 to 2020.  
Source: World Gold Council

In the short run, investment demand responds more strongly to inflation, rainfall and taxes than jewellery demand, and conversely price has a lesser (but statistically significant) effect. Bar and coin demand grows by 4% for every additional 1% in inflation, and 0.7% for a 1% excess rainfall during the monsoon. Conversely, a 1% increase in price reduces short-term investment demand by 0.9% and, holding everything else constant, higher taxes since 2012 have reduced gold demand by 2.3t. Investment demand also mean reverts faster than jewellery – as seen by a higher  $\lambda$ . The model explains 74% of the variability and correctly estimates the direction of demand growth 73% of the time – less often than for jewellery, but a high proportion of accuracy nonetheless.

## Technology

Gold demand for electronics, dentistry and other uses is relatively small in India, adding between 10t and 20t to total annual demand. Still, our analysis was able to capture some interesting dynamics and insights. In the long run, technology demand is linked to Indian GDP and the gold price. It has also been affected by the 80:20 gold import rule (in place between 2012 and 2014),<sup>54</sup> as well as by the pre-1992 import ban.

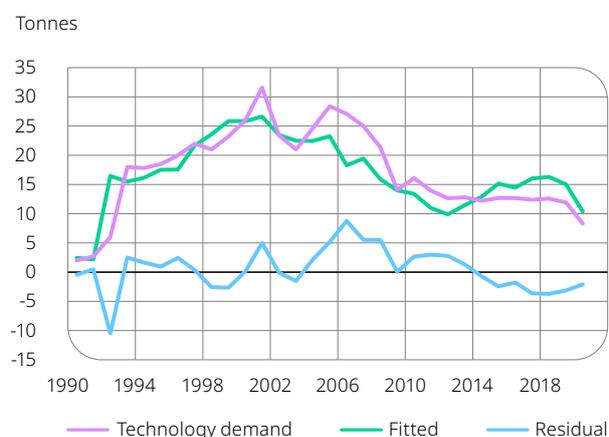
The long-run equation is given by:

$$d_t = \delta_0 + \delta_1 \text{GDP}_t + \delta_2 p_t + \delta_3 I_{1992} + \delta_4 \text{80:20 rule} + u_t$$

Chart 16 and Table 7 summarise the results.

### Chart 16: Long-term Indian technology demand is driven by economic growth and price, and has been heavily influenced by import restrictions

Annual gold demand (in tonnes) from 1990 to 2020



Source: Metals Focus, World Gold Council

### Table 7: Economic growth is counterbalanced by price and import restrictions, and this affects long-term technology demand

Summary statistics from long-term cointegrating demand relationships

	Constant	GDP	Price	1990s ban	80:20 rule
	$\delta_0$	$\delta_1$	$\delta_2$	$\delta_3$	$\delta_4$
Estimate	5.03	0.82	-0.66	-2.27	-0.87
Standard error	0.65	0.24	0.44	0.77	0.35
T-stat	7.8	3.4	-4.3	-9	-0.2
R <sup>2</sup>	82.7%				

Note: Based on annual demand from 1990 to 2020.  
Source: World Gold Council

In the long run, a 1% increase in national GDP leads to a 0.8% increase in technology demand for gold in India. However, technology demand is sensitive to the gold price, and a 1% increase pushes demand down by 1.1%. Similarly, import restrictions affect demand substantially. The pre-1992 ban suppressed long-run demand by 2t per year and the 80:20 import rule decreased demand by 0.1t per year.

