All that glitters is Gold: India Jewellery Review 2013
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About FICCI

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A non-government, not-for-profit organisation, FICCI is the voice of India’s business and industry.

FICCI draws its membership from the corporate sector, both private and public, including SMEs and MNCs; FICCI enjoys an indirect membership of over 2,50,000 companies from various regional chambers of commerce.
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To deliver superior, sustainable results for our clients and each other, we will build on our rich legacy and full range of consulting services as we:

Connect across all borders and boundaries, driving global innovation and collaboration.

Lead in all that we do to ensure our clients lead in all they do.

Sustain success by nurturing our people while harmonizing limited resources, social responsibility, and profitable growth.

By doing good, we will do well for our clients, ourselves, and our community. We do this with passion for people, ideas, and the world in which we live.

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Our Locations

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Our Industry Specialization

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- Automotive
- Chemicals
- Communications, Media & Technology
- Consumer Products & Retail
- Financial Institutions
- Health
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- Oil & Gas
- Private Equity
- Public Sector
- Transportation, Travel & Infrastructure
- Utilities

Our Service Practices

- Analytics
- Digital Business
- Innovation
- Marketing & Sales
- Mergers & Acquisitions
- Operations
- Organization & Transformation
- Procurement
- Strategic IT
- Strategy
- Sustainability
Our Clients

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The Company was founded in 1926, when Andrew Thomas (Tom) Kearney joined our predecessor firm. We still believe in Tom’s mantra: “Our success as consultants will depend upon the essential rightness of the advice we give and our capacity for convincing those in authority that it is good.”

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We have a distinctive, collegial culture that transcends organizational and geographic boundaries. Our consultants are down to earth and approachable, and have a passion for doing innovative client work. We always seek to deliver immediate impact and growing advantage to our clients and our people.

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Preface

Dr. A. Didar Singh
Secretary General

The gems and jewellery sector is one of the most important sectors of Indian economy and has also been one of the fastest-growing sectors in the past few years. The sector is highly export-oriented, labour-intensive and a major contributor to employment, GDP and foreign exchange earnings.

The domestic Gems and Jewellery industry had a market size of INR 251,000 Cr in 2013, with a potential to grow to INR 500,000 – 530,000 Cr by 2018. Considering its immense potential and contributions, the Indian Government has also declared the sector as a thrust area for export promotion.

However, in the past few months due to the increasing Current Account Deficit (CAD) and curbs put on importing Gold, the industry has been severely affected. These restrictions are inadvertently leading to a state of panic amongst the jewellery manufacturing sector.

Whilst in order to resolve the CAD issue, there is a need to look at measures on both export and import side, it is also important to seek a balanced approach which would safeguard the interest of all stakeholders. Although the CAD situation is looking better now however, the turbulent times, for the sector has yet not ended. This report ‘All that glitters is Gold: India Jewellery Review 2013’ is an endeavour to highlight the current status as well as the issues and challenges that exist in the gems and jewellery sector with appropriate solution themes.

I am hopeful that the study would give us some critical insights along with pertinent answers and would establish itself as a work pioneered for one of the oldest industry of this country.

Enjoy reading and we look forward to receiving your suggestions!

Dr. A Didar Singh
Foreword

It gives me great pleasure to present the latest Knowledge Paper on the Indian Gems & Jewellery sector - Maintaining Growth, painstakingly prepared by A T Kearney.

The Gems & Jewellery sector have been playing a very important role in the Indian economy and has been contributing to 6% to 7% of the country's GDP, apart from large scale employment generations and foreign exchange earnings. However, I am pleasantly surprised by the fact that the value created by Gems & Jewellery sector estimated at about INR 1,00,000 crores is as high as the apparel sector and much higher than many other sectors in India.

The steps taken by the Indian Government to liberate Indian Gems & Jewellery sector in the 90's, is one of the important reason for the increase export contribution by this sector. The liberalization has also resulted in shift from the unorganized to a more organised set of players which resulted in greater transparency and adaption of higher quality and design standards.

The recent steps taken by Government to restrict import of gold is definitely having a negative impact on Gems & Jewellery sector and we hope that this is only a short term measure and the Government quickly removes restrictions on gold consumed for jewellery manufacturing.

I take this opportunity to thank the FICCI team as well, for all their efforts to initiate this insightful Knowledge Paper.

Thanking you

Sincerely,

Mehul Choksi
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1. Executive Summary

The gems and jewellery industry plays an important part in the Indian economy. In addition to boasting a large gems and jewellery market, India has a unique situation in terms of both demand and supply. The domestic gems and jewellery industry had a market size of INR 251,000 Cr in 2013, with a potential to grow to INR 500,000–530,000 Cr by 2018.

The gems and jewellery industry is crucial to the Indian economy given its role in large-scale employment generation, foreign exchange earnings through exports, and value addition. The industry provides direct employment to roughly 2.5 million people and has the potential to generate employment of 0.7–1.5 million over the next five years. This is comparable to the 2.1 million employments provided by IT services and is 2.5 times that provided by basic iron and steel manufacturing and automotive manufacturing. In 2012–2013, the industry drove jewellery exports to the tune of INR 227,000 Cr, outperforming textiles and apparel exports by 25%. The industry also drove value addition of more than INR 99,000 Cr, which is comparable to several large industries such as apparel manufacturing.\(^1\)

The demand in India can be segmented into consumption and investment. Unlike most other countries, investment demand for gold is important in India and accounts for about 45 percent of total market demand. Around 57 percent of the investment demand comes from bars and coins, while the rest comes from jewellery. The high investment demand is driven by a lack of alternative financial institutions for a large section of society, a perceived capacity to hedge against inflation, ability to invest smaller value in gold, high returns in gold over the past 12 years and ease of investing unaccounted money in gold. Also, while the volume demand for gold as jewellery has remained more or less constant over 2005 to 2013, the volume demand for gold bars and coins have grown at a CAGR of around 13 percent in the same period.

From a supply side, the value chain consists of imports, mining, refining, trading, manufacturing, and retailing. This includes a mix of players catering to both consumption and investment demand. The Indian gems and jewellery industry is fragmented, with local players constituting about 80 percent of the overall market. The variances in consumer preferences in designs, quality, and material across different regions have historically presented a challenge for national and organized players to create design-led differentiation. The share of organized players in the industry is growing, specifically that of regional players. However, there is a risk of reversal in this trend due to increasing regulatory restrictions on gold imports and the price differential between the official and unofficial supply of gold in the market. The supply side is also characterized by several local and independent stores in rural areas that play the role of financing entity, providing customers an investment option and lending money against gold.

The industry faces several challenges impacting consumption and the investment demand side of the market. While challenges in talent and skill development, research and technology adoption, and limited financing options are core to players catering to the consumption demand for jewellery, an increasing investment demand with limited supply infrastructure affects the investment side of the market. High import dependence and regulatory curbs impact both consumption and investment demand of the market.

- **High import dependence and limited recycling.** There is very little domestic production of gold, which has resulted in a very high dependence on imports. This makes the industry susceptible to any regulations that constrain gold supply. In addition, the supply of recycled gold from the domestic market is limited.

\(^1\) Calculated as difference between output and raw material consumed by the industry.
• **Overregulated consumption industry and under-developed investment industry.** In terms of regulatory policy, there is a lack of differentiation between investment demand and consumption demand. As a result, while imports have surged primarily to feed investment demand, regulations have also constrained consumption demand. There is no clear policy on the investment demand of gold.

• **Large investment demand and associated supply infrastructure.** There is substantial investment demand in both jewellery and bars and coins form. This is due to the great attractiveness of gold as an investment option, the limitations of alternate investment options, and the inadequacies of financial products backed by gold. However, bars and coins in particular have limited value addition and thus make a limited contribution to industry growth. Further, the investment demand adds to the import burden, leading to regulatory actions that impact the industry. There are a number of jewellers that cater primarily to investment demand, especially in rural and semi-urban areas.

• **Perception of opaqueness.** The industry is fragmented with MSME-sector dominance. Over the last decade, there has been considerable increase in share of organized sector and corresponding transparency. However, there is still a perception of opaqueness, particularly due to the fragmented nature of the industry. As we have seen over last five years with share of national and regional chains increasing from 3 to 5 percent and 7 to 17 percent respectively, this perception is improving. We expect this perception to further improve in long run.

• **Limited financing options.** The industry faces difficulties in availing financing options. Further, the unavailability of Gold (Metal) Loans has increased the cost of financing for domestic jewellers. Traditional financing is costly due to high input costs.

• **Risk of talent shortage.** The industry’s on-the-job training model leads to longer training time and creates gaps in availability of industry best practices and standardization, mainly for the fragmented part of the industry. This is coupled with gaps in infrastructure, lower demand for institution-trained workers in the fragmented part of the industry, and low attractiveness of the industry to the younger generation of employees.

• **Limited research and technology adoption.** Innovation is critical for success in the export market and for growing the domestic segment. This requires the use of modern design and the latest technology. While the industry is adept at traditional designs, there is a lack of design-led innovations. Adding to this are sub-scale facilities that limit the use of modern technology.

Given these challenges, it is crucial to drive a comprehensive transformation of the industry to ensure sustainable growth and greater contribution to the Indian economy through higher exports and value addition. While several initiatives would benefit the industry, there are six broad themes that can form the basis of action for the industry, Government, RBI, and other stakeholders. The various stakeholders can draw learning from Turkey and Dubai where the gems and jewellery market has witnessed significant transformation.

• **Monetize existing investment through recycling.** Focus on higher recycling of gold available within the country through gold deposit schemes and other similar schemes and allow banks to buy domestic gold.

• **Liberalize regulations affecting the consumption value chain.** Enable consumption demand by reducing restrictions on gold supply, focusing on quality control (hallmarking), and introducing easy financing options.

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2 MSME is micro, small, and medium-sized enterprises.
3 RBI is Reserve Bank of India.
• **Develop and regulate the investment value chain.** Develop the market to cater to investment demand for gold by facilitating gold-based investment products. Also, effectively meet investment demand by increasing access to banking systems and increasing financial education and confidence particularly in non-urban areas. Ensure availability of gold coins and bars primarily through banking systems and develop other gold based financing options.

• **Offer easy financing options.** Ensure better credit ratings and develop easy financing options such as asset-based lending. Also, re-introduce gold (metal) loans for the domestic jewellers.

• **Improve perception of industry opaqueness.** Ensure that the industry image is enhanced through increased registration of enterprises, higher discipline in financial reporting and tax payments. This is especially important given the fragmented nature of the industry.

• **Develop infrastructure and skills to cater to specific needs of consumption demand.** Facilitate adoption of new technology and designs—particularly by the fragmented part of the industry—through creation of shared facilities, and develop an adequate talent pool through modern skill development initiatives.

We expect that these steps can help transform the industry and positively impact key industry metrics by 2018:

• **Lower imports** of gold of INR 620,000–630,000 Cr from a base case of INR 660,000–680,000 Cr, with greater recycling and wider use of alternate investment options reducing the import burden to balance the increase in import requirements to cater to around INR 90,000 Cr of additional exports.

• **Higher recycling** of 40 to 45 percent of domestic demand compared to 20 percent base case.

• **Additional employment** opportunity of 0.5-1 million compared to scenario if import restrictions and other challenges continue.

• **Higher consumption demand for gold jewellery** of INR 390,000–410,000 Cr from a base case of INR 370,000–390,000 Cr due to increased value addition by the industry, leading to a 4 to 6 percent increase in consumption demand.

• **Reduced investment demand** of INR 110,000–120,000 Cr from a base case of INR 130,000–140,000 Cr for jewellery and of INR 135,000–145,000 Cr from a base case of INR 180,000–190,000 Cr for bars and coins due to the wider presence of and greater access to alternate financial options, resulting in a decrease in imports of 8 to 9 percent.

• **Higher gold exports** of INR 240,000–250,000 Cr from base case exports of INR 150,000–160,000 Cr, a result of a more competitive industry with better designs, quality, and manufacturing, making exports equal to 40 to 45 percent of domestic jewellery demand and 40 percent of imports post transformation.

• **Greater value addition** on jewellery manufacture and retail of around INR 165,000 Cr from a base case of around INR 140,000 Cr, led by better infrastructure and enhanced exports.

• **Higher share of organized retail** of 30 to 35 percent compared to a base case of 25 percent due to initiatives undertaken to enhance transparency and improve infrastructure with a higher adoption of modern technology.
2. Study Context and Background

In India, gems and jewellery inspire passion unlike any other object of desire. Everyone has been moved by the beauty of gems and jewellery at some point—be it a glittering wedding necklace, exquisite earrings, or a solitaire diamond. Gems and jewellery have a rich history and cultural heritage that, coupled with an enduring attraction to gold, has given rise to a large and thriving industry.

The gems and jewellery industry has a far-reaching impact in the Indian economy—it is one of the highest contributors to export (INR 227,000 Cr in 2012–2013)—provides employment to 2.5 million directly, and contributed INR 99,000 Cr as value addition to the economy.\(^4\)

However, one of the key inputs for the industry, gold, has been in focus due to almost complete dependence on imports for supply and an expanding current account deficit (CAD). As a result, regulatory action has been taken to limit gold imports. The CAD for India has increased to 4.8 percent of GDP in 2012–2013 from a positive current account balance of 1.2 percent of GDP in 2002–2003. It should be noted here that imports have grown by a CAGR of 25 percent in this period. Exports, however, have not kept pace, with a CAGR of 20 percent between 2002–2003 and 2012–2013. Resolving the CAD issue, thus, requires a study of both export and import measures.

Gold has the second-highest share in imports, increasing from 6 percent in 2002–2003 to 11 percent in 2012–2013. The increase in gold imports is largely driven by the spectacular growth in gold prices, with prices moving from INR 5332 per 10 gm in 2002–2003 to INR 30,164 per 10 gm in 2012–2013 (CAGR of 19 percent), leading to a CAGR of 32 percent in value terms.\(^5\) In comparison, import of gold in volume has only increased by a CAGR of 5 percent.

The other two large segments are crude and other petroleum products and machinery and other equipment. These are considered more essential to the economy than gold and, as a result, the regulations to curtail imports have focused on gold. Consequently, there have been changes in regulations that aim to curb gold imports. Because gold is the most important raw material, any uncertainty in its supply has a crippling impact on the entire industry.

