

# “Investment in Gold is Protection in Bad Times”: A Study of Consumer Demand and Resale of Gold in India during Covid 19 Pandemic

<sup>1</sup>Vihaan Tandon, <sup>2</sup>Dharmendra S. Mistry

<sup>1</sup>Student, Ahmedabad International School, Ahmedabad, Gujarat, India

<sup>2</sup>Professor and Principal, M C Shah Commerce College, Gujarat University, Ahmedabad, Gujarat, India

## Abstract

Gold is considered the safest investment by people in India. It is also considered as the asset that safeguards people in bad times which drives them to purchase it as investment. Hence, the present study has been conducted to study consumer demand for jewellery and gold bar & coin as well as its price during the period of Covid 19 pandemic and to examine recycling/ scrapping of gold during the times of Covid 19 Pandemic to protect them against the adverse effect of the pandemic. The present study covers the period of 12 Quarters i.e. 6 Quarters of COVID 19 Pandemic in India (Q 2', 2020 to Q 3', 2021) and 6 Quarters prior to COVID 19 Pandemic (Q 4', 2018 to Q 1', 2020). The study found that during the lock down and second wave of the Covid in India, there has been significant effect on the overall consumer demand of gold in India. It is interesting to see that during the first wave of the Covid, there has been significant increase in overall consumer demand of gold in India. It was found that during the quarter after lock down, the scrapping and recycling of gold was the highest. The reason of the highest scrapping and recycling of gold was loss of employment, unemployment, exodus of the labourers to their home states from the other parts of the sub-continent. There has been adverse impact on trade and industry due to lock down which has resulted into salary cut or loss of employment. Hence, people sold the gold for their livelihood and fortunately they got good return on their investment because there has been significant increase in price of gold during covid in India.

**Keywords:** Consumer Demand for Gold, Covid 19 Pandemic, Resale of Gold.

## INTRODUCTION

Gold is significant in Indian Culture. It has a deep-rooted importance in history of the country. Passion for gold has grown stronger and stronger in India as a result Indians referring the most of the gold expended worldwide. Despite the majority of people in India survive on inadequate resources, they find ways to buy gold, irrespective of gold rates in. Gold is considered to be more than an investment because gold is an integral part of religious ceremonies in India, irrespective of religions and prominent asset across all the

religions. It is also considered as a family heirloom by majority of people in India and is passed on from generation to generation which saves money on gold and avoiding price rise in gold. It is also common to give gold as gift during all ceremonies because gifting gold is considered auspicious among people in India. Gold is also considered to be status symbol and people exhibit it and therefore the demand for gold is also there, irrespective of its price and market condition. Hence, the present study has an objective to study consumer demand for jewellery and gold bar & coin as well as its price during the period of Covid 19 pandemic.

Above all, gold is considered the safest investment by people in India. It is also considered as the asset that safeguards people in bad times which drives them to purchase it as investment. Hence, the present study has been conducted with one of the objectives to examine whether people in India have recycled/scrapped gold during the times of Covid 19 Pandemic to protect them against the adverse effect of the pandemic.

The present study covers the period of 12 Quarters i.e. 6 Quarters of COVID 19 Pandemic in India (Q 2', 2020 to Q 3', 2021) and 6 Quarters prior to COVID 19 Pandemic (Q 4', 2018 to Q 1', 2020). The sample of the present study consists of complete data pertaining to Gold Market in India during the study period. The researchers have conducted a T-Test: Paired Two Sample for means to test the hypotheses of the present study. It is hypothesised for the study that there is no significant difference in the means of consumer demand for Jewellery, gold bar and coin, its price and scrapping or recycling of gold before and during COVID 19 Pandemic in India. The study has been carried out as follows: the present section gives the introduction about the present research work. The second section discusses a literature review. The third section outlines the methodology of the present study. The fourth section focuses on the result and discussion and the last part of the study outlines the major findings and conclusion.

## Literature Review

India's gold demand is significantly influenced by real income and a set of variables pertaining to monetary, fiscal and financial sector policies such as interest rate, exchange rate, personal income tax, government spending to ease economic and social uncertainty and wealth (asset price), besides the relative price of gold. These findings have critical implications for development policy, financial intermediation and gold market in the Indian context (Kannan & Dhal, 2008).

Behavior of gold was considered as a safe haven. Analysis of the relationship between

U.S., UK, and German stock and bond returns and gold returns has shown that gold can act as a safe haven in extreme stock market conditions (Baur & Lucey, 2010).