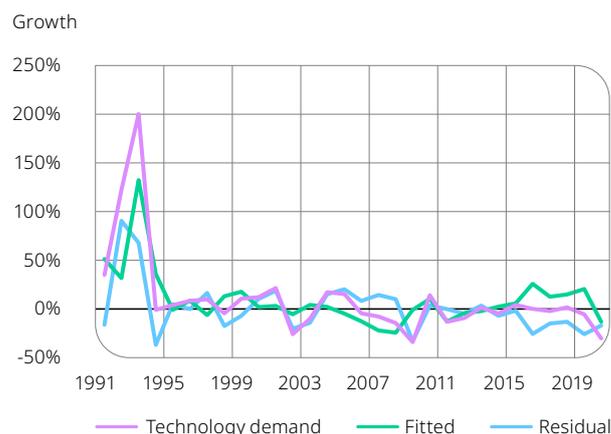
Over the short run, some additional variables appear: there is a persistency in technology demand (momentum) and past GDP influences short-term deviations. In addition, a substitution effect between copper and gold becomes apparent. The equation is shown by:

$$\Delta d_t = \beta_1 \Delta d_{t-1} + \beta_2 \Delta \text{income}_t + \beta_3 \Delta \text{GDP}_{t-1} + \beta_4 \text{spread}_t - \lambda u_{t-1}$$

Chart 17 and Table 8 show the relevant results.

### Chart 17: Past demand and GDP growth influence technology demand, as does income, the gold price and the price differential between copper and gold

Y-o-y % changes in gold demand from 1991 to 2020



Source: Metals Focus, World Gold Council

### Table 8: Income growth and demand momentum push short-term technology demand up, while substitution and rising inventories push it down

Summary statistics from short-term demand dynamics

	ECV	Tech t-1	Income	GDP t-1	Spread
	$-\lambda$	$\beta_1$	$\beta_2$	$\beta_3$	$\beta_5$
Estimate	-0.58	0.15	2.11	-0.76	-0.02
Standard error	0.17	0.14	0.93	0.58	0.02
T-stat	-3.47	1.11	2.27	-1.32	-1.04
R <sup>2</sup>	56.6%				
Direction	63.3%				

Note: Based on annual data from 1990 to 2020.  
Source: World Gold Council

Over the short run, technology demand displays some momentum. A 1% increase in the previous year's technology demand pushes demand up 0.2%: a 1% increase in income lifts demand by 2.1%. Conversely, the previous year's GDP pushes demand down by 0.8% – this implies that manufacturers may over-stock during a good year, thereby lessening demand during the subsequent year. In addition, a widening of the spread between copper and gold prices reduces demand by 0.02% as a substitution effect kicks in. Finally, technology demand mean reverts rapidly, as  $\lambda$  is approximately 0.6. The model explains 57% of the variability and correctly estimates the direction of demand growth 63% of the time.

### Recycling

Since the import ban was lifted in the 1990s, gold recycling has experienced variability and has not displayed a marked trend as we have seen in other demand sectors. In some sense this would imply that Indian gold recycling is fairly consistent – approximately 90t – over the long run.<sup>55</sup> However, there are variables that affect year-on-year changes. Thus, we focused our analysis on short-term dynamics. We found that recycling is positively correlated to price and inversely correlated to jewellery demand and GDP growth.

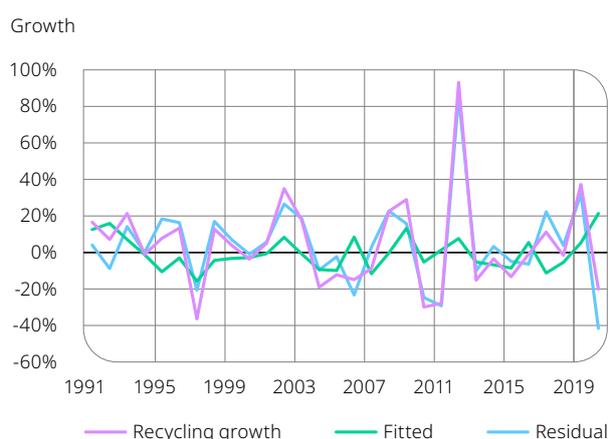
The short-run equation is shown by:

$$\Delta r_t = \beta_1 \Delta p_t + \beta_2 \Delta \text{jewellery}_t + \beta_3 \Delta \text{GDP}_t + \beta_4 \Delta \text{GDP}_{t-1} - \lambda u_{t-1}$$

The results are summarised in **Chart 18** and **Table 9**.