In these turbulent times, FICCI and A.T. Kearney have come together to develop a comprehensive view of the industry. The focus of this report is on gold jewellery manufacturing and retail, which accounts for around 50 percent of value addition in the gems and jewellery industry (see Figure 1).

\(^4\) Calculated as difference between output value and input value of raw materials
\(^5\) RBI data, price at Mumbai
The report aims to highlight the differences in investment and consumption demand in the market as there are specific challenges and solution themes for each area. Our aim is to answer four basic questions:

1. What is the size and structure of the industry? What are the demand segments and fundamental drivers for gems and jewellery demand (with the focus on gold)?
2. What is the contribution of the gems and jewellery industry to the Indian economy?
3. What are the various challenges that can impact the industry’s growth?
4. What are the key solution themes and roles of various stakeholders in order to ensure sustainable growth for the industry?

The assessments and recommendations in this report have been based on collation and analysis of an extensive fact base, international comparisons and benchmarks, discussions with industry leaders and other stakeholders.
3. Study Methodology and Report Structure

The following assessment was conducted to address the four big questions identified for the industry.

- **Demand assessment.** The focus of this report is on the domestic market. The domestic retail jewellery market size has been estimated by aggregation of individual elements: gold, diamond, silver, platinum, and gemstones. The demand assessment highlights a previously unexplored facet of the industry—the industry is clearly segmented into two parts, consumption and investment demand. The forecast of market size is based on regression analysis of historical demand on all potential factors to identify the demand drivers. This has been done separately for consumption and investment demand.

- **Value addition.** Value addition has been defined as the difference between output value and input value of raw materials. The study has captured value added by the industry catering to both domestic and export markets. A thorough analysis of the value chain has been undertaken. Value addition has been estimated for each element of the value chain, viz. trading, refining, cutting and polishing of diamonds and colored gemstones, jewellery manufacturing and retailing to estimate total value added by the industry.

- **Employment.** The employment generated by the industry has been estimated using an employee productivity method. For example, the average number of employees needed per unit volume of jewellery manufactured has been analyzed and this has been used to estimate the total number of employees in jewellery manufacturing. Employment generated in various sectors, including jewellery manufacturing, diamond cutting and polishing, gemstone processing, jewellery retail, and others (trading, mining, etc.), has then been aggregated to obtain employment generated by the industry.

- **Exports.** The various components of the market, including gold, silver, platinum, and diamond and gemstone jewellery, have been aggregated to estimate the export contribution of the jewellery industry. Future projection of exports has been based on the assumption of a stable domestic supply industry.

- **Challenges and solution themes.** The industry value chain was studied in detail with respect to regulations, industry structure, and key players as also in the context of the widening CAD of the country. The findings were used to identify key challenges faced by the industry. Solution themes were arrived at after a thorough root-cause analysis, study of best practices from other comparable countries, industries in India with similar characteristics and discussions with industry and A. T. Kearney experts.

The findings are presented in the following chapters:

- **Value Chain in India** – provides an overview of the value chain highlighting value chains for investment and consumption demand.

- **Industry size and Importance to the Economy** – assesses industry demand drivers and growth outlook across consumption and investment demand, and lays out the importance of the industry to the economy.

- **Challenges faced by the Industry** – looks at challenges across the value chain to identify specific issues faced across segments (consumption and investment demand). We highlight how challenges across the consumption and investment sides are distinct and therefore need to be managed differently. The challenges include areas that are central to the history and structure of the industry and recent changes that have further impacted the gems and jewellery industry.
• **Imperatives for Sustainable growth** – identify key solution themes for the industry that can ensure sustainable growth for the consumption demand. It also identifies initiatives to manage the investment demand to reduce the impact on CAD, provide alternate investment options, and increase transparency.

• To conclude, we bring all of our learning together and present **The Way Forward** – for key stakeholders—industry, Government, and RBI. This sets the action agenda for these stakeholders to ensure sustainable growth for the industry through successful implementation of various initiatives.

As in any industry study, multiple data sources have been used to assess the gems and jewellery industry. We have leveraged data from The Department of Commerce, Directorate General of Commercial Intelligence and Statistics (DGCI&S), RBI, World Bank, Gold Surveys, and World Gold Council. This has been adequately supplemented by primary information collected through interviews across stakeholders including leading jewellers, banks, Government, and industry experts.
4. Value Chain in India

Jewellery has a special significance in Indian culture. Backed by intricate Karigari and designs developed over the ages, it has been an integral part of Indian lifestyle and culture for centuries. Today, India has a large domestic jewellery market. It is also the largest consumer of gold jewellery in the world with 29 percent share of the total global demand for gold as jewellery. Apart from being a large jewellery market, India also has a robust jewellery manufacturing industry.

The value chain for gold includes mining, imports, refining, trading, manufacturing, retailing, and the financial industry for gold-based products. The gold value chain has a distinct characteristic: it caters to both consumption-led demand and investment-led demand. As a result, there are two value chains with distinct drivers and needs; however, there is extensive intermingling of the players across the two value chains. The industry value chain is comprised of sourcing (mining and imports), refining, trading, manufacturing, and retailing (see Figure 2). While some of the players cater primarily to consumption demand for jewellery and others cater primarily to investment demand, there are a host of players catering to both consumption and investment demand. For example, banks selling gold coins would serve the investment demand for gold, a branded diamond jewellery retailer would primarily serve the consumption demand, and a local jeweller would play a dual role by also serving as a money lender.

The supply landscape of the Indian gems and jewellery industry is different from its counterparts in the developed world. This difference is highlighted in the fragmented supply base, variation across regional manufacturing hubs, and labor-intensive but highly productive industry.

4.1 Gold Sourcing: Largely Dependent on Imports

Mining of gold in India is very limited and is restricted to the Hutti, Uti, and Hira-Buddini mines (Hutti Gold Mines Limited) in Karnataka and the Kundkocha mine (Manmohan Industries Pvt. Ltd) in Jharkhand. Primarily due to India’s limited gold reserves, the yearly production of gold was around two tons in the period 2011–2012, which equates to just 0.2 percent of the amount of gold imported.

As a result, there is a high dependence on imports. Gold is imported by nominated banks (36 banks are authorized), nominated agencies or bullion banks, and select star and premier trading houses (around eight organizations). Most gold is imported through a handful of bodies, including bullion banks and Government trading agencies, and is largely organized and consolidated among fewer players. Also, the imported gold is usually sold in bulk to manufacturers and dealers. Gold is imported primarily in unwrought or semi-manufactured form (INR 292,000 Cr in 2012–2013). However, some gold is imported as jewellery (jewellery import was INR 27,000 Cr in 2012–2013).

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6 World Gold Council data for 2012
7 Indian Minerals Yearbook 2012, Indian Bureau of Mines
8 RBI data, January 2013, Authorization up to December 31, 2013; Federation of Indian Export Organizations data
9 Including jewellery of pure gold, diamond jewellery, jewellery set with pearls and gemstones
4.2 Refining: Existing Capacity But Low Utilization

Refineries in India operate mainly on imported gold dore bars and scrap gold collected from the domestic market. Refineries thus play a crucial role in the recycling of gold in the country. The market for refining is small, however. Currently, it is estimated that refineries are operating at 25 percent of total installed capacity due to a shortage of used jewellery. The market consists of a few larger units and other smaller units, mostly

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**Figure 2: Gold value chain in India**

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<th>Sourcing (mining and imports)</th>
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<th>Trading</th>
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*Source: A.T. Kearney analysis*

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10 *Business Standard* news report, October 9, 2013
in the private sector, and a few Government refineries. In addition, because most of the private refineries are not LBMA-certified, gold bars produced by them cannot be used for exchange traded funds (ETFs) or bought back by banks and as a result these refineries are not part of the financial system.

4.3 Trading: Developed Industry for Physical Trading of Gold

Trading of physical gold is done by dealers and gold jewellery manufacturers and retailers. Physical gold is usually purchased in bulk from importing agencies and then resold to smaller jewellers across the country. This trading caters to both consumption and investment demand in the market.

Commodity-based trading of gold is done through exchanges such as the Multi Commodity Exchange of India (MCX), National Commodity & Derivatives Exchange Ltd. (NCDEX), National Multi-Commodity Exchange of India Ltd. (NMCE), and National Spot Exchange Limited (NSEL). Several organizations engage in trading activities, including bullion dealers and jewellery manufacturers. Most of these transactions are done by industry players and not by retail investors. For example, jewellery retailers may hedge position in MCX while buying jewellery directly from vendors.

4.4 Manufacturing: Largely Manual Manufacturing Spread Across the Country

India has a thriving manufacturing base for gems and jewellery. Globally, India is well known as an important diamonds and jewellery manufacturing hub and is an important source of supply across the world. Within the country, there is regional variation in customer preference that has resulted in the development of specific jewellery clusters, specializing in a particular kind of gold and diamond jewellery design preferred by customers in the region. Jewellery manufacturing is fairly spread across the country with hubs located across all regions, catering to local tastes and preferences (see Figure 3).

The last few years have seen the emergence of large organised jewellery manufacturers who serve the rapidly organizing jewellery retail industry. The larger manufacturers of jewellery have modern, well organized manufacturing units, a higher focus on design, quality, standardization as well as efficiency (minimal gold loss) and they primarily cater to consumption demand for jewellery. These players operate primarily from the major jewellery manufacturing hubs in the country. However, the rest of the jewellery manufacturing industry is fairly fragmented, with a large share of the output produced by small manufacturers. The output from this fragmented segment has comparatively lower value addition and hence caters to both consumption and investment demand in the market. The gold coins are manufactured either directly by refiners or by jewellers or coin manufacturers and cater to investment demand.

Given the fragmented nature of the Indian gems and jewellery industry and the relatively cheap work force, there is limited investment in machinery and automation in jewellery manufacturing. Around 70 percent of the jewellery processing in India is carried out manually. This leads to an increased demand for highly skilled labor with unique skill sets. However, with changing customer demand, there is a need for higher automation and innovation, necessitating additional skill requirements in the industry. While there has been a shift toward higher automation, the rate of change will be dependent on the cumulative efforts made by various stakeholders.

11 *Netscribes* Report: Gems and Jewellery Market – India (May 2010)
In terms of technology used for jewellery making, three types predominate: handmade, casted, and machine-made. In addition, there are new technologies such as fusion, electroforming, mesh, and Italian being adopted by some players. These have been used for differentiation with respect to customer-facing parameters such as quality, finish, design complexity, and weight.

**Figure 3: Major jewellery manufacturing hubs in India**

- **Amritsar**
  - Jadau
- **Jaipur**
  - Kundan
  - Minakari
- **Gujarat**
  - Junagadh–polki
  - Rajkot–color stone
  - Surat–diamond jewellery
- **Mumbai**
  - Machine-made jewellery
  - Largest wholesale market
- **Delhi**
  - Diamond and silver jewellery and articles
- **Kolkata**
  - Lightweight plain gold jewellery - filigree
- **Andhra**
  - Hyderabad–semi-precious studded jewellery
  - Nellore–hand-made
- **Southern Cluster**
  - Coimbatore – casting jewellery
  - Thrissur – light-weight gold

Sources: Primary interviews, A.T. Kearney analysis

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**4.5 Retail Industry: Fragmented With Good Productivity**

The Indian gems and jewellery industry developed as an unorganized sector, but the past decade has witnessed the emergence of organized players, with Government liberalizing gold imports into the country. The industry is, however, still fragmented, with local and independent store constituting roughly 80 percent of the overall market, in comparison to a much higher proportion of share from organized players (about 50 percent) in similar markets such as Turkey, as shown in Figure 4. The trusted local family jeweller, with whom customers have relationships over generations, is still the largest channel for jewellery sales. In rural areas, many local jewellers will also play the role of financiers/money lender, lending money against gold.
The growth of national chains is inhibited by the strong presence of local and regional players and variances in consumer preferences in designs, quality, and material across different regions. Despite that, there has been a sharp increase in the share of organized retail, which was almost negligible 15 years ago. Along with a few large national players, regional players have also expanded beyond their city/catchment and have become regional chains (see Figure 5). Over the period between 2008 and 2013, the share of regional chains has increased significantly from 7 percent to 17 percent, while the share of national chains has grown from 3 percent to 5 percent.
While the share of organized players in Gems and Jewellery industry has been increasing, there is a risk of slowing down of this trend due to regulatory restrictions on gold imports and price differential between official and unofficial supply of gold in the market.

Value proposition for jewellers
While there are multiple types of retailers, they differ from each other in terms of their value proposition to the consumer. The key purchase criteria for a jewellery consumer are trust, range, price, design, quality, brand image, location, and services (see Figure 6). Players focus on a few of these to differentiate themselves as explained below:

- **Designer jewellers**: Have very high focus on design and cater to high-end market, with differentiation on design and brand image
- **Top-end family jewellers**: Have high focus on services and design
- **Leading family jewellers**: Primarily focus on heritage-based trust and services, but also provide a good range and are price competitive
- **International brands**: Have a small presence in India; target trendy customers by playing on brand name and design
- **Regional jewellers**: Often form chains in a particular region, focusing on trust and services and providing personalized services for customers
- **National chains**: Have a pan-India presence and differentiate on trust and brand image
- **Local and independent jewellers**: Focus on price and target low-end customers, with little focus on brand image or design
• **Diamond jewellery brands**: Focus on brands and design; they try to be in multiple locations through modern retail and department stores

**Performance of Indian retailers**

The high consumer demand for gold has enabled Indian jewellery retailers to realize higher store productivity and faster inventory turns leading to a higher return on capital employed when compared to retailers in other developed markets (see Figure 7). This has helped the industry grow and has given new players an incentive to enter and to existing players to expand their operations, particularly in jewellery retail. Gross margins through are lower compared to developed markets since the brand premium that the consumer is willing to pay is still very low. The system of selling jewellery on a component-wise costing and the consumer’s unwillingness to pay for design also contributes to keeping gross margins low.