Gold can act as a stabilizing force for the financial system by reducing losses in the face of extreme negative market shocks. Gold acted as a strong safe haven for most developed markets during the peak of the previous July 2007 financial crisis (Baur & McDermott, 2010).

Study has been conducted on the trends in gold prices and its demand, volatility in gold prices and causes of the mounting prices of gold in the Indian economy. It also analyzed the comparative trends and patterns between India and China. He concluded that the average annual growth is 12.27 percent which indicates that investment in gold is an effective investment avenue in the hand of investors (Singh, 2013).

Various factors contribute towards the continuously escalating prices of gold in India. Factors like international business environment, political environment, market conditions, its induction in commodity market, buying behavior of consumers, and inflation have affected prices of gold during last decade. There has been rise in gold prices in India during the last decade between years 2002 to 2012 (Baber et al., 2013).

Traditionally, Indians love to buy gold and they want to possess it. In fact, they hardly go for ETFs which is just a piece of paper for them. But in India, during the last one year, investment in gold ETFs has risen by Rs. 303 crores (Vidhyapriya & Mohanasundari, 2014).

There exists a significant relationship between Gold prices and the independent variables S&P 500, Currency, Sensex, Crude Oil Price and NIFTY. Nifty and crude oil prices have positive impact on gold prices whereas S&P 500, Currency, Sensex have negative impact on the gold prices. As the BSE Sensex, S & P 500 and the Indian Currency value increases, the price of gold decreases. However, the Crude Oil Price and the Nifty Index have positive beta coefficients. This elucidates that as the NIFTY

and the crude oil price increase the value of the gold also increases (Sashikala, 2018).

Covid -19 pandemic fell down the demand in gold market temporarily. But it provides greater demand for investment. Supply and actual prices of Gold are more than demand and estimated gold price. Hence, Covid - 19 pandemic creates positive impact in investment decision and negative impact in gold buying behavior (Sasikala & Padmaja, 2020).

Although it is no longer a primary form of currency in the developed world, gold remains a popular investment for a number of reasons: liquidity, value retention, hedging against inflation, diversification, universal desirability as an investment, and use as an input. In situations such as the COVID-19 crisis where there are periods of great political upheaval, stock market crashes, high inflation rates, and losses of value of national currencies, gold offers an ideal investment option. Even in opposite situations where an increase in the price of gold is not expected, the mere demand for products that use it as an input can encourage investment. Moreover, gold is an asset that maintains its value, so a passive purchase-and-hold investment strategy can be a good form of investment (Angeles, Domingo, & Juan, 2020).

Recently, in the early stage of the COVID-19 outbreak, gold and soybean commodity futures were used as safe haven assets (Ji, et al., 2020).

The COVID-19 pandemic has forced governments around the planet to restrict mobility and enforce social distancing measures to stop the spread of the virus (Anderson et al. , 2020)

From the above review of empirical works, it is clear that during COVID 19 pandemic mobility of the people has been restricted and lockdown has been imposed which adversely affected business and employment of the people. Hence, the Consumer demand was there for essential commodities only. Demand for luxurious items including gold has been affected adversely. People were forced to manage their livelihood expenses out of their savings; by borrowing money from friends, relatives, banks; by taking

gold loans; by selling their investments including scrapping or recycling of gold.

**Research Problem:** The survey of the existing literature reveals that no specific work has been carried out to examine and ascertain impact of COVID 19 pandemic on variables such as Consumer Demand for Jewellery, Gold Bar and Coin, Gold Price and Recycling and Scrapping of Gold in India. The present study is an attempt in this direction and therefore, aims to enrich the literature on the impact of Covid 19 pandemic on Demand and Resale of Gold in India.

**Research Question:** The present study is an attempt to find the answer to the following research questions: Is there any impact of Covid 19 Pandemic on Demand and resale of Gold in India?

**Research Objectives:** The present study has been carried out with the following objectives:

- 1) To study consumer demand for jewellery, gold bar and coin, before and during Covid 19 pandemic in India.
- 2) To study recycling and scrapping of gold before and during covid 19 pandemic in India

## Methodology

**geographical Coverage and Duration:** The existing study had geographical coverage of Indian Gold Market. The study covers the period of 12 Quarters i.e. 6 Quarters of COVID 19 Pandemic in India (Q 2', 2020 to Q 3', 2021) and 6 Quarters prior to COVID 19 Pandemic (Q 4', 2018 to Q 1', 2020). The duration of research study has been selected in such a way that it takes into account not only lock down but also first wave and second waves of Covid 19 Pandemic in India. Hence, the duration of the study is good enough to reflect impact of Covid 19 Pandemic on Indian Gold Market.