**Chart 18: Recycling is influenced by price, jewellery demand and economic growth**

Y-o-y % changes in gold demand from 1991 to 2020



Source: Metals Focus, World Gold Council

**Table 9: Higher prices result in more recycling, but stronger GDP growth and jewellery demand have the opposite effect**

Summary statistics from short-term recycling dynamics

	Price	Jewellery	GDP	GDP t-1
	$\beta_1$	$\beta_2$	$\beta_3$	$\beta_4$
Estimate	0.57	-0.09	-0.26	-0.58
Standard error	0.37	0.26	0.46	0.48
T-stat	1.53	-0.35	-0.57	-1.21
R <sup>2</sup>	15.7%			
Direction	60.0%			

Note: Based on annual data from 1990 to 2020.  
Source: World Gold Council

In the short run, quite intuitively, a 1% increase in price pushes recycling up by 0.6%. Conversely, positive GDP growth in the same year and the previous year push recycling down by 0.3% and 0.6% respectively. In addition, a 1% increase in jewellery demand pushes recycling down by 0.1%.<sup>56</sup> In other words, recycling seems to respond to opposite forces than jewellery demand – which makes sense as it is the reverse mechanism. This model is not as robust (or statistically significant) as the models we used for the different aspects of demand. Yet while it explains less of the variability than the demand models, it nonetheless estimates the correct direction of the change in recycling at least two-thirds of the time.

## Appendix 2: Government aim to double farmers' income by 2022

India's government set up an inter-ministerial committee in April 2016 to examine the issues around its objective to double farmers' income by 2022. The committee recommended seven key measures to boost farmers' income in response to the suggestion from the Standing Committee on Agriculture (2018-19) of implementing uniform farm laws across the states in India. In September 2020, central government announced three farm Acts related to the agriculture market, contract farming and essential commodities:

- Farmers' Produce Trade and Commerce (Promotion and Facilitation) Act, 2020
  - gives farmers the right to sell their produce either in the agriculture produce market committee (APMC) market or outside it and allows electronic trading of farmers' produce
- Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Act, 2000
  - provides a legal framework for farmers to enter into a contract with agribusiness firms, processors, wholesalers, exporters or large retailers, in order to sell future farming produce at a pre-agreed price which will enable farmers to achieve full price realisation
- Essential Commodities (Amendment) Act, 2020
  - to remove commodities like cereals, pulses, oilseeds, onions and potatoes from the list of essential commodities. This will do away with the imposition of stockholding limits on such items except under "extraordinary circumstances", such as war, and create a competitive market environment.

In the interim budget of 2019-20 the central government also launched the Pradhan Mantri Kisan Samman Nidhi (PM-KISAN).<sup>57</sup> Under this programme, vulnerable landholding farmer families, having cultivable land up to two hectares, would be provided with direct income support at the rate of Rs6,000 per year. Around 120mn small and marginal farmers were covered under the scheme at a cost of Rs750bn (US\$10.84bn) annually. The scheme was later extended to all eligible farmers with no restriction on landholding – approximately 145mn farmers – entailing an annual expenditure of Rs872bn (US\$12.6bn).

Policymakers have attempted to boost non-farming rural incomes as well. Three significant policies have been launched in the past 15 years:

- the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) was launched in 2006 to provide at least 100 days' unskilled employment to households in rural areas
- the National Rurban Mission (NRuM) was launched in 2016 to stimulate local economic development, enhance basic services and create well-planned Rurban clusters
- the Mission Antyoda is a state-led initiative for rural transformation launched in 2017 to enhance efficiency and effectiveness of rural development programmes.

India's government set up an inter-ministerial committee in April 2016 to examine the issues around its objective to double farmers' income by 2022



## Chapter 4: Gold investment market and financialisation

### Appendix 1: India's above-ground stocks

Estimating India's above-ground stock of gold is a notoriously difficult exercise.