**Bars and coins retailing**

Another aspect of gold retailing caters purely to the investment demand for gold and includes retail sale of bars and coins. Bars and coins are available for retail sale through jewellers, select bullion dealers, and banks. While most jewellers are involved in the retail sale of gold coins mainly to increase traffic in stores, some banks sell gold coins in select branches throughout the country. There is, however, limited availability of gold coins through banks in rural areas. Also, banks do not buy back gold coins they have sold.
**Figure 6: Value proposition for jewellers**

- **Designer jeweller**
  - Differentiates on design and brand image

- **Top-end family jeweller**
  - Differentiates on services and design

- **Leading family jeweller**
  - Differentiates on services and heritage-based trust

- **International brands**
  - Differentiates on design and brand image; for the trendy customer

- **Regional jeweller**
  - Provides personalized services over national chain

- **National chain**
  - Differentiates on trust and brand image

- **Local and independent store**
  - Competes on price and range; targets low-end consumer

- **Diamond brands**
  - Differentiates on brand image and design

Source: A.T. Kearney analysis
The investment demand for gold is also fulfilled through financial products. There are different types of products available in the market. Retail investors may take positions in gold through financial instruments such as gold ETF, e-gold, and gold-based mutual funds.

**Gold ETFs**

These are exchange-traded funds backed by gold. Gold ETFs are provided by about 14 financial institutions in India and are traded on the NSE and BSE. They provide returns that closely match that of gold, though there is a need for actual backing with physical gold up to 90 to 95 percent of the value of the gold ETF. It is also possible to back these (up to 20 percent) with the gold deposit schemes of banks. However, retail investors need not take physical possession of gold during the transaction. The instrument works on a platform similar to equity trading, with investors needing equity demat accounts to have positions.

There is a comparatively larger market for gold ETFs globally, with combined holdings of 2,691 tons at the end of 2012. However, the market for gold ETFs in India is smaller, with gold holdings of around 40 tons (around INR 10,660 Cr of total assets under management). Of this, the top four funds (Goldman Sachs, Reliance...
Mutual Fund, SBI Mutual Fund, and Kotak Mutual Fund) have around 75 percent share (see Figure 8). Having launched in 2007, gold ETFs are relatively new, with significant rise in volumes only in the past two years. However, recent pressures on CAD have led to instances of market regulator SEBI turning down applications for new gold ETFs.\(^{14}\)

**Figure 8: Assets under management for gold ETFs in India**

(September 2013)

 ![Pie chart showing assets under management for gold ETFs in India]


Sources: NSE, BSE, Money Control; A.T. Kearney analysis

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**e-gold**

These are gold-backed instruments traded on the NSEL. They operate like a commodity in the spot market, with nominal cost of trading (compared to that of gold ETFs, where NAV is calculated after incorporating fees for the asset management company and other charges).\(^{15}\) It is possible to get delivery of physical gold if needed by the investor. Also, the returns track gold prices very closely since they are backed completely by physical gold.

**Gold funds (mutual funds)**

These are usually fund of fund schemes backed by gold ETFs. They operate along similar lines to mutual funds, and do not require a demat account. Being fund of funds, they incur recurring expenses of the underlying scheme (gold ETFs). Gold funds also offer Systematic Investment Plans (SIPS) that allow customers to invest in small value.

Overall, the market for financial products is comparatively new in India, with low off-take and limited product options. Recent pressure on CAD also has led to initiatives impacting the industry.

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15 NAV is net asset value.
5. Industry Size and Importance to the Economy

We have comprehensive assessed the industry size and its importance to the Indian economy across three dimensions:

- **Gems and Jewellery Industry Size**: Current demand and its key characteristics including consumption and investment behavior in India and regional preferences
- **Importance of the Gems and Jewellery Industry in the Indian Economy**: Contributions of the gems and jewellery industry to the Indian economy, specifically in employment generation, exports, and value addition
- **Growth Outlook and Demand Drivers**: Growth outlook for the domestic jewellery market and drivers for demand

5.1 Gems and Jewellery Industry Size

The gems and jewellery industry in India caters to both domestic and export demand (see Figure 9). The industry has three key markets:

- Domestic gems and jewellery market of around INR 251,000 Cr in 2012–2013
- Export market for cut and polished diamonds and other gemstones, with exports of INR 126,000 Cr in 2012–2013
- Jewellery export market, with exports of INR 73,000 Cr in 2012–2013

**Figure 9: Components of gems and jewellery industry – India**

(INR '000 Cr, 2012-2013)

Note: Numbers may not resolve due to rounding
1. Includes rough diamonds and cut and polished diamonds

Sources: Ministry of Commerce, WGC; A.T. Kearney analysis
In addition, there is a large non-jewellery domestic market of INR 103,000 Cr, which is primarily gold bars and coins. Over the years, the market for gold bars and coins has grown in size from 134 tons in 2005 to 312 tons in 2012. Currently, demand for gold bars and coins in India contribute to 25 percent of world demand (see Figure 10).\(^\text{16}\)

**Figure 10: Share of Indian demand in global demand (volume of gold consumption)**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>1,256</td>
</tr>
<tr>
<td>Rest of world</td>
<td>1,908</td>
</tr>
</tbody>
</table>

Sources: WGC; A.T. Kearney analysis

The domestic gems and jewellery market is the largest segment of the Indian industry, accounting for 56 percent of gems and jewellery output of INR 451,000 Cr in 2012–2013.\(^\text{17}\) It is comprised of gold, silver, and platinum jewellery, either plain or studded with diamonds or other gemstones, and is driven by gold and diamond, which account for 94 percent of total market value (see Figure 11).

**Consumption Behavior in Domestic Market: Significant Investment Demand**

Gold is a symbol of prosperity and appeals to both younger and older generations across social strata within the country. It has a unique position in the minds of Indians and is considered a source of social security for a large section of the society. Indians also attach a high emotional value to gold. It is often considered a social requirement for ceremonies and weddings and bestows a sense of pride and social status to its owners.

The demand assessment for gems and jewellery in India needs to distinguish the investment and consumption demand due to the significant importance of gold as an investment asset (see Figure 12).

**Consumption Demand**

The consumption demand accounts for around 55 percent of the total market demand. This demand is led by the need for gold and non-gold jewellery that caters to specific wear occasions and is essentially similar to that of a luxury product. The jewellery for consumption demand typically requires high value addition and intricate design-led innovations. In terms of occasions for wearing jewellery, the consumption demand caters to (see Figure 13).

\(^{16}\) World Gold Council data for 2012

\(^{17}\) Calculated as domestic jewellery market / (domestic jewellery market + jewellery export + diamond exports)
Figure 11: Historical domestic gems and jewellery and gold bars and coins market

(INR '000 Cr)

Note: Numbers may not resolve due to rounding.
Sources: World Gold Council, GFMS, industry interviews; A.T. Kearney analysis

Figure 12: Historical domestic investment and consumption market

(INR '000 Cr)

Sources: World Gold Council, GFMS, industry interviews; A.T. Kearney analysis
• The fashion-wear segment that currently has 8 to 10 percent share but has gained importance with the increase in demand for diamond jewellery. The growth in this segment is being driven by rising income levels and the adoption and promotion of western concepts such as solitaire engagement rings.

• Diamond-studded gold jewellery, non-gold jewellery, and pure gold jewellery for regular wear. The regular wear segment has around 25 to 30 percent share of the market. This segment includes comparatively lower-value jewellery and gem-based rings.

• Non-gold jewellery and some diamond-studded and pure gold jewellery in the ceremonial and bridal wear segment. The ceremonial and bridal wear segment is the largest segment, with 60 to 65 percent share.

Figure 13: Segmentation based on content and wear occasion

(2012)

<table>
<thead>
<tr>
<th>Occasion classification</th>
<th>Ceremonial and bridal wear</th>
<th>Regular or daily wear</th>
<th>Fashion wear</th>
</tr>
</thead>
<tbody>
<tr>
<td>60-65%</td>
<td>Predominantly 22 carat gold</td>
<td>Mostly 22 carat; 18 carat growing</td>
<td>Predominantly 18 carat or exquisite designs in 22 carat</td>
</tr>
<tr>
<td></td>
<td>Above 50 grams per piece</td>
<td>1–50 grams per piece</td>
<td>1–20 grams per piece</td>
</tr>
<tr>
<td></td>
<td>Sets, necklace, bangles,</td>
<td>Chains, necklace,</td>
<td>Chains, pendants,</td>
</tr>
<tr>
<td></td>
<td>waistbands</td>
<td>bangles, pendants,</td>
<td>earrings, braces</td>
</tr>
<tr>
<td></td>
<td></td>
<td>earrings,</td>
<td></td>
</tr>
<tr>
<td>25-30%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8-10%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Gold jewellery

- Fully studded or solitaires
- Above Rs.1 lakh per piece
- Bangles, pendants, necklace sets

Diamond-studded jewellery

- Average price: Rs. 30,000
- Smaller-size diamonds
- Rings, pendants, earrings, nose pins

Other categories

- Pearls and silver jewellery
- Platinum jewellery

- Gems and gems jewellery (for example, rings)
- Platinum, synthetic diamond, or silver with design being a value add

Source: A.T. Kearney analysis
Investment Demand
Investment demand in either jewellery form or as bars and coins accounts for about 45 percent of the total market demand. The high investment demand in India is driven by five key reasons:

- **Lack of alternate investment or savings options for a large section of society.** Tier 2 towns and rural parts of the country that account for 60 to 65 percent of gold jewellery demand have limited alternate options for investments.\(^{18}\) Specifically, they have limited access to bank accounts, which restricts investments in financial instruments. India has low financial access, with only 747 bank accounts per 1000 adults as compared to countries such as UAE, Turkey, the United States, and the UK (see Figure 14).\(^{19}\) The actual number of unique account holders is expected to be much lower in India due to the number of people with multiple accounts. This is driven by low availability of bank branches in the rural sector. For example, only 37 percent of scheduled commercial bank branches are in rural areas.\(^{20}\) For rural populations, the post office network, with its wide footprint in rural areas, is the primary institutional option for savings and has emerged as one of the preferred options for financial saving. However, post offices have not been able to capture the entire rural investments due to the lack of lending/credit facilities. According to RBI, in 2002, 42 percent of rural credit was given out by non-institutional agencies, including landlords, money lenders, and traders.\(^{21}\) As a result, jewellers have emerged as the financial alternate, providing investment options through gold and also playing the role of money lender.

Figure 14: Domestic consumer demand for gold (as jewellery only) as percentage of nominal GDP

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>1.64%</td>
</tr>
<tr>
<td>UAE</td>
<td>0.68%</td>
</tr>
<tr>
<td>Turkey</td>
<td>0.45%</td>
</tr>
<tr>
<td>UK</td>
<td>0.05%</td>
</tr>
<tr>
<td>U.S.</td>
<td>0.04%</td>
</tr>
</tbody>
</table>

Bank accounts per thousand adults (2010)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>747</td>
</tr>
<tr>
<td>UAE</td>
<td>1,750</td>
</tr>
<tr>
<td>Turkey</td>
<td>1,661</td>
</tr>
<tr>
<td>UK</td>
<td>2,923</td>
</tr>
<tr>
<td>U.S.</td>
<td>2,022</td>
</tr>
</tbody>
</table>

Note: GDP at current prices
Sources: WGC data for gold demand as jewellery, World Bank data for nominal GDP, CGAP and the World Bank Group for banking penetration; A.T. Kearney analysis

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\(^{18}\) Primary interviews with industry experts
\(^{19}\) CGAP and the World Bank Group, 2010
\(^{20}\) RBI data
\(^{21}\) Persistence of Informal Credit in Rural India, April 2013, RBI working paper
• **Perceived capacity to hedge against inflation.** Gold is traditionally believed to be an effective hedge against inflation. During times of rapid inflation, there is effective loss of value in assets such as cash. However, gold is perceived to be an asset where growth in price offsets these inflationary pressures. It should be noted here that in the period 2005–2012, gold prices grew at a rate higher than CPI (see Figure 15).²²

![Figure 15: Gold price growth (year over year) and inflation (%)](image)

Note: Gold price based on Mumbai price released by RBI, Inflation calculated on CPI
Sources: RBI database, A.T. Kearney analysis

• **Ability to invest in gold in small denominations.** For a large share of the population, gold is perceived to be an attractive non-financial investment option when compared to the other important category: land and real estate. This is due to the flexibility of gold, which allows investments in small amounts. There is a wider reach of jewellers across India where consumers have the ability to invest in extremely small volumes (as low as one or two grams). In Tier 1 towns, while there are alternate options for investment, gold remains attractive as it provides flexibility to invest in low volumes. This is enhanced by the fact that gold acts as a compact store of value, which leads to relative ease of storage.

• **High returns on gold.** Gold has outperformed several other asset classes, including Nifty, term deposits, and savings deposits, with significantly higher returns over the past 12 years (see Figure 16).

• **Ease of investing unaccounted money in gold.** Unlike other financial investment options, many retail transactions in gold can still be done in cash without any documentation. This provides an easy route for investing unaccounted (black) money. There are varying estimates of the level of black money in India, ranging from around 20 percent of GDP (2006 estimate) to 30 percent of GDP (INR 25 lakh Cr in 2013).²³²⁴ The Government, however, has not released its own estimate of black money in India.

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²² CPI is consumer price index.  
²⁴ News reports
The focus on gold as an investment is reflected in the high demand for bars and coins and low-value-added jewellery. Overall, the purchase of gold in this capacity is inherently similar to investment or savings and not to consumption-based expenditure.

**High Investment Demand for Jewellery: A Unique Indian Feature**

The unique nature of Indian demand highlights the insatiable demand for gold jewellery in India that has been largely immune to rising prices. Even with gold prices rising about 3.8 times between 2005 and 2012, demand for gold jewellery in terms of volume has remained steady and in terms of value has grown by 4.2 times in nominal terms, despite higher import duties.

In contrast, gold jewellery is typically viewed as a consumption product in most other countries. For example, in the U.S. and Turkey, the volume of gold jewellery purchased is negatively correlated to the price of gold. In these countries, gold competes with other consumption items and hence its consumption goes down when gold price rises.

**Gems and Jewellery Market Segmentation—Regional Preferences for Jewellery**

The jewellery consumption behavior in India also varies across geographical regions, with few regions focusing more on investment demand than other regions. This is reflected in geographical differences in terms of gold type, diamond quality, jewellery type, and key decision makers (see Figure 17). For example, in the East and South, gold jewellery has a high association with culture and traditions, making them better markets for traditional designs. The North and West, on the other hand, have higher demand for white gold and diamond jewellery with class, status, and modern aesthetics as major demand drivers, making them better suited to modern jewellery designs. The difference in consumption behavior leads to dominance of local and regional suppliers.