**Sample and Sampling Techniques:** Looking at the objectives of the present study, there was a need to take a sample covering the Indian Gold

Market and henceforth a sample of the present study consists of complete data pertaining to Gold Market in India during the study period. It means the entire population has been taken as a sample for the present study.

**Data Collection:** The existing work was created on the secondary information composed from the website of the World Gold Council.

**Variables:** with a view to study impact of Covid 19 Pandemic on Indian Gold Market, Jewellery Demand, Bar and Coin Demand, Overall Consumer Demand for Gold, Gold Price and Gold Scrapped/Recycled have been taken as variables. The reason why Jewellery Demand and Bar and Coin Demand as variables has been because India has been almost on top of the Table worldwide as far as Jewellery Demand and Bar and Coin Demand has been concern in the last decade i.e. 2010-2020. As the demand for the gold is affected by its price, Gold Price has been taken as one of the variables for the study. As the Covid 19 Pandemic has adversely affected the economy of the nation, loss of employment or closing down of the business have been prevalent during the Covid 19 pandemic and hence tendency of scrapping/recycling of the gold has been observed and therefore the Gold Scrapped/Recycled has also been taken as one of the Variables for the present study.

**Hypotheses of the Study:** The following hypotheses were formulated in this study:

H0 = There is no significant difference in the means of Jewellery Demand before and during COVID 19 Pandemic in India.

H1 = There is significant difference in the means of Jewellery Demand before and during COVID 19 Pandemic in India.

The above hypothesis is limited to the Jewellery Demand. To have better understanding and true picture about Gold Demand, the previous hypothesis has been extended to the following hypothesis:

H0 = There is no significant difference in the means of Bar and Coin Demand before and during COVID 19 Pandemic in India.

H1 = There is significant difference in the means of Bar and Coin Demand before and during COVID 19 Pandemic in India.

To have clear idea about impact of pandemic on Consumer Demand for Gold, the above hypothesis is further extended to the following hypothesis:

H0 = There is no significant difference in the means of Overall Consumer Demand for Gold before and during COVID 19 Pandemic in India.

H1 = There is significant difference in the means of Overall Consumer Demand for Gold before and during COVID 19 Pandemic in India.

As the Demand for any Goods is affected by its Price, it is essential to study price movement of Gold. Hence the following hypothesis has been framed:

H0 = There is no significant difference in the means of Gold Price before and during COVID 19 Pandemic in India.

H1 = There is significant difference in the means of Gold Price before and during COVID 19 Pandemic in India.

As the Covid 19 Pandemic has adversely affected the economy of the nation, tendency of scrapping/recycling of the gold has been observed and therefore following hypothesis has also been framed:

H0 = There is no significant difference in the means of Gold Scrapped/Recycled before and during COVID 19 Pandemic in India.

H1 = There is significant difference in the means of Gold Scrapped/Recycled before and during COVID 19 Pandemic in India.

**Research Design:** Founded on the Works Review, the present study begins with a basic data i.e., Jewellery Demand. To study the exact impact of the pandemic on Consumer Demand for Gold, variables such as Bar and Coin Demand as well as Overall Consumer Demand for Gold have been selected. It also covers Price Movement of Gold During Covid 19

Pandemic in India as well as Gold Scrapped/Recycled in India during the period.

**Hypothesis Testing:** To determine whether the means of the selected variables and during COVID 19 Pandemic are different or not, the researchers have conducted a T-Test: Paired Two Sample for means and hence the hypotheses of the study were verified by T-Test: Paired Two Sample for Means.

**Limitations:** The existing research work has been based on secondary data, so the outcome of the study depends upon the accuracy of the secondary data. The terrestrial room was restricted to Indian Gold Market only.

**Further Scope of Study:** The present study can further be extended by covering different countries of Asia to study the impact of Covid 19 Pandemic.