But it is important for the industry to have an estimate in which it can have confidence. We have taken a closer look at India's gold flows to come up with a credible estimate.

#### Methodology

An accurate assessment of Indian gold holdings requires an estimate of historical purchases of gold. It is important to be clear that this estimate does not include the volume of gold that may be in the supply chain at any given time.

We assessed the household stock of gold from the accumulation of annual flows; essentially the sum of annual net retail investment and jewellery consumption less jewellery recycling. This allowed us to form an estimate of the household stocks of jewellery and bars and coins.

#### India's gold holdings

Indian gold holdings can be divided into three distinct categories:

- private households
- religious institutions
- financial institutions.

##### Private households

Households are by far the largest holders of gold in India, and have a long tradition of buying gold, stretching back several centuries.

Using an historical GFMS report from 1968 as a starting point, we built a picture of jewellery, bar and coin consumption. Annual data for gold imports, fabrication, consumption and recycling allowed us to

derive the net addition to stocks of gold held by Indian households. Allowances were made for hand-carried cross-border flows and round tripping. Recycling estimates were stress-tested to arrive at a robust estimate. The data imply that private households and individuals are responsible for around 25,000t of gold holdings.

##### Religious institutions

It is well documented that households often gift gold to temples, churches and other religious institutions. Indian temples are among the richest in the world, some receiving donations valued at billions of Rupees. Given the strong religious ties in India and the affinity towards gold, it is not surprising that temples receive donations of bullion and ornaments.

But such holdings are not transparent; there are no data available detailing the amount of gold held by temples. And they are quite fragmented: we know there are more than 700 "popular" temples, with many thousands of far smaller ones across the country.

While religious institutions' gold is distinct from private ownership, developing an accurate picture of India's total stock of gold means we need to subtract it from the estimate of private household ownership of gold; temples do not buy gold themselves, a large portion of it is given by worshippers.

But not all of it is given by worshippers. Some of religious institutions' gold was accrued before 1968, the starting point for our household estimate, and was donated by princely states. This adds a significant margin of error to any estimate for India's stock of gold, which include religious institutions' holdings.

Some of the larger and wealthier temples are known to have large holdings of gold. The Padmanabha Swamy Temple, for example, was found in recent years to have an estimated Rs1.2tn in precious metals, stones and ornaments in five vaults. And there are many other temples with significant annual levels of income and enormous volumes of annual visitors: Tirupati Balaji receives around Rs6.5bn worth of donations per year, while Vaishno Devi welcomes 8mn visitors each year, many of whom will make a donation.

# Chapter 6: Gold Refining and Recycling

## Appendix 1: List of gold refineries in India

Name	Capacity (tonnes)	Location (state)
MMTC-PAMP India Pvt Ltd	300	Haryana
ABANS Jewells Pvt Limited	5	Uttarakhand
Agnis Bullion	30	Haryana
AJ Gold & Silver Refinery	30	Himachal Pradesh
Altim Metals	30	Uttarakhand
Augmont Enterprises Pvt Ltd	140	Uttarakhand
Bangalore Refinery Pvt Ltd	30	Karnataka
CGR Metalloys Pvt Ltd	150	Kerala
Emerald Jewel Industry India Ltd	40	Tamil Nadu
GGC Gujarat Gold Centre Pvt Ltd	30	Gujarat
Golden Star Trading Pvt Ltd	30	Tamil Nadu
Goldfarb Industries Pvt Ltd	30	Gujarat
Harshini Maple Leafs	30	Tamil Nadu
India Govt. Mint	30	Maharashtra, Telangana and West Bengal
Jalan and Company	18	Delhi
JBL Refineries	150	Uttarakhand
Khandwala Finstock Pvt Ltd	40	Uttarakhand
Kundan Care Products Ltd	72	Uttarakhand and Haryana
Lalithaa JewelleryMart Pvt Ltd	30	Tamil Nadu
M.D. Overseas Pvt Ltd	72	Uttarakhand and Rajasthan
Narondas Manordas	100	Maharashtra
National India Bullion Refinery	30	Maharashtra
Onkar Jewellers Private Limited	30	Haryana
Parker Precious Metals LLP	30	Gujarat
R.K. Jewels	30	Haryana
Salasar Synthetics	30	Uttarakhand
Shree Ambica Touch	36	Gujarat
Sonigara Jewellers Pvt Ltd	30	Maharashtra
Sovereign Metals Ltd	110	Gujarat
Tasha Gold Pvt Ltd	30	Uttar Pradesh
Titan Company Ltd	30	Karnataka
Yash Oro India Pvt Ltd	30	Telangana
Zaveri and Company Pvt Ltd	30	Uttarakhand and Gujarat
<b>Total</b>	<b>1,833</b>	