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**Figure 16: Annual return on domestic assets**

(2001-2002 to 2012-2013)

<table>
<thead>
<tr>
<th>House Price Index¹</th>
<th>Gold</th>
<th>Nifty</th>
<th>Term Deposit Above 5 Years</th>
<th>Savings Deposit</th>
</tr>
</thead>
<tbody>
<tr>
<td>~19%</td>
<td>~17%</td>
<td>~11%</td>
<td>~9%</td>
<td>~4%</td>
</tr>
</tbody>
</table>

1. House price index value for 2002-2007 city wise annual on year growth in Delhi, Mumbai, Bangalore, Kolkata and Bhopal

Sources: RBI, NSE, A.T. Kearney analysis
Figure 17: Regional preferences of Indian consumers in gold jewellery

North  20%
- **Lead Categories:** Rings, pendants, necklaces
- **Gold type:** White & yellow
- **Diamond quality:** SI-I1, lower colours
- **Demand Drivers:** Class, status, culture, beauty & adornment
- **Key decision-makers:** Women choose, while men pay

East   15%
- **Lead categories:** Bangles, necklaces & earrings
- **Gold type:** Yellow
- **Diamond quality:** VVS, lower colours
- **Demand drivers:** tradition, ancestral value, investment, intricate craftsmanship & design
- **Key decision-makers:** Women

West  30%
- **Lead categories:** Pendants, earrings
- **Gold type:** White & yellow
- **Diamond quality:** VS, all colours
- **Demand drivers:** Investment, status, aesthetics and modern designs
- **Key decision-makers:** Equal role for men and women

South  35%
- **Lead categories:** Pendants, necklaces, earrings
- **Gold type:** Yellow
- **Diamond quality:** VVS, better colours
- **Demand drivers:** Investment, family bonding, status, culture, tradition
- **Key decision-makers:** Women – husband’s permission taken for high value purchases

X%  Contribution to gold jewellery sales

Source: A.T. Kearney analysis

Types of traditional designs in Indian jewellery

India produces various kinds of jewellery art, ranging from Kundan to Meenakari to stone and bead work, which show a wide range of influences (Mughal art, tribal art, modern art) (see Figure 18). Various regions and states in the country often specialize in one or more of these art forms. For example, the state of Rajasthan specializes in Kundan and Meenakari, while places in southern India specialize in pure gold jewellery. As a result, local preferences for jewellery also tend to vary accordingly.
5.2 Importance of the Gems and Jewellery Industry in the Indian Economy

The gems and jewellery industry is important for the Indian economy given its role in large-scale employment generation, foreign exchange earnings through exports, and value addition.

Significant Employment Generation

One of the most important contributions of the industry to the economy is employment generation. The labor-intensive nature of the industry and the large share of small and fragmented players, particularly in jewellery manufacturing, lead to significant employment generation. There are about 2.5 million people directly employed by the industry. Diamond processing, gold jewellery fabrication, and jewellery retail account for 92 percent of the total employees (see Figure 19). It is expected that the industry can generate 0.7–1.5 million additional direct jobs over the next five to seven years.
The distributed nature of the gems and jewellery industry conceals the fact that the employment generated is comparable to large industries (see Figure 20). The industry provides employment that is around 2.5 times the number of jobs in basic iron and steel manufacturing and in motor vehicles and trailers manufacturing. In comparison, the output for the gems and jewellery industry (excluding bars and coins) is about 65 percent of that of the manufacture of basic iron and steel and is comparable to that of the manufacture of motor vehicles and trailers. Also, the employment generated by the gems

Figure 20: Comparison of employment with select other industries

(Number of employees, in millions)

Note: Gems and jewellery includes manufacture and retail
Sources: NSSO Employment report 2012, A.T. Kearney analysis
and jewellery industry is around 26 percent of that provided by the vastly recognized labor-intensive sector of textile manufacturing. It is important, too, to note that a large section of this employment is provided to low-skilled employees. According to estimates, around 70 to 75 percent of employees in diamond processing and 40 to 45 percent of employees in jewellery fabrication have education levels below 10th standard (see Figure 21). 25

Figure 21: Percentage distribution of workforce by education level

![Percentage distribution of workforce by education level](image)

1. 2006 estimates
Sources: NSDC; A.T. Kearney analysis

High Exports

The industry makes a significant contribution in terms of exports. Overall, the industry export contribution was INR 227,000 Cr in 2012–2013, or 14 percent of total Indian exports (see Figure 22). Cut, polished diamonds and jewellery are the two most important subsets, with 81 percent share of gems and jewellery exports.

- **Cut and polished diamonds.** India is the largest hub for cut and polished diamonds in the world. Consequently, with total exports of INR 116,000 Cr, it accounted for 7 percent of total exports by the country in 2012–2013.

- **Gold jewellery.** India also exported gold jewellery worth INR 68,000 Cr in 2012–2013, which was 21 percent of total gold imports (35 percent of gold imported for jewellery). 26,27

Currently, the industry contributes the second-highest share of exports for the country, higher than the textiles and apparels and automotive and other transportation vehicles industries (see Figure 23). In comparison, output from the gems and jewellery industry was about 82 percent of the manufacture of textile and apparels and comparable to the manufacture of motor vehicles and other transportation equipment. 28 The economy

26 Includes gold in unwrought, semi-manufactured, or powder form and gold jewellery imported
27 Gold imported for jewellery is defined as the sum of net import of gold in unwrought, semi-manufactured, or powder form and import of gold jewellery imported less domestic sale of bars and coins.
28 Including bars and coins
stands to gain immensely through export promotion of this industry, given the considerable value addition done by the industry. It can be estimated that at 25 percent value addition in diamond processing, every INR 20,000–25,000 Cr (about 20 percent of current exports) increase in export of polished diamonds can reduce CAD by INR 4,000–5,000 Cr (about 1 percent of CAD for 2012–2013). Further, export of high-value-addition jewellery items, particularly diamond jewellery, will similarly have a positive impact on the CAD of the country. However, this would require significant investment in technology, design, and skill development, which we discuss later.

**Figure 22: Export contribution of gems and jewellery industry**

(INR ‘000 Cr)

**Figure 23: Comparison of exports across industries**

(INR ‘000 Cr, 2012-2013)

1. “Others” includes gemstones and gold and silver in wrought and semi-manufactured form.
2. Including railway or tramway, motor vehicles, aircraft, ships, and components (HS code: 86–89)

Sources: Ministry of Commerce, Exim Bank, Newsreports; A.T. Kearney analysis
Significant Value Addition

Value addition is a critical parameter for evaluating the importance of an industry to a country’s economy. Value addition, estimated as the difference between output and raw material input value, effectively gives the contribution of the industry in creation of value and corresponding benefits in the form of profits, salaries, and inputs to other ancillary industries. There is a total value addition of ~INR 100,000 Cr for the industry, which corresponds to about 21 percent of the industry’s total output.29,30 For the domestic jewellery market, there is a value addition of INR 70,000 Cr (28 percent of domestic jewellery output), of which value addition on gold constitutes INR 51,000 Cr. Value addition occurs through trading, cutting and polishing of diamonds, jewellery manufacture, and retail. Jewellery retail accounts for the largest value addition of INR 51,000 Cr, followed by cutting and polishing with INR 27,000 Cr value addition (see Figure 24).

Figure 24: Value addition across segments

(INR '000 Cr, 2012-2013)

1. In raw form
Sources: WGC, GFMS, Department of Commerce; Directorate General of Commercial Intelligence and Statistics (DGCI&S). A.T. Kearney analysis

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29 Value addition here is based on the difference between total output and raw materials consumed
30 Value addition percent calculated as value addition / net exports
The gems and jewellery industry has very high input material cost, which contributes to low percentage value addition. However, the value addition of ~ INR 100,000 Cr is significant and is comparable to several large sectors such as apparel manufacturing (see Figure 25).

**Figure 25: Comparison of value addition comparison with other industries**

(INR '000 Cr, 2012-2013)

The value addition by an industry has multiplying effects on the economy, such as the creation and sustenance of ancillary industries along with employment creation in those industries. For example, a new jewellery store creates business opportunities for an interior designer and security services providers. The value addition estimate does not cover the multiplier effect of these benefits.

### 5.3 Growth Outlook and Demand Drivers

In order to analyse the growth drivers, we assessed correlation between gold volume and various parameters like GDP per capita, private final consumption expenditure, gross domestic savings, gold price and number of high income households. However, there is limited relationship between the gold demand in volume terms and these economic parameters.

We also assessed the future price of gold based on gold supply and money supply\(^{31}\). The assessment based on gold supply and money supply suggest that if supply of gold and dollars remain at similar levels as that over the last 5-7 years, gold would have a theoretical value of $1250-1350/oz by 2018. Also, it may be noted that gold futures (for December 2018) are trading in the market at around $1350/oz\(^{32}\). However, gold prices in India would depend not only on the gold price in dollar terms but also on the rupee – dollar exchange rates and the import duty on gold.

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\(^{31}\) Paul Van Eeden, model on theoretical gold value

\(^{32}\) CME data
It is however very interesting that the historical jewellery demand in value terms was found to be highly correlated to GDP/capita and not as much to other consumption drivers like private final consumption expenditure, gross domestic savings, and number of high income households. What this implies is that irrespective of the price, individuals tend to buy based on the total price of a piece of jewellery; if the price is higher they would proportionately reduce the (grammage, carats) they purchase. As such the jewellery demand has been forecasted in value terms. Part of the relative inelasticity of gold demand to price is explained by the religious and cultural significance of gold - occasions such as weddings, where gold is purchased for adornment and for gifting purposes, and festivals like Akshay Tritiya and Dhanteras. Weddings are financed through savings or loans and as spending on weddings is less dependent on the current income of the spender and spend on wedding jewellery is highly consistent within a community and differs across communities.

Thus if one were to extrapolate the demand based on expected GDP/capita trend, the domestic gems and jewellery consumption demand could potentially reach a size of INR 500,000–535,000 Cr by 2018, from INR 240,000 Cr in 2012 (see Figure 26 and Figure 27). In addition, the investment demand in the form of bars and coins could potentially reach INR 180,000–190,000 Cr by 2018, from INR 85,000 Cr in 2012. This assumes that the current macroeconomic environment and industry ecosystem persists. The future growth in the domestic gems and jewellery market is thus expected to be impacted by the low-growth outlook for the Indian economy. It also assumes that the current import restrictions will be removed and there will not be any limiting effect of raw material supply.

In sum, the gems and jewellery industry plays a significant role in the economy through its contribution to employment generation, exports, and value addition. However, it caters to two very distinct demands—consumption and investment—with very different needs and challenges. Some of these challenges can impact the industry’s performance and contribution to the economy if they are not addressed. We look into key challenges faced by the industry in the next chapter.
Figure 26: Growth outlook for gems and jewellery and gold bars and coins demand

(INR '000 Cr)

Note: Numbers may not resolve due to rounding
Sources: World Gold Council, GFMS, Industry interviews, A.T. Kearney analysis
Figure 27: Growth outlook for domestic investment and consumption demand

(INR '000 Cr)

Sources: World Gold Council, GFMS, Industry interviews, A.T. Kearney analysis

Consumption demand for jewellery
Investment demand for jewellery
Investment demand for bars and coins

45-46%
6. Challenges Faced by the Industry

The gems and jewellery industry has significant potential for growth and the corresponding increase in value addition, exports, and employment generation. However, there are certain structural challenges that are keeping the industry from reaching its full potential. In addition, there are recent regulatory challenges that could further cripple the outlook for the industry. We have developed a comprehensive view of these challenges by scanning the entire value chain across consumption and investment demand, and find there are seven key challenges that need to be addressed to ensure sustainable growth for the industry (see Figure 28).

**Figure 28: Key challenges across industry value chain**

While challenges in talent and skill development, research and technology adoption, and limited financing options are central to players catering to the consumption demand for jewellery, an increasing investment demand with limited supply infrastructure catering to it affects the investment side of the market. High import dependence affects both consumption and investment demand.

### 6.1 High import dependence and limited recycling

**High import dependence**

One of the biggest challenges faced by the industry stems from its dependence on gold imports. Compared to an average of about two tons of domestic production of gold, roughly 1,000 tons of gold was imported in 2012–2013. Gold is the second-largest import item after crude, with an import bill of INR 307,000 Cr (including gold as part of jewellery) in 2012–2013 (see Figure 29). Of this, around INR 152,000 Cr of imported gold was for jewellery manufacturing catering to the domestic market and around INR 92,000 Cr was for bars and coins with
the remaining gold exported primarily as jewellery. The high dependence on imports makes the gems and jewellery industry susceptible to any regulations that constrain gold imports. For example, the high CAD (4.8 percent of GDP) in India has led to concerns over the import bill of gold that caters to the domestic gems and jewellery industry and bars and coins manufacturing. Consequently, a series of regulatory measures have been taken to reduce gold imports. While the regulations aim to reduce the current account deficit, they will also have restrictive influences on the growth of the gems and jewellery industry. The regulatory landscape is discussed later in this chapter.

**Figure 29: Import basket of India**

(INR '000 Cr, 2012-2013)

<table>
<thead>
<tr>
<th>Sector</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crude and petroleum</td>
<td>33%</td>
</tr>
<tr>
<td>Gold (unwrought/ semi-manufactured/ powder)</td>
<td>38%</td>
</tr>
<tr>
<td>Machinery, mechanical parts, nuclear reactor, boilers</td>
<td>6%</td>
</tr>
<tr>
<td>Electrical and electronics</td>
<td>7%</td>
</tr>
<tr>
<td>Diamonds</td>
<td>11%</td>
</tr>
<tr>
<td>Others</td>
<td>6%</td>
</tr>
<tr>
<td>Total:</td>
<td>2,669</td>
</tr>
</tbody>
</table>

**Note:** Percentages do not resolve due to rounding

**Sources:** Department of Commerce, Directorate General of Commercial Intelligence and Statistics (DGCI&S); A.T. Kearney analysis

**Limited recycling**

India has the world’s largest above-ground stock of gold. However, there is limited recycling. This is evident from the fact that the supply of gold from old gold scrap was only around 13 percent of total domestic consumer demand for gold in 2012, which is less than 1 percent of the above-ground stock of gold in India. In comparison, the supply of old gold scrap in Turkey is around 60 percent of total domestic consumer demand for gold33 (see Figure 30). This is due to the unique positioning of gold in the minds of the Indian consumer, whereby the sale of family gold is seen as a social taboo and to be considered only in the case of acute financial crisis. As a result, there is a hoarding tendency by individuals and institutions such as temple trusts. There is also a lack of incentive to sell household gold, since there is a loss in value on the sale of gold jewellery and the buyback price provided by jewellery retailers for old gold is lower (up to 10 percent) than the gold selling price to account for impurities in the used gold.