## Result and Discussion

### (1) Jewellery Demand (Tonnes) in India

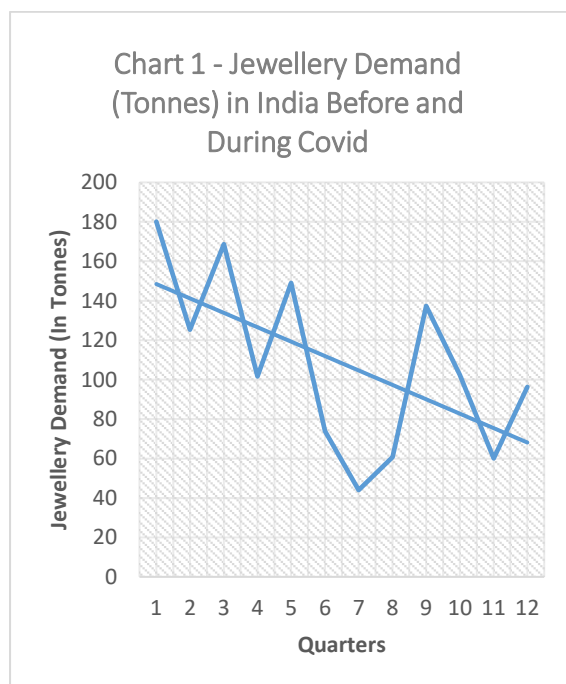


Chart 1 shows Jewellery Demand (Tonnes) in India before and after Covid 19 Pandemic. The first six Quarters i.e. period before Covid 19 Pandemic showed decrease in demand in jewellery from 180.1 tonnes to 73.9 tonnes. The later six Quarters showed Jewellery

Demand during the Pandemic in India. It showed further decrease in jewellery demand (tonnes) in India as compared to six quarters before Covid 19 Pandemic. The Seventh quarter i.e. First quarter of Covid 19 Pandemic in India was the quarter of lock down in which the demand for the jewellery was the lowest i.e. 44 tonnes during the period of the study. Despite the First wave of Covid 19 Pandemic in India, i.e. the eighth and ninth quarters i.e. couple of quarters right after the lock down showed significant increase in Jewellery demand from 44 tonnes to 137.3 tonnes. The tenth and eleventh quarters i.e. 4th and 5th quarters of covid 19 was the period of second wave of Covid 19 Pandemic in India which adversely affected the demand and there has been continuous decline in demand in jewellery in India from 137.3 tonnes to 60 tonnes. However, the last quarter of the study i.e. 6th quarter of the Covid 19 Pandemic showed increase in demand in jewellery to 80 tonnes.

As far as Overall trendline was concerned, it showed continuous decline in Jewellery demand in India before Covid but there has been significant effect of Covid 19 Pandemic on demand in jewellery in India as the demand for jewellery continued to fall.

It can be seen that during the lock down and second wave of the Covid 19 Pandemic which the worst of all waves in India was, there has been significant effect of the pandemic on the demand of the jewellery in India. However, it is interesting to see that during the first wave of the Covid, there has been significant increase in demand of the jewellery in India. It is also observed that people in India continued to demand jewellery as and when Indian economy has revived from the impact of Pandemic.

**Table 1 t-Test: Paired Two Sample for Means of Jewellery Demand (In tonnes) in India**

	Before Covid 19 Pandemic	During Covid 19 Pandemic
Mean	133.1	83.48333
Variance	1655.648	1207.966
Observations	6	6
Pearson Correlation	-0.21132	
Hypothesized Mean	0	

Difference		
Df	5	
t Stat	2.065778	
P(T<=t) one-tail	0.046871	
t Critical one-tail	2.015048	
P(T<=t) two-tail	<b>0.093742</b>	
t Critical two-tail	2.570582	

Table 1 shows t-Test: Paired Two Sample for Means of Jewellery Demand (In tonnes) in India. It can be seen that p-value is more than 0.05 and hence Null hypothesis is accepted and alternate hypothesis is rejected. The difference between the means of Demand of Jewellery in India before and during Pandemic is statistically insignificant. Hence, the sample selected provides enough evidence to conclude that the two-population means are indifferent and hence there is no significant difference in the means of Demand of Jewellery in India.

However, if we compare the means of the Demand of Jewellery before and during Pandemic, the mean of Demand of Jewellery in India before Pandemic (133.1 tonnes) is greater than that of during Covid (83.48333 tonnes) hence it can be said that Covid has an adverse effect on Demand for Jewellery in India.

To have a true picture, the impact of Covid on Bar and Coin Demand in India should also be required to be studied because those people who don't want to buy Jewellery but want to invest their savings in Gold make investment in Gold Bar and Coin with a view to save expenditure on making charges. Hence, the present study also covered the analysis of Gold Bar and Coin Demand in India during the study period.