Note: As of January 2022. Source: Metals Focus, World Gold Council



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## Chapter 1

### The drivers of Indian gold demand

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- 2 We used a common approach to estimating long- and short-term effects called the Error Correction Model (ECM), which we applied to determine the drivers of gold consumer demand using data from 1990 to 2020. See Appendix 1 for more details.
- 3 Prior to the 1990s, government regulation made gold imports illegal. This changed in 1992, resulting in a structural change in gold market dynamics. We concentrate on the period starting in the 1990s for three reasons: 1) to have a consistent model across the various demand categories; 2) to avoid difficulties modelling the structural shift; and 3) because econometric models using series for which the pre-1990s data is available and seemingly reliable (e.g. jewellery) delivered results consistent with those using post-1990 data.
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- 50 While taxes were not exactly fixed before 2013, gold price premium data indicates that few of those changes were passed to consumers and so, we have assumed, small fluctuations in price would have only a minor impact on consumer demand.
- 51 2020 was globally an aberration. It had unexpected consequences for gold demand in that physical buying was constrained by restrictions on movement. When considering 2020 as an indicator variable, the impact of higher gold price and tax was lower on short-term demand with coefficient for gold price and tax at 1.1% and 0.9% respectively.
- 52 This corresponds to the 31-year average ending in 2020.
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- 54 The 80:20 rule was an import restriction rule imposed by India where importers were required to export 20% of their imports in the form of jewellery. The rule came into effect on 22 July 2013 and was removed on 28 November 2014.
- 55 In statistical terms we would say that annual recycling appears to be stationary but not constant.
- 56 2020 was globally an aberration. It had unexpected consequences for gold demand in that physical buying was constrained by restrictions on movement. Likewise, recycling was also impacted. In 2020, recycling volumes in India did not respond as much to higher gold prices as consumers preferred to use gold jewellery as a collateral against loans to meet their liquidity needs. Similarly, the response of recycling to jewellery demand was weak as consumers chose gold-to-gold exchange to meet their jewellery demand, particularly during weddings.
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- 56 GIFT is India's only International Financial Services Centre for bringing offshore financial transactions to the Indian territory.
- 57 Based on the tonnage of gold ETF and SGB at end of February 2023.
- 6 The Gold Control Rules were promulgated in 1963 and the final provisions were enacted under the Gold Control Act 1968 whereby several restraints were placed on gold businesses including limits on individual and family holdings of gold. These restrictive measures lasted until 1989.
- 7 A nominated agency status is provided by the Ministry of Commerce via DGFT notification to import bullion in India.
- 8 Four Star Trading Houses and Five Star Trading Houses are import and export houses, some of which are also manufacturers. All exporters of goods, services and technology with an import-export code (IEC) are eligible for recognition as Four Star and Five Star Trading Houses.
- 9 Goods that are importable freely without any 'restriction' may be imported by any person. However, if such imports require an authorisation, the actual user alone may import such good(s) unless the actual user condition is specifically dispensed with by the DGFT.
- 10 Round tripping is the act of exporting gold, be it jewellery, bars or coins, with the sole purpose of melting it down before re-importing it back to the original exporting country. The underlying motive behind round tripping varies. It can be to arbitrage between differences in tax rates or exploit loopholes. Few Star Trading Houses exported medallions without following the value addition norms, hence inflating their export value, in order to retain their status of Four Star and Five Star Trading Houses.