33 Based on WGC and GFMS data
Figure 30: Ratio of gold supply from old gold scrap to gold demand, select countries

(2012)

<table>
<thead>
<tr>
<th>Country</th>
<th>Supply of gold from fabricated old gold scrap (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>113</td>
</tr>
<tr>
<td>Turkey</td>
<td>72</td>
</tr>
<tr>
<td>U.S.</td>
<td>128</td>
</tr>
</tbody>
</table>

1. Gold demand for jewellery and bars and coins only
Source: GFMS Gold Survey 2012, WGC; A.T. Kearney Analysis

Given the import dependence and limited recycling, there have been initiatives to encourage higher recycling such as the Gold Deposit Schemes of State Bank of India, which targeted both retail customers and trusts to loan out their gold holding. However, these schemes had limited success due to insufficient coverage and communication, unattractive scheme structure, and consumer inhibitions.

- **Insufficient coverage and communication by banks**
  The scheme is offered by only a handful of banks. Of roughly 36 banks authorized to deal in gold only about 4 banks have taken up the scheme as it was perceived as a non-core activity. In addition, banks lacked the infrastructure needed to convert jewellery to pure gold bars. Even the banks that offered the scheme failed to promote the scheme aggressively, launching it only in select branches in urban markets with limited communication. For example, only 54 branches of a total of more than 13,500 branches of SBI offer this scheme. More importantly, the role of jewelers, a key stakeholder in the gold value chain, was not clearly defined, thereby limiting the coverage of the scheme.

- **Unattractive scheme structure**
  The scheme offered very low interest rates of 1.0 percent per year on a deposit of 4 years and above, making the scheme less attractive to retail customers. In addition, the scheme needed a minimum deposit of 500 grams of gold (which is a very huge quantity to expect from individuals), thus excluding a majority of retail customers. A very long lead time of 90 days to issue gold deposit certificate by the banks after deposit of gold also deterred customers.

- **Consumer Inhibitions**
  In many cases, gold is either inherited from family or gifted from someone, without proper traceability. In addition, gold is also purchased through cash transactions without proper receipts. The inability of customers to furnish proof of source of jewellery and the fear of investigations from authorities kept consumers from participating in the scheme.
• High import dependence, with domestic production of about 0.2 percent of total gold imports for the country, and high current account deficit has led to regulatory restrictions that can dampen potential growth and sustainability of the industry
• Limited recycling of gold in spite of high above-ground stock of gold (less than 1 percent of the stock recycled)

6.2 Overregulated consumption industry and under-developed investment industry

The industry faces regulatory challenge due to lack of differentiation between consumption and investment resulting in overregulated consumption and under-developed investment industry.

**Limited regulatory differentiation between investment demand and consumption demand.** There is a lack of regulatory differentiation between the consumption and investment industries. While a large share of imports feeds investment needs of customers, import restriction-led initiatives go on to affect the consumption side of demand as well. Restrictive regulatory actions have hindered growth of the consumption value chain, slowed the move toward higher industry transparency, and reduced financial sustainability for jewellery manufacturers. In addition, there is no clear policy to specifically cater to the investment demand and develop this market. There is a large supply market, including jewellers, catering to the investment demand for gold, which is not well monitored. Overall, it can be said that the consumption industry is overregulated and the investment industry is under-developed.

**Assessment of regulations across the value chain.** The issues pertaining to regulations span the entire jewellery value chain (see Figure 31). The key areas of concern are regulations around imports, trading, manufacturing, and consumer protection in terms of quality.

The financial industry for gold-based products also faces regulatory challenges. Approvals for new gold ETFs have been rejected by the SEBI in an effort to contain gold imports. Also, some regulations prevent banks from sourcing gold from the domestic market. These have hindered the growth of the industry and prevented it from tapping the full potential for gold-based investment demand.

**Impact of restrictive regulations**

Given the significance of the industry to the nation’s economy, it is important to assess the potential impact of regulations on employment, exports, and value addition. For example, the recent regulatory measures to curb gold imports that are aimed at reducing the current account deficit can potentially have negative ramifications on employment. It is estimated that with every 100-ton reduction in domestic jewellery sales, roughly 2.5 lakh employees in jewellery manufacture and jewellery retail could potentially lose their jobs. Alternatively, there could be a rise in unofficial imports, which will lead to higher levels of cash transactions for gold purchase in the domestic market and a loss of tax earnings for the Government.

**Comparison with other markets**

A comparison with other similar markets (for example, Turkey) across the value chain highlights the significant differences in regulatory structure (see Figure 32). Turkey has created a highly conducive environment for its gems and jewellery industry and the use of gold as an investment asset by monetizing gold.
Figure 31: Key regulations across jewellery value chain

<table>
<thead>
<tr>
<th>Key area of issue</th>
<th>Current regulations</th>
<th>Detail</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sourcing and trading</td>
<td>Import duty</td>
<td>Customs duty of 10% for gold in August 2013 as compared to 2% in January 2012</td>
<td>High import duty aimed to reduce gold imports</td>
</tr>
<tr>
<td></td>
<td>RBI directive</td>
<td>Import agencies to ensure minimum one-fifth of each lot of gold import is made available for export (non-SEZs or EOUs, and so on)</td>
<td>May provide incentive to unofficial channels with 5-10% difference in gold price; unofficial imports of around 100 tons in 2012¹</td>
</tr>
<tr>
<td></td>
<td>Gold deposit scheme</td>
<td>Gold deposit scheme: Banks can provide gold deposit schemes of maturity between 6 months and 7 years</td>
<td>Requirement for 20% export will constrain the gold imports through official channels</td>
</tr>
<tr>
<td></td>
<td>Sourcing gold for ETF</td>
<td>Gold ETFs: Can source gold only from RBI refinery or LBMA certified refiners</td>
<td>Sourcing of gold from LBMA adds to the import burden of the country since banks cannot buy domestic recycled gold</td>
</tr>
<tr>
<td>Design</td>
<td>Design registration rule</td>
<td>Jewellery designs can be registered to give owner protection against piracy</td>
<td>Policy framework exists; need wider acceptance; Issues: enforcement difficulties, low awareness</td>
</tr>
</tbody>
</table>
| Manufacturing                     | SEZ or EOU rules    | SEZs and EOUs to promote exports
- Duty-free inputs for manufacturing
- Minimum 3% value addition requirement for units in SEZs
- 15% import duty on jewellery compared to 10% on raw gold | Formation of SEZs and EOUs and minimum value addition norm has promoted jewellery exports; Higher customs duty on jewellery import protects domestic manufacturers from imports |
|                                   | RBI directive       | Gold (metal) loans currently unavailable to domestic manufacturers | Limits financing options for jewellery manufacturers; Higher working capital requirements and gold price risk |
|                                   | Retailing           | Gold and precious stone purchases over INR 50,000 proposed to come under know-your-customer norm (as against INR 5 lakhs done on TDS purpose) | Significant gold transactions done in cash and hence provide easy source of hoarding; the new regulation would make this difficult; Implementation may only be feasible in long term, given current infrastructure |
|                                   | Retailing           | Gold hallmarking (BIS) recently made mandatory but limited implementation so far | Limited implementation, particularly in the unorganized sector, exposes customers to risks related to quality or under-caratage |
|                                   | Consumer            | Gold hallmarking (BIS) recently made mandatory but limited implementation so far | Protected customers and ensures use of conflict-free diamonds |

Note: RBI is Reserve Bank of India. SEZ is special economic zone. EOU is export oriented unit. ETF is exchange traded funds. LBMA is London Bullion Metal Association. KYC is know your customer. TDS is tax deducted at source. BIS is Bureau of Indian Standards
1. Gold Survey 2013, GFMS
Source: A.T. Kearney analysis
Similarly, Dubai has set up extensive quality control measures to ensure consumer protection. Jewellers are mandated to indicate the purity of the jewellery and include their name on every article sold. This is coupled with a strong penalty system for under-caratage—loss of license if reported and proven. Such strong regulatory focus ensures that purity is a priority.

**Figure 32: Key gems and jewellery industry regulations in Turkey**

<table>
<thead>
<tr>
<th>Regulations in Turkey</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sourcing and trading</strong></td>
</tr>
<tr>
<td>• Duty-free import of gold</td>
</tr>
<tr>
<td>• High focus to bring gold under the purview of financial systems and out of households, with innovative products like gold accounts</td>
</tr>
<tr>
<td>• High focus on gold as investment option with 18 different gold instruments, facility to transfer gold between bank accounts, and promotion of gold ETFs</td>
</tr>
<tr>
<td><strong>Manufacturing</strong></td>
</tr>
<tr>
<td>• Several policies to encourage manufacturing in the country (for example, large-scale jewellery manufacturing hub set up at Kuyumcukent)</td>
</tr>
<tr>
<td>• Gold credits available to manufacturers</td>
</tr>
<tr>
<td><strong>Retailing</strong></td>
</tr>
<tr>
<td>• KYC-covered entities include dealers of precious metals, stones, jewellery, and precious metals exchange intermediaries</td>
</tr>
<tr>
<td><strong>Consumer</strong></td>
</tr>
<tr>
<td>• No centralized process for hallmarking of gold jewellery</td>
</tr>
</tbody>
</table>

Note: KYC is know your customer
Source: A.T. Kearney analysis
The industry faces regulatory challenges on account of:

- Lack of differentiation between investment and consumption demand impacting consumption
- No clear policy to develop market to cater to investment demand for gold

6.3 Large investment demand and associated supply infrastructure

There is a large investment demand for physical gold in the form of bars, coins, and jewellery. In 2012, there was gold demand of 312 tons for investment as bars and coins and 385 to 390 tons for investment in jewellery form. The demand for bars and coins has grown from 100 tons in 2004 to 312 tons in 2012, with a CAGR of 15 percent in volume terms compared to overall gold demand growth of 4 percent (see Figure 33). The investment demand has been driven by bars and coins since there is lower loss on making charges as compared to that on jewellery.

**Figure 33: Gold demand for jewellery and bars and coins investment, India**

![Figure 33: Gold demand for jewellery and bars and coins investment, India](image)

The high investment demand for physical gold is driven by the attractiveness of gold as an investment option, the ease of investing in small denominations, the perceived capacity to hedge against inflation, the ease of investing unaccounted money in gold, and the limited presence of alternate investment or savings options for a large section of the society.

The supply side for physical gold investments is currently dominated by jewellers due to lack of alternate channels. Coins can be purchased from banks, but banks charge a premium of around 5 percent. In addition, coins are not bought back by the banks, making them a less attractive channel for gold investment in physical form. As a result, many local and independent jewellers are focused on catering to this investment demand.
There are a number of small jewellers with very low retail stocks of jewellery on display who are effectively bullion traders or money lenders catering primarily to the investment need.

Two key challenges emerge as a result:

1. The increasing physical gold demand for investments increases the import bill, but has limited impact on the growth of the gems and jewellery industry. In the form of bars and coins, the demand has around 1 percent value addition, which is much lower than the 15 to 20 percent value addition in jewellery. Similar is the situation with jewellery with lower value addition. Investment demand and low value added jewellery increase the import bill without proportionate value addition to the economy. Any regulatory action aimed at this segment also hurts the consumption side of the demand.

Further, a large section of the jewellery industry is playing the role of financial institution by catering to investment needs and money lending, particularly in rural areas. And since it is not regulated like other financial institutions, it could be a risk to consumers who are not aware

There is a large investment demand leading to several challenges:

• There is a high demand for physical gold for investment purposes due to the attractiveness of gold as an investment option, lower availability of alternate savings or financial options, and limited financial products backed by gold
• Consequently, high volume growth of demand for bars and coins (15 percent CAGR between 2004 and 2012) and overall investment demand has impacted CAD, leading to regulatory action impacting the overall jewellery industry
• Many jewellers focused on catering to investment demand, playing the role of financial institution but not governed by regulations for financial industry

6.4 Perception of opaqueness

The industry is fragmented, with the MSME segment dominating and most jewellery manufacturers and retailers run as family businesses (see Figure 34). This is because in manufacturing, there is low cost of capital requirement compared to other common manufacturing industries. Also, stemming from local tastes and preferences, a major part of manufacturing is handcrafted by artisans and craftsmen.

Most of the family-owned businesses are not listed on domestic stock markets. The business on the export side is well documented due to statutory requirements. On the domestic side, the industry has seen an increase in the share of organized sector with several large national and regional players. These large players are increasing the transparency in the industry by sharing data on industry and company performance with investors, banks and general public thus leading to higher transparency. That said, a good part of domestic market operations are cash-based, from the purchase of inputs for jewellery to retail and finally to the end consumer. Value drivers in the industry are not well understood. As a result, the industry is perceived as being opaque by the Government, other industries, investors and the general public.
6.5 Limited financing options for the industry

The industry is facing challenges in availability of low-cost financing. Traditionally, there were two types of financing available to jewellers: gold (metal) loans and short-term bank loans. However, gold (metal) loans have been made unavailable for domestic jewellers, leaving only the short-term bank credit option. The short-term bank credits like cash credits, letters of credit (LC) with interests ranging from 10 to 15 percent are very costly for the industry (compared to 3 to 5 percent interest on gold (metal) loans) as the raw material costs are very high, leading to financing challenges for jewellers (see Figure 35).
Other industries such as apparel and consumer durables have better financing options, ranging from equipment finance, bill discounting, cash management services, and structured cash flow financing (see Figure 36). Also, in the jewellery sector of other countries, asset-based lending models are used, where advance rates are applied to the value of assets.