## (2) Gold Bar and Coin Demand (Tonnes) in India

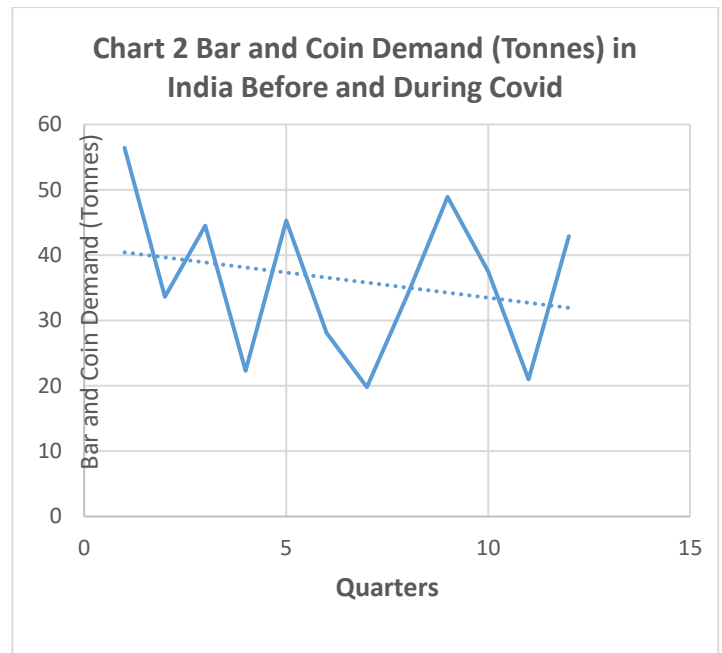


Chart 2 shows Gold Bar and Coin Demand (Tonnes) in India before and after Pandemic. The first six Quarters i.e. period before Covid 19 showed decrease in demand in Bar and Coin from 56.4 tonnes to 28.1 tonnes. The later six Quarters showed Gold Bar and Coin demand (tonnes) in India during Pandemic. The Seventh quarter i.e. First quarter of Covid 19 in India was the quarter of lock down in which the demand for the Bar and Coin was the lowest i.e. 19.8 tonnes during the period of the study. Despite the First wave of Covid in India, the eighth and ninth quarters i.e. couple of quarters right after the lock down showed significant increase in Bar and Coin demand from 19.8 tonnes to 48.9 tonnes. The tenth and eleventh quarters i.e. 4th and 5th quarters of covid 19 was the period of second wave of Covid in India which adversely affected the demand and recorded decline in demand in Bar and Coin in India from 48.9 tonnes to 21 tonnes.

However, the last quarter of the study i.e. 6th quarter of the showed increase in demand in Bar and Coin to 42.9 tonnes. As far as overall trendline is concerned, it shows continuous decline in Bar and Coin demand in India before Covid but there has been significant effect of Covid on demand in Bar and Coin in India as the demand for Bar and Coin continued to fall.

It can be seen that during the lock down and second wave of the Covid in India, there has been significant effect on the demand of the Bar and Coin in India. It is interesting to see that during the first wave of the Covid, there has been significant increase in demand of the Bar and Coin in India. It is also observed that people in India continued to demand Bar and Coin as and when Indian economy has revived from the impact of Covid.

It can clearly be observed that almost similar trends have been seen both in demand of jewellery and Bar & Coin in India during the study period. Rise and Fall in demand go hand in hand not only in case of jewellery but Bar & Coin also.

<b>Table 2 t-Test: Paired Two Sample for Means of Gold Bar and Coin Demand (In tonnes) in India</b>		
	<b>Before Covid 19 Pandemic</b>	<b>During Covid 19 Pandemic</b>
Mean	38.36667	33.98333
Variance	159.4307	136.8297
Observations	6	6
Pearson Correlation	-0.54364	
Hypothesized Mean Difference	0	
Df	5	
t Stat	0.502335	
P(T<=t) one-tail	0.318384	
t Critical one-tail	2.015048	
P(T<=t) two-tail	<b>0.636768</b>	
t Critical two-tail	2.570582	

Table 2 shows t-Test: Paired Two Sample for Means of Bar and Coin Demand (In tonnes) in India. It can be seen that p-value is more than 0.05 and hence Null hypothesis is accepted and alternate hypothesis is rejected. The difference between the means of Demand of Bar and Coin in India before and during Pandemic is statistically insignificant. Hence, the sample selected provides enough evidence to conclude that the two-population means are indifferent and hence there is no significant difference in the means of Demand of Bar and Coin in India. Specifically, the mean of Demand of Bar and Coin in India before Pandemic (38.36667

tonnes) is marginally greater than that of during Pandemic (33.98333 tonnes) hence it can be said that Pandemic has an adverse effect on Demand for Bar and Coin in India.