## Chapter 5

### Bullion trade

- 1 In fine gold content terms.
- 2 India's average consumer demand (sum of jewellery consumption and total bar and coin investment) over the last decade was 787t; the second highest over the past decade after China at 938t.
- 3 Financial year (FY) is from April to March.
- 4 Total import duty on bullion post the budget of February 2021 includes 7.5% Basic Customs Duty (BCD), 2.5% Agriculture and Infrastructure Cess (AIDC) and 0.75% Social Welfare Surcharge (SWS). Custom duty on gold bars was increased from 10% to 12.5% in the Union Budget 2019-20 and was effective from 6 July 2019. The domestic gold spot price, as measured by the MCX Gold Spot, had increased by 42% during the period 5 July 2019 to 31 January 2021.
- 5 In 2016 the Indian gold market was shut for 42 days due to protests against 1% excise duty on jewellery manufacturing. In 2020 official imports were hammered due to the impact of the coronavirus. In recent years, gold smuggling has shifted away from the sea in favour of air and land routes.
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- 21 Metals Focus, official imports in fine gold content terms.
- 22 FTWZ offers a distinct advantage as overseas suppliers can import gold into the custom-bonded warehouse of FTWZ without paying customs duty for authorised operations. Imported gold can be stored in FTWZ for a long period – as long as the letter of approval (LOA) is valid – thus reducing the logistics time in supplying to the domestic market as compared to importing from the overseas market.
- 23 Metals Focus.
- 24 Deloitte Study, World Gold Council.
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- 12 Cast bars/coins are produced through moulding whereas minted bars/coins are produced through a continuous casting process.
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## Chapter 6

### Gold refining and recycling

- 1 Recycling industry size calculated as per gold recycling volumes in 2021 and average domestic gold price in 2021. Average annual Indian supply based on last five-year Indian supply (2016-21).
- 2 Metal recovered from an ore body formed into unrefined bars is known as “doré”. These unrefined bars contain gold as well as other metals (such as silver or copper). The gold doré bar contains less than 5% impurities.
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- 9 The Uttarakhand Tax on Entry of Goods Into Local Areas (Amendment) Act. 2016, State Tax Department, Government of Uttarakhand, 2016, [comtax.uk.gov.in/files/VAT/entry\\_tax\\_2016.pdf](http://comtax.uk.gov.in/files/VAT/entry_tax_2016.pdf)
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- 22 Indian Customs, Metals Focus.
- 23 Ibid.
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- 25 Ibid.
- 26 Ibid.
- 27 Ibid.
- 28 Ibid.
- 29 Based on data from 1990 to 2020. 2020 was an aberration globally and had unexpected consequences for gold demand in that physical buying was constrained by restrictions on movement. Likewise, recycling was also impacted. In 2020 recycling volumes in India did not respond as much to a higher gold price as consumers preferred to use gold jewellery as collateral against loans to meet their liquidity needs. Similarly, the response of recycling to jewellery demand was weak as consumers chose to exchange gold to meet their jewellery needs particularly during the wedding season.
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### Gold mining in India

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# Contributors

We commissioned Metals Focus, one of the world's leading precious metals consultancies, to conduct this independent research study with the help of their 'on the ground' presence in India. With a team spread across nine countries, Metals Focus is dedicated to providing world-class statistics, analysis and forecasts to the global precious metals market. We are extremely thankful to Chirag Sheth and Harshal Barot from Metals Focus for their contributions to this report, as well as to Adam Webb, former Metals Focus mining analyst, and Mukesh Kumar, former World Gold Council lead analyst in India.

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