The industry faces financing challenges due to:

- Highly fragmented with the MSME segment dominating the industry
- Perception of lack of transparency in the industry, inadequate documentation for domestic transactions leading to difficulty in availing loans
- Unavailability of gold metal loan increasing cost of financing for domestic jewellers

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**Figure 35: Financing options for jewellery industry in India**

<table>
<thead>
<tr>
<th>Stage</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement</td>
<td></td>
</tr>
<tr>
<td>Diamond processing</td>
<td></td>
</tr>
<tr>
<td>Diamond trading</td>
<td></td>
</tr>
<tr>
<td>Jewellery manufacturing</td>
<td></td>
</tr>
<tr>
<td>Distribution</td>
<td></td>
</tr>
<tr>
<td>Retailing</td>
<td></td>
</tr>
<tr>
<td><strong>Packing Credit</strong></td>
<td>• Available for 180 days pre-shipment and 180 days post-shipment</td>
</tr>
<tr>
<td><strong>Gold (metal) loan</strong></td>
<td>against bank guarantee (now discontinued)</td>
</tr>
<tr>
<td><strong>LC on Gold</strong></td>
<td>is also available for 90 days (through nominated agencies)</td>
</tr>
<tr>
<td><strong>Cash Credit</strong></td>
<td>• for domestic consumption</td>
</tr>
<tr>
<td><strong>WCDL</strong></td>
<td>(Working Capital Demand Loan)</td>
</tr>
<tr>
<td><strong>LC</strong></td>
<td>(180 to 364 days, if the cycle is justified)</td>
</tr>
</tbody>
</table>

Jewellery retailers mostly rely on credit period extended to them by their suppliers

Note: LC is letter of credit
Source: A.T. Kearney analysis
Figure 36: Financing options in select other industries

Apparel value chain

Sourcing
Yarn
Fabric & trims
Conversion
Warehousing
Distribution
Retail

Consumer durables value chain

Sourcing and procurement
Manufacturing/ assembling
Carrying & forwarding agents
Distribution
Retail

Financing options:

- **Producer finance**
  - Agricultural credit
  - Equipment finance
- **Trader finance**
  - Import and export credit
  - Derivative desk
  - Equipment finance
  - Term loans
  - Working capital loans
  - Structured cash flow financing
  - Vendor or dealer finance
  - Bill discounting
  - Export or import credit
  - Cash management services
  - Short-term finance
  - Structured cash flow financing

Source: A.T. Kearney analysis

6.6 Risk of talent shortage

The gems and jewellery industry employs around 2.5 million directly and it is estimated that 0.7–1.5 million additional jobs will be created in the next five to seven years. Further, the consumption demand for jewellery is fast evolving, and there is a growing demand for new designs and higher value addition. These changing customer requirements are increasingly creating a need for a more highly skilled workforce. However, there is a growing gap in skill availability as the skill development process in the fragmented part of the industry is primarily achieved through an apprenticeship model and on-the-job training. This leads to longer training time and gaps in the availability of modern jewellery manufacturing and diamond cutting and polishing skills.

**Key skill gaps in the industry**

In the diamond cutting and polishing segment, key skill gaps include skilled manpower for operating laser machines for cutting and polishing of diamonds, knowledge of operating computers, and understanding of modern techniques for assortment and planning. The jewellery manufacturing and retailing segment faces gaps in availability of employees who can use design software (CAD) and are aware of international design trends and preferences in jewellery design. There is also limited manpower capable of using modern machines and understanding modern techniques (for processes such as soldering and plating in jewellery manufacturing).

**Underlying reasons for talent shortage**

These skill gaps are caused by underlying factors that hinder the development of a more highly skilled workforce:
• **Gaps in skill development infrastructure and limited demand**

While there are institutes that provide courses for the gems and jewellery industry across the value chain, the availability of these courses is limited. Course fees are high and the lack of equivalent compensation from the industry reduces the utility of the training to the worker. For example, a professional diamond grading and manufacturing course of 20 to 24 weeks costs about INR 40,800, while a short-term eight-week course on industry-oriented professional jewellery design costs about INR 50,000. A large share of the workforce comes from the low-income segment of the population and is unable to afford these courses. There is a need for absorption of skilled workers in the organized sector, which uses modern machines and can take advantage of these skills. With the fragmented nature of the industry, however, there is limited demand for this talent pool, which creates a vicious cycle that restricts overall skill development in the industry.

• **Low attractiveness of the industry to younger generation of workers**

Sustainable growth for any industry requires an ongoing inflow of new talent. Unfortunately, the gems and jewellery industry faces difficulties in attracting younger workers. There are several reasons for this, including inadequate working conditions for manufacturing, low salaries, and an overall small-scale and fragmented image of the industry (see Figure 37). Inadequate working conditions and limited compliance of health and safety standards in the manufacturing industry have also led to low interest in the industry. The working conditions, particularly for jewellery manufacture, have not kept pace with advancements. Most workshops are small in size, with karigars working without fans (so as to prevent loss of gold). The small scale of these facilities does not allow the use of some amenities, such as air conditioning. These factors make it challenging to attract new, young talent to the industry.

**Figure 37: Average salary earned across sectors**

(INR lakhs, 2010-2011)

<table>
<thead>
<tr>
<th>Industry</th>
<th>Average Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic iron and steel manufacturing</td>
<td>2.5</td>
</tr>
<tr>
<td>Motor vehicles and trailers manufacturing</td>
<td>2.4</td>
</tr>
<tr>
<td>Jewellery manufacturing</td>
<td>1.6</td>
</tr>
<tr>
<td>Textile manufacturing</td>
<td>1.1</td>
</tr>
</tbody>
</table>

1. In registered factories; Enterprises under the purview of ASI 2010–2011
Sources: Ministry of Statistics and Programme Implementation; A.T. Kearney analysis

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34 NSDC report on Human Resource and Skill Requirement in Gems and Jewellery Sector (2022)
The jewellery industry catering to consumption demand faces challenges in attracting talent and developing skills due to:

- Gaps in skill development infrastructure and high course fees coupled with low demand from the fragmented part of the industry
- Low salaries, inadequate working conditions for manufacturing, and small-scale image which make the industry less attractive to younger generations of workers

6.7 Limited research and technology adoption

Technology and research-led innovation are key factors in the long-term future of an industry, where they are needed in both design and manufacturing. While use of better designs can enable jewellers to differentiate in the market and attract higher premiums, technology can enhance productivity and the quality (finish) of jewellery produced.

**Design-led innovation.** Innovations in jewellery design are needed in order to meet the changing needs and tastes of customers. While the industry is adept at traditional designs, there is a lack of design-led innovations and a gap in adoption and development of modern designs, particularly in the large fragmented sector. This could be a crucial limiting factor in meeting the demands of the export market. A design focus is also becoming important in the domestic market, with changing consumer preferences and wider awareness and acceptance of western designs.

**Technology usage in manufacturing.** There is also limited use of technology in manufacturing, specifically in the fragmented part of the industry due to the presence of sub-scale facilities. This leads to a lack of standardization and challenges in quality control, which results in gaps in productivity and quality of jewellery produced in India as compared to more technology-focused countries such as Thailand and China. While Indian jewellery has huge design variety, countries like Thailand produce a far better finish which is recognised internationally. As consumers become more aware of standardization and quality, use of technology and work practices that ensure better finish and consistency increases.

**Details of technology gaps.** While the diamond processing industry has a higher adoption of modern machines, jewellery manufacture is largely done manually. It is estimated that the ratio of manual- to machine-oriented work in the industry is around 70:30 for jewellery manufacture and 40:60 for diamond processing. Even in diamond cutting and polishing, Indian companies use less technology than their global counterparts. Some examples include:

- **Diamond cutting.** While there has been an increase in the use of laser machines, blade sawing machines—which are three to four times slower and have higher weight loss than laser machines—are still the overwhelming choice.

- **Faceting and polishing.** Currently, faceting and polishing are done manually, with very low usage of auto faceting and polishing machines.

- **Planning.** Software use is limited, as planning is largely done through a manual process resulting in lower yield.

Similarly, there is limited use of technology in jewellery manufacture:

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35 *Netscribes Report: Gems and Jewellery Market – India (May 2010)*
• **Model making and prototyping.** Most model and mould making is done manually, with very low use of CAM- or CAD-based systems for rapid prototyping and model making.

• **Jewellery design.** Traditionally, design in small scale manufacturing set-ups is done on paper, which is more time consuming. There has been a trend toward adopting CAD-based designs—particularly in the organized sector—which increases design precision and level of detail.

• **Grinding and assembly process.** There is very low use of grinding machines and assembly is done by manual soldering.

Finally, a case has been made for the adoption of enterprise solutions to enable a seamless flow of information and scale up of operations for gems and jewellery companies.

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• The industry has a high ratio of manual- to machine-oriented work (70:30 for jewellery manufacture, 40:60 for diamond processing)

• There is limited adoption of modern technology such as CAD-based designing and model making or laser-cutting machines for diamond cutting and polishing, leading to lower productivity

• There is limited innovation in jewellery design that is required to meet the needs of changing consumer demand; this is especially relevant for exports

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Given these challenges, the performance of the industry on key metrics may remain stagnant or become increasingly unattractive in the future. We have assessed the following two scenarios for market evolution by 2018, “business as usual,” and “constrained gold supply” (see Figure 38 and Figure 39).

**Business as usual.** It has been assumed that there are no structural changes in the industry, and that businesses function normally without undergoing any major transformation. However, in this case, it has also been assumed that the recent regulatory restrictions around imports do not continue in the long run and the industry does not face any supply constraints due to reduced flow of gold imports.

**Constrained gold supply.** If the regulatory restrictions on gold imports continue, it will have significant impact on the market. This scenario assumes that the 80-20 rule for import-export will constrain the gold imported by non-SEZ or EOU units as they will not be able to export 20 percent volume of every lot of gold imported. The limited gold imports will result in a significantly smaller domestic market—both consumption and investment—and a significantly lower value addition. It is assumed that other macroeconomic and structural factors remain the same as in the business as usual scenario.

The industry is in danger of complete stagnation, with very little growth if import constraints continue. Such stagnation will have a significant impact, including loss of livelihoods and closure of businesses. It is therefore imperative for various stakeholders, such as the government, RBI, and industry, to drive large-scale transformation and ensure a sustainable and growing industry. Key structural and regulatory challenges should be addressed. There are six key questions that need to be answered by all stakeholders to enable this transformation:

• How can the import burden for the industry be reduced through higher recycling?

• What initiatives are needed to ensure infrastructure and skill development?

• How can the industry remove the perception of opaqueness?
• How can better financing options be provided to the industry?
• How can regulations enable industry growth by differentiating between consumption and investment demand?
• How can large investment demand be managed and regulated through financial systems?

In the next chapter, we will look at potential solution themes that can drive transformation of the industry.

**Figure 38: Total jewellery and bars and coins market – business as usual and constrained gold supply scenario**

(INR '000 Cr)

Sources: World Gold Council, GFMS, industry interviews; A.T. Kearney analysis
## Figure 39: Key Metrics of the Industry in 2018

<table>
<thead>
<tr>
<th>Metric</th>
<th>2012 – Current baseline</th>
<th>2018 – Business as usual&lt;sup&gt;2&lt;/sup&gt;</th>
<th>2018 – Constrained gold supply</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Imports&lt;sup&gt;1&lt;/sup&gt; (INR ’000 Cr)</strong></td>
<td>306</td>
<td>660–680</td>
<td>450–460</td>
</tr>
<tr>
<td><strong>Gold recycling</strong> (percent of domestic demand)</td>
<td>~20%</td>
<td>~20%</td>
<td>~20%</td>
</tr>
<tr>
<td><strong>Employment</strong> (million)</td>
<td>2.5</td>
<td>3–4</td>
<td>2–3</td>
</tr>
<tr>
<td><strong>Consumption market–jewellery (INR ’000 Cr)</strong></td>
<td>177</td>
<td>370–390</td>
<td>190–210</td>
</tr>
<tr>
<td><strong>Investment market–jewellery (INR ’000 Cr)</strong></td>
<td>63</td>
<td>130–140</td>
<td>65–75</td>
</tr>
<tr>
<td><strong>Investment market–bars and coins (INR ’000 Cr)</strong></td>
<td>85</td>
<td>180–190</td>
<td>95–100</td>
</tr>
<tr>
<td><strong>Exports&lt;sup&gt;1&lt;/sup&gt; (INR ’000 Cr)</strong></td>
<td>69</td>
<td>150–160</td>
<td>150–160</td>
</tr>
<tr>
<td><strong>Value addition–jewellery (INR ’000 Cr)</strong></td>
<td>68</td>
<td>135–145</td>
<td>65–70</td>
</tr>
<tr>
<td><strong>Percent share of organized retail</strong></td>
<td>~20%</td>
<td>~25%</td>
<td>~22%</td>
</tr>
</tbody>
</table>

1. Gold and gold jewellery only
2. If import restrictions are removed
Source: A.T. Kearney analysis
7. Imperatives for Sustainable Growth of the Industry

The gems and jewellery industry faces many challenges that can hamper its growth. However, the industry also has opportunities to transform itself and help ensure sustainable growth and greater contribution to the Indian economy through higher employment generation and exports. The industry needs a set of coordinated actions across five solution themes to address the challenges previously discussed (see Figure 40).

Figure 40: Solution themes for the Industry

<table>
<thead>
<tr>
<th>Procurement</th>
<th>Design</th>
<th>Manufacturing</th>
<th>Distribution and retail</th>
<th>Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Monetize existing investment, recycling</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Liberalize regulations affecting the consumption value chain</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3. Develop and regulate the investment value chain</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Offer easy financing options</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Improve perception of industry opaqueness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Develop infrastructure and skills to cater to specific needs of consumption demand</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: A.T. Kearney analysis

7.1 Monetize existing investment and recycling

The Indian gems and jewellery industry is currently heavily dependent on gold imports. Recycled gold and mines satisfy less than 25 percent of the industry demand, with imports constituting a much higher proportion (more than 75 percent) of overall industry demand. This makes the industry vulnerable to changes in import policies. With an imminent need to reduce dependence on gold imports and limited production of gold in India, the focus has to be on the recycling of domestic gold.

Magnitude of above-ground gold reserves in India. India has one of the largest reserves of gold in the world. In the last two decades itself, there has been a cumulative fresh gold consumption of about 15,000 tons.\(^{36}\) It has been estimated that 20,000-25,000 tons of gold is held by retail customers, temple trusts and banks. While there are no official figures, it is estimated by various sources that about 1800-2000 tons of gold is present with the temple trusts in the country.\(^{37}\) This could present a significant recycling potential.

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\(^{36}\) Based on WGC data

\(^{37}\) Based on news reports
Potentially recyclable gold and recycling target. Some domestic gold, particularly gold that feeds the consumption demand for jewellery, may not be recyclable. However, the parts feeding the investment demand (constituting about 45 percent of the market) is more suited to recycling, which means that roughly 11,000 tons may be recyclable. A national target to double the supply of gold from domestic above-ground reserves to meet 40 to 45 percent of industry demand may be achieved even if 4 percent of the recyclable gold is brought out for recycling every year.

To enable higher recycling, schemes such as gold deposit schemes need to be made more attractive for retail customers and temple trusts alike. These schemes could be improved by involving jewellers as stakeholders and by making the scheme structure attractive for targeted customers.

• Widen the availability of gold deposit scheme

There is need for widening the availability of gold deposit scheme available through banks. The scheme needs to be offered by more banks. Also, more importantly the scheme needs to be available in higher number of bank branches. Specific focus has to be made to ensure availability of this scheme in higher number of bank branches in non-urban areas.

• Involving jewellers as stakeholders in the scheme

Jewellers have a wider reach than banks and can be incentivized to act as business associates for the banks. With their deep relationships with customers, their ability to identify recycling opportunities and convince consumers to recycle is very high. They could collect gold from customers and issue the gold deposit certificate, on behalf of the bank, after testing the purity. This reduces the lead time for the issuance of gold deposit certificates. It also addresses the concern over the lack of sufficient infrastructure with banks to test purity and melt gold. Jewellers could also act as redemption centers on maturity of the term, allowing customers to redeem their deposit for gold or cash.

• Attractive scheme structure

Improving the interest rates on the scheme is necessary to make the scheme attractive to retail customers. In addition, the scheme should offer sufficient flexibility to customers in terms of minimum deposit by bringing down the minimum deposit amount from the current 500 grams. Simplifying the prerequisites for participation in terms of documentation required could potentially increase participation from retail customers. Also, a rupee-denominated high rate of return (greater than the perceived return on gold) in the form of government bonds, coupled with tax incentives, could be considered.

Also, given the high volumes of gold with temple trusts, the government is advised to reach out to them to ensure they are bought into the scheme. Alternatively, standalone schemes designed specifically for temple trusts could be introduced. In addition to the gold deposit scheme, other schemes being assessed by RBI (such as gold pension products and gold accumulation schemes) could be explored to enhance gold recycling. Enabling banks to buy back gold from the domestic market will help in recycling of gold and enable creation of an integrated system involving domestic refineries, the domestic scrap market, and banks, which will be able to use this gold for ETFs, thereby reducing the import burden. Also, implementing a gold ceiling act that limits the amount of gold held by an individual or organization (similar to that for land), with the aim of getting gold from temple trusts, might be considered.

An increase in the recycling of domestic gold can help in reducing imports for the industry. It is estimated that by 2018, gold imports could fall by around INR 60,000–65,000 Cr, equivalent to 9 to 10 percent of import requirements under the business as usual scenario. Also, gold recycling may increase to 40 to 45 percent from the current value of around 20 percent.
Strengthen existing schemes, such as gold deposit schemes, to drive higher recycling by making scheme structures more attractive and involving jewellers to drive wider penetration

Evaluate other schemes, such as gold pension products and gold accumulation schemes, to reduce import dependence

7.2 Liberalize regulations affecting the consumption value chain

It is important to differentiate between the consumption and investment value chains. Several existing regulations governing the jewellery value chain have hampered the growth of the industry and have hindered the shift toward greater transparency and higher growth.

There is a need to free consumption-led jewellery demand from restrictive regulation and to create a positive environment for domestic manufacturing and retail. Some helpful measures include:

**Procurement**

The import duty of 10 percent on gold is high compared to duty-free import policies in comparable markets such as Turkey and UAE. In addition, a higher import duty has increased the incentives for gold transactions through unofficial channels. Reducing the import duty and rationalizing the current 80-20 import-export rule can bolster the shift toward greater transparency in the industry by reducing the incentives to move gold through unofficial channels.

Additionally, easing the regulation on banks for domestic sources of gold by allowing them to source gold from domestic sources other than an RBI refinery, for the purpose of exchange traded funds, would aid in reducing the dependence on imports of gold for investments.

**Manufacturing and retail**

The unavailability of gold (metal) loans to domestic manufacturers and retailers has led to an increase in working capital funding requirements for jewellers and exposed them to price risk (due to holding of gold inventory). Increasing the financing options for jewellers by ensuring the availability of gold (metal) loans would also discourage cash transactions by jewellers and ensure higher sustainability of operations.

**Customer protection**

While there has been a significant increase in adoption of hallmarking (BIS) on jewellery, the practice is currently limited primarily to organized players, thereby exposing customers to risks related to quality and under-caratage. Hallmarking needs to be implemented widely to protect the interests of customers, with nationwide rollout in the next three years. In addition, reducing the procedural complexities involved in the process of hallmarking pertaining to wholesaler stamping, need for separate stamping across different branches would encourage more players to opt for hallmarking. Alternatively, jewellers may be mandated to compulsorily indicate the gold purity and their own label on each jewellery piece so that that cases of under-caratage are easily traced back to the jeweller. Further, to ensure proper implementation, strict punitive measures, including loss of license in cases of proven reported under-caratage, could be undertaken.
Develop differentiated regulations between consumption demand and investment demand of gold

Enable consumption demand—remove regulations that restrict gold supply (for example, high import duties, 80-20 rule, ensure better financing, and focus on quality)

The gems and jewellery industry in Dubai has witnessed significant growth supported by policy changes. This has helped in establishing Dubai as the major trading hub for gems and jewellery. It will be relevant for India to draw learning from the Dubai success story (Case Study: Learning from the Transformation of the Gems and Jewellery Industry in Dubai).

7.3 Develop and regulate the investment value chain

Given the high investment demand for gold, there is need for regulating the investment value chain. However, this needs to be coupled with development of alternate investment options to cater to this demand to ensure effectiveness.

Regulate investment value chain

The investment value chain needs stronger regulation and monitoring. Some measures that are recommended include:

- **Regulating bars and coins sale.** To bring investment demand under the purview of financial systems, jewellers may be discouraged to sell bars and coins to retail customers in the long term. Also, bars and coins can be made available only through banks. Banks may also reconsider buying back gold coins they have sold, making this market more liquid and attractive to customers.

- **Regulating unofficial credit and investment systems.** The large rural demand catered to by jewellers acting as money lenders and traders may be brought under regulatory scope. Unofficial credit and investment systems need to be scrutinized and measures need to be taken to limit these systems. While it is difficult to regulate each and every money lending situation between a borrower and lender, enabling financial organizations that provide loans against gold may prevent customers from seeking loans from unofficial channels and help bring better regulatory supervision. The unofficial systems can also be made less attractive by creating effective and widely available alternate investment options for customers such as gold-linked accounts, gold pension products, etc. (discussed in later section).

- **Controlling the flow of unaccounted money.** Implementing the know-your-customer norm under the Anti-Money Laundering Act may deter the channeling of black money through gold, with the industry transparent and focused only on genuine demand.

Develop alternate investment options and supply infrastructure to cater to this demand

The investment side of the industry also needs to be managed by providing alternate financial instruments for a wider section of society, creating easy investment options in physical gold, and developing gold-backed financial instruments.

- **Availability of banking infrastructure to provide alternate investment options**
  
  Bringing more customers under the purview of banking by improving access to the banking system can reduce investment demand for gold. Use of m-banking—enabling customers to access banking facilities over mobile phones—coupled with the use of UID can help increase banking penetration. In addition, financial education and an increase in comfort with use of financial products in rural areas through process.
simplification can make banking systems more effective in these areas. New innovative products aimed at helping customers hedge inflation risk (such as inflation-hedged bonds) may be developed and made accessible through the wider banking network as an alternative to investment in gold.

- **Easy availability of gold in physical form through banking or alternate channels**
  There is a need to segregate gold demand for investment and consumption purposes. This requires developing alternate channels to allow the purchase of gold for investment purposes. The supply of gold coins and bars can be made more easily available through banks so that investment demand can be fulfilled in this way rather than with jewellery. This can be done by increasing the number of bank branches that sell gold coins and increasing consumer awareness of gold coin availability, particularly in non-urban areas. In the longer term, jewellers can discontinue the sale of gold coins and bars. Also, allowing banks to buy back gold sold by them may further help in enhancing the liquidity of the gold sold and increase customer interest. It should be noted that gold coins sold in developed countries such as the United States are primarily sold by bullion dealers and special coin trading agencies. In Turkey, while a large number of coins are available through jewellers, an attempt has been made to bring this under the purview of the banking system by introducing banking schemes such as gold checks, gold accumulation accounts, and ATM-based gold sale.

- **Development of gold-based financial instruments**
  Instruments that would limit the circulation of gold in the domestic gems and jewellery industry while providing returns corresponding to those provided by investments in physical gold would help shift investment demand from physical gold. The following schemes may be considered:

  **Gold-linked account.** Customers invest in gold-backed financial instruments and the bank buys equivalent gold in international exchanges. On redemption, the customer receives marked to market value of gold, while the bank sells off the gold held in international exchanges, thereby limiting the need for domestic circulation of gold (see figure 41).
Figure 41: Gold-linked account scheme

**Gold accumulation account.** This is an account similar to any savings account in a bank—however, savings are accumulated in gold units. The balance accumulation is done in terms of gold volume, and redemption is based on the current market value of gold. This enables investors to invest in gold in banks without the need to have physical possession of gold.

**Gold pension plan.** These plans involve the sale of gold by individuals in exchange for periodic pensions until death. This helps bring idle gold into banking systems by providing a strong financial incentive.

Attempts could also be made to make gold-based financial products already available in the market (such as gold ETFs and e-gold) more popular by introducing fiscal benefits and lower transaction fees.

Providing alternate investment options can lead to a decrease in investment demand for gold. Investment demand for gold as jewellery could potentially fall from INR130,000–140,000 Cr (business as usual scenario) to INR 110,000–120,000 Cr and demand for gold as bars and coins could fall from INR 180,000–190,000 Cr (business as usual scenario) to INR 135,000–145,000 Cr by 2018. This would lead to a reduction in imports by a similar range of around INR 60,000 Cr, equal to 8 to 9 percent of imports needed for business as usual in 2018.
Regulate investment demand by checking bars and coins sales and regulating unofficial credit systems and the flow of black money

Expand banking infrastructure to provide wider banking access to alternative financial options for investment

Eventually reduce sales through the jewellery industry and manage it only through banks

Develop and promote gold-backed financial instruments to meet the investment demand for gold

7.4 Offer easy financing options

The industry has historically faced issues around easy, low-cost financing. While there has been a gradual shift toward a more organized industry, resulting in better financing, the unavailability of gold metal loans is again creating difficulties, leading to an increase in working capital funding requirements for jewellers. Though this has reduced the amount of extra inventory held by jewellers, it has also increased pressure on jewellers to fund their working capital requirement. In addition, the lack of low-cost capital encourages cash transactions and trade through unofficial channels. There is a need to provide low-cost financing options while incentivizing transparency.

Re-introducing gold (metal) loans

The gold (metal) loans need to be made available to domestic jewellers. This is critical for the success of the gold deposit schemes (GDS), since it would enable banks to give out the gold collected through GDS back into circulation. Also, since the tenure of the gold deposit scheme is higher compared to the tenure of gold (metal) loans, there is a need to assess possibility of a higher tenure for gold (metal) loans from current 180 days. The scheme structure and implementation of gold (metal) has to be consistent across banks.

Developing innovative financing options

Globally, jewellery retailers have access to low-cost and secured finance options such as asset-based lending, where inventory serves as collateral for revolving credit. Advance rates are applied to the value of assets. There is inventory-based financing, with advances up to 75 percent, and accounts receivable-based financing, with advances up to 90 percent.

Benefit to banks. This benefits banks, as they get security against their financing and greater transparency of transactions through ongoing monitoring of the collateral.

Benefit to industry. The industry gets multiple benefits in these models:

- Cost-efficient alternative to finance rapid growth and expansion of business
- Greater flexibility and borrowing capacity
- Overall improvement of the health of the industry by encouraging greater transparency

Increasing credit penetration in the industry

The gems and jewellery industry and banks need to work together to increase credit penetration in the industry. For these initiatives to be successful, banks will need to ensure competitive rates, easy accessibility, higher flexibility, and continuous awareness campaigns about funding schemes. The industry will also need to ensure a strong credit rating and repayment track record to enable financing from banks or other financial institutions. Better organization will further help the industry in this regard.
One major impact of higher transparency is an increase in the share of organized retail. The industry can target around 30 to 35 percent penetration of organized retail by 2018 from the current level of around 20 percent.

- Ensure better availability of financing options and encourage higher financial transparency among jewellers

7.5 Improve perception of industry opaqueness

The industry over the last decade has seen considerable increase in the share of organized sector. However it still suffers from a perception of opaqueness due to large fragmented part of industry. As a result, there is a need for adoption of best practices and processes that would enable it to increase transparency. Some options include:

- **Better internal processes.** This could include increased documentation using RFID-based tracking and the use of enterprise solutions to enable a seamless flow of information.\(^3\)

- **Higher discipline in financial reporting.** The industry needs to ensure higher compliance in areas such as declaration of income and tax payments, particularly for local and independent players to improve the industry's image.

- **Listing/registration of companies.** Given the high percentage of fragmented enterprises, an increase in the share of registered/publicly listed companies would also benefit the industry image. Even if companies don’t want to list on the stock exchanges, diligently sharing genuine information proactively with the Registrar of Companies will help.

- **Elimination of unofficial supply.** The elimination of the unofficial supply systems and measures that make these systems redundant will help the industry in terms of transparency. This will require the removal of import restrictions on gold to curb unofficial flows.

- **Enabling transparency at the customer end.** At the customer end, wider implementation of know-your-customer norms and hallmarking will increase transparency.

7.6 Develop infrastructure and skills to cater to specific needs of consumption demand

Indian consumers, with increasing awareness of fashion trends in developed markets, have become more demanding in their choice of jewellery designs. Over time, fashionable, light, and hollow jewellery will see growing demand. While the large organized players with sufficient scale and infrastructure have been able to successfully cater to the demands of the new age customers, small independent players have struggled.

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\(^3\) RFID is radio frequency identification.
There is a growing need to support the independent players in upgrading their design and manufacturing capabilities to ensure they remain competitive. This will go a long way toward meeting the consumption demand for jewellery. Use of better infrastructure and advanced skills would make jewellery more of an adornment item with enhanced potential for value addition. In the long term, this would also drive the consumer to focus on product quality and design and away from the intrinsic gold value, making the consumer more comfortable in paying premium for better designs.

This could be achieved through the creation of shared facilities, collaboration among jewellers, and a sharper focus on skill development.

• **Creation of shared facilities**
  Shared facilities in big jewellery clusters could facilitate the adoption of new technologies in the design and manufacture of jewellery among small independent players, and also help improve the working conditions in the industry. In addition, a collaboration of small independent jewellers could source designs from their global counterparts and indigenize them to meet the local preferences. Currently, there are 10 to 15 major clusters of jewellery manufacturing around Jaipur, Surat, Mumbai, Coimbatore, Trichur, Hyderabad, Nellore, Kolkata, Delhi, and Amritsar. There is a need for development of shared services facilities in these locations.

• **Enhanced focus on skill development**
  Currently, there are around 2.5 million people employed by the industry, of which less than 5 percent are trained through diploma or vocational courses. In the coming five to seven years, there is potential for employment of 0.7–1.5 million additional people. Assuming 10 percent are trained through diploma and vocational courses, the industry needs a training infrastructure to address around 1 lakh new students in the coming five to seven years. Also, the training of existing employees will need further improvement in infrastructure.

  India’s skill development curriculum needs to be standardized and updated to reflect global standards. In the face of changing customer preferences, artisans should also be encouraged to upgrade their skills through formal training, using scholarships and fee subsidization. Skill development institutes should have strong collaboration with jewellers to ensure practical training.

The gems and jewellery industry in Turkey, having faced similar challenges around high fragmentation and low organization in the early 1990s, adopted measures to improve the level of value addition, organization, and transparency in the industry (see Case Study: Learning from the Transformation of the Jewellery Industry in Turkey).

Improving infrastructure and skill in the industry would impact the overall consumption demand for jewellery. There is potential for an increase in this demand from INR 370,000–390,000 Cr to INR 390,000–410,000 Cr in 2018, based on higher value addition-led premium pricing and higher share of organized retail. Also, there is a potential for increase in exports from INR 150,000–160,000 to INR 240,000–250,000 Cr in 2018, due largely to better designs, quality, and manufacturing. This would be equal to around 45 to 50 percent of the domestic jewellery market and would increase the total value added on jewellery manufacturing and retailing from around INR 140,000 Cr to around INR 165,000 Cr in 2018.

• Create shared facilities in large jewellery clusters to facilitate adoption of new technology and provide better working conditions
• Enhance focus on skill development with standardized curriculum and encouragement to artisans through scholarships, fee subsidization
Case Study: Learning from the Transformation of the Jewellery Industry in Turkey

The state of the jewellery industry in Turkey in the early 1990s was very similar to the current Indian jewellery industry, characterized by a high level of fragmentation with limited penetration of organized players and import controls. The industry was highly fragmented with less than five workshops having a workforce of greater than 100 employees. A series of initiatives by government, along with industry association, has helped in facilitating growth of the industry.

Initiatives catering to consumption demand

Jewellery clusters were created to sharpen focus on technology adoption, aided through the formation of a dedicated trade association. Currently Kuyumcukent, with around 2,500 shops and production centers, is the largest integrated goldsmith center in the world. In addition, the industry focused on skill development in design by offering multiple vocational courses across its state and through private universities. This was bolstered by multiple design competitions, organized in collaboration with the World Gold Council. Turkey was successful in leveraging its rich heritage in gold jewellery in developing contemporary designs. As a result, jewellers can charge a higher markup for the jewellery, giving them higher value addition potential and greater margins.

The trade association also organizes multiple jewellery trade shows to encourage jewellers to showcase their collections. In addition, the trade association facilitates the participation of domestic jewellers in international trade shows and organizes road shows across major markets to promote the export of gold jewellery from Turkey.

These measures have resulted in a higher level of organization and value addition in the Turkish gold jewellery industry. The industry currently has more than 50 factories employing a workforce of 200 to 1,500 employees, each with modern manufacturing systems.

Initiatives catering to investment demand

Historically, Turkey had several controls on gold. However, there was a series of deregulations that opened up the Turkish market. The establishment of the Istanbul Gold Exchange in 1995 was a landmark event that helped in managing gold investment demand through the financial system. Similar to India, Turkey has a high demand for gold as investment. Consequently, over the last few years there have been several gold banking products created, and people have been encouraged to use the banking system for gold and to bring private holdings into the economy. The range of products includes gold accounts (savings accounts in gold units), gold transfers (transfer of gold from one account to another), gold cheques (gold denominated gift cheques available at banks), and ATM-related physical gold purchase (purchase of gold from ATMs using either units from gold accounts or cash from normal savings accounts). Additionally, the central bank has also allowed commercial banks to hold gold as part of their cash reserve ratio. These measures have led to a higher use of the Turkish banking system to meet the investment demand of customers.
Case Study: Learning from the Transformation of the Jewellery Industry in Dubai

UAE has focused on developing the country as one of the largest diamond and jewellery trading hubs in the world through initiatives of the DMCC and duty free import regime. Currently Dubai is one of the top diamond trading centers in the world with US$ 39 billion trading done through Dubai Diamond Exchange in 2011, compared to US$ 5 million diamond trade in Dubai before the establishment of DMCC in 2005. It is also a vibrant gold trading hub with more than 130 countries as gold import partners spread across the Indian sub-continent, South East Asia, Africa and Europe. This has been achieved through a low tax regime coupled with significant sectorial focus on infrastructure development for trading. Development of free zones like the Jumeirah Lakes Towers (JLT) free zone has added impetus to businesses. Some of the facilities offered at JLT include 100% foreign business ownership, zero personal and corporate tax, unique industry clustering and purpose-built infrastructure leading to clustering of over 6500 companies. All of these have benefited the gems and jewellery industry at UAE significantly.

These initiatives can have significant benefits for the industry (see Figure 42 and Figure 43). Even if domestic jewellery demand were to remain the same, there are potential benefits in several areas:

- **Higher consumption demand for gold jewellery.** Higher value addition would result from superior designs and quality, and improvements in infrastructure would lead to a greater share of the organized market. All of these would enable the industry to charge greater premiums, which in turn would lead to an increase in the market size of consumption demand for jewellery.

- **Reduced investment demand.** Initiatives targeting a wider presence of and greater access to alternate financial options will eventually lead to a decrease in investment demand for gold.

- **Higher exports.** Initiatives undertaken to improve infrastructure, innovation, and skill would lead to greater competitiveness in the exports market.

- **Greater value addition.** There would be higher value addition by the overall industry through design and manufacturing-led innovation. Also, higher exports would lead to an increase in value addition.

- **Lower impact on imports.** There would be greater recycling of domestic gold, which would lower the burden on gold imports. Also, a decrease in investment demand would help overcome the import burden. These would also offset the increase in imports for catering to higher exports.

- **Higher share of organized retail.** Initiatives to improve infrastructure and higher transparency in the industry would lead to a higher share of organized retail.

- **High employment generation.** A healthy growth in domestic and exports market size will help create more employment.
Figure 42: Total jewellery and bars and coins market – Constrained gold supply and post-transformation scenario

(INR '000 Cr)

Sources: World Gold Council, GFMS, industry interviews; A.T. Kearney analysis
### Figure 43: Expected benefits of transformation

<table>
<thead>
<tr>
<th>Metric</th>
<th>2012 - Current baseline</th>
<th>2018 – Business as usual</th>
<th>2018 – Constrained Gold supply</th>
<th>2018 – Post Transformation</th>
<th>Transformation impact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Imports</strong>&lt;sup&gt;1&lt;/sup&gt; (INR ’000 Cr)</td>
<td>306</td>
<td>660–680</td>
<td>450–460</td>
<td>620–630</td>
<td>Including increase in gold imports catering to approximately INR 90,000 Cr export increase</td>
</tr>
<tr>
<td><strong>Gold recycling</strong> (percent of domestic demand)</td>
<td>~20%</td>
<td>~20%</td>
<td>~20%</td>
<td>40–45%</td>
<td>9 to 10 percent decrease in imports from business as usual</td>
</tr>
<tr>
<td><strong>Employment</strong> (million)</td>
<td>2.5</td>
<td>3–4</td>
<td>2–3</td>
<td>3–4</td>
<td>0.5-1 million new employment</td>
</tr>
<tr>
<td><strong>Consumption market–jewellery</strong> (INR ’000 Cr)</td>
<td>177</td>
<td>370–390</td>
<td>190–210</td>
<td>390–410</td>
<td>Doubling of consumption demand from constrained gold supply case</td>
</tr>
<tr>
<td><strong>Investment market–jewellery</strong> (INR ’000 Cr)</td>
<td>63</td>
<td>130–140</td>
<td>65–75</td>
<td>110–120</td>
<td>8 to 9 percent decrease in imports from business as usual</td>
</tr>
<tr>
<td><strong>Investment market–bars and coins</strong> (INR ’000 Cr)</td>
<td>85</td>
<td>180–190</td>
<td>95–100</td>
<td>135–145</td>
<td></td>
</tr>
<tr>
<td><strong>Exports</strong>&lt;sup&gt;1&lt;/sup&gt; (INR ’000 Cr)</td>
<td>69</td>
<td>150–160</td>
<td>150–160</td>
<td>240–250</td>
<td>Exports equal to 45 to 50 percent of domestic jewellery demand and 40 percent of imports post transformation</td>
</tr>
<tr>
<td><strong>Value addition–jewellery</strong> (INR ’000 Cr)</td>
<td>68</td>
<td>135–145</td>
<td>65–70</td>
<td>160–170</td>
<td>More than doubling of value addition from constrained gold supply case</td>
</tr>
<tr>
<td><strong>Percent share of organized retail</strong></td>
<td>~20%</td>
<td>~25%</td>
<td>~22%</td>
<td>30–35%</td>
<td>Doubling of share of organized retail</td>
</tr>
</tbody>
</table>

1. Gold and gold jewellery only
2. If import restrictions are removed
3. Including a. Higher premium, b. Higher recycling of gold, c. lower investment demand, d. higher exports
Source: A.T. Kearney analysis
8. The Way Forward

The previous two chapters highlight the challenges that the gems and jewellery industry is facing, along with possible solutions to address them. The road will not be easy. The goal of ensuring sustainable industry growth to enhance value addition, employment, and exports without impacting the current account deficit (by increased imports) requires a concerted effort by all the stakeholders, including the gems and jewellery industry, government, and RBI. The priority initiatives needed to reach this target include:

Role of industry

- **Develop infrastructure and the skills to cater to specific needs of consumption demand**
  The industry will need to increase focus on collaboration and the creation of shared facilities in the major jewellery manufacturing hubs of Jaipur, Surat, Mumbai, Coimbatore, Trichur, Hyderabad, Nellore, Kolkata, Delhi, and Amritsar in order to take advantage of modern technology. Skill development should also be a priority, and the industry should ensure the availability of infrastructure to provide vocational training to around 1 lakh students over the next five years.

- **Remove perception of opaqueness**
  The industry has made progress in this regard with significant increase in share of organized sector. However, it still needs to play an important role in increasing the enhancing transparency in the industry. Also, strict implementation of know-your-customer norms and hallmarking will help improve transparency on the customer end.

- **Enable use of better financing options**
  The industry needs to ensure a strong credit rating and repayment track record to enable financing from banks or other financial institutions. A continuous movement toward higher organized trade will further help the industry in this regard. Finally, the industry needs to work with financial systems to increase credit penetration of the sector.

- **Encourage recycling of gold**
  The industry may educate the customers about schemes such as the gold deposit scheme to improve recycling. It should work toward achieving a target of 40 to 45 percent recycling from a current value of around 20 percent.

Role of the Government

- **Support industry in infrastructure and skill development**
  The government will need to play the role of enabler by providing adequate thrust for skill and infrastructure development through incentives, subsidies, facilitation of land allocation, and supply of utilities.

- **Enable transparency improvement for the industry**
  The government will need to provide incentives for higher transparency.

- **Provide differentiated regulation for consumption and investment demand**
  The government will need to differentiate between consumption demand and investment demand. While it will need to enable the consumption demand by reducing restrictions on gold supply (removal of 80-20 regulation and high import duty), focusing on quality control (ensuring nationwide implementation of
hallmarking in three years), and enabling easy financing, it will also need to develop systems to cater to the investment demand through better regulations.

- **Enable alternatives to investment in physical gold**
  The government will need to take proactive measures to enable investment in alternative options for gold through better financial access and education, and supporting industry in the development of m-banking and UID-based platforms. In the long term, it may consider limiting the sale of bars and coins in jewellery shops.

**Role of RBI and the financial sector**

- **Monetize existing investment and recycling schemes**
  The RBI and the financial systems will need to develop innovative means to encourage better recycling of gold in order to meet the target of 40 to 45 percent recycling by 2018.

- **Provide better financing options to the industry**
  The financial sector will need to work with the industry to ensure access to better financing, such as asset-based lending. Also, it will need to make the gold (metal) loan available to domestic jewellers.

- **Provide differential regulations for consumption and investment demand**
  The RBI and the financial systems need to ensure minimum restrictions to the consumption side of the demand for jewellery by easing regulations on imports and financing. However, a market for the investment demand needs to be developed by introducing gold-based financial products and ensuring a higher share of this demand be met through financial systems.

- **Develop alternate investment options and supply infrastructure**
  RBI and the financial systems need to ensure that attractive alternative investment options are developed and made available through better access to banks, including the use of platforms such as m-banking. They will need to ensure higher availability of gold coins and bars in banks and also develop and promote gold-based financial products such as gold-linked accounts, gold accumulation accounts, and gold pension accounts.

In addition, industry associations and academia will also have an important role to play. Industry bodies will need to participate in driving consultations for policy making and highlighting issues and requirements of all stakeholders. Universities and other research institutions need to be an integral part of initiatives focused on innovation and capability building.

In conclusion, the industry plays a significant role in the Indian economy by providing significant employment, earning significant foreign exchange through exports and providing high value addition. The industry has even greater potential for growth. However, this requires an industry transformation through coordinated efforts from all the stakeholders. The industry transformation will usher the industry into a new phase and will lead to an even higher contribution to the Indian economy.
Appendix A

Regression between consumption demand and GDP per capita

Regression between investment demand and GDP per capita

Note: GDP per capita is at current prices, consumption demand is for jewellery only, investment demand includes jewellery, gold bars and coins.
Source: RBI, WGC, GFMS; A.T. Kearney Analysis
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