To have a true picture, it is required to study the impact of Covid on Overall Consumer Demand for Gold in India. Hence, the analysis of Overall Consumer Demand for Gold in India has been done in the next part of the section.

### (3) Consumer Demand for Gold (Tonnes) in India

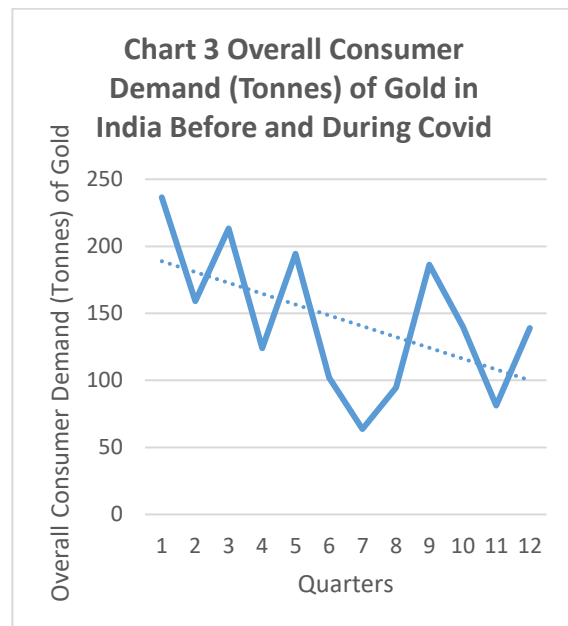


Chart 3 shows Overall Consumer Demand (Tonnes) of Gold in India before and during Pandemic. The first six Quarters i.e. period before Pandemic showed decrease in Overall Consumer Demand (Tonnes) of Gold from 236.5 tonnes to 101.9 tonnes. The later six Quarters was the period of the Pandemic. The Seventh quarter i.e. First quarter of Pandemic in India was the quarter of lock down in which overall consumer demand of gold was the lowest i.e. 63.7 tonnes during the period of the study. Despite the First wave of Pandemic in India, the eighth and ninth quarters i.e. couple of quarters right after the lock down showed significant increase in overall consumer demand from 63.7 tonnes to 186.2 tonnes. The tenth and eleventh quarters i.e. 4th and 5th quarters of Pandemic was the period of second wave of Pandemic in India which adversely affected the demand which resulted into decline



in demand in overall consumer demand of gold from 186.2 tonnes to 81.2 tonnes. The last quarter of the study i.e. 6th quarter of the Pandemic showed increase in overall consumer demand of gold to 139.1 tonnes.

As far as overall trendline is concerned, it shows continuous decline in overall consumer demand of gold in India before Pandemic but there has been significant effect of Pandemic on overall consumer demand of gold in India as the overall consumer demand of gold continued to fall.

It can be seen that during the lock down and second wave of the Pandemic in India, there has been significant effect on the overall consumer demand of gold in India. It is interesting to see that during the first wave of the Covid, there has been significant increase in overall consumer demand of gold in India because unlocking started in India and the first wave of the pandemic was not so severe as the second wave of the pandemic was. It is also observed that people in India continued to gold demand as and when Indian economy has revived from the impact of Covid. It can clearly be observed that almost similar trends have been seen in Demand of jewellery, Bar & Coin and overall consumer demand of gold in India.

**Table 3 t-Test: Paired Two Sample for Means of Overall Consumer Demand of Gold (tonnes) in India**

	Before Covid 19	During Covid 19
Mean	171.4667	117.4667
Variance	2749.979	2085.807
Observations	6	6
Pearson Correlation	-0.31299	
Hypothesized Mean Difference	0	
Df	5	
t Stat	1.66187	
P(T<=t) one-tail	0.078714	
t Critical one-tail	2.015048	
P(T<=t) two-tail	<b>0.157428</b>	
t Critical two-tail	2.570582	

Table 3 shows t-Test: Paired Two Sample for Means of Overall Consumer Demand (In tonnes) in India. It can be seen that p-value is

more than 0.05 and hence Null hypothesis is accepted and alternate hypothesis is rejected. The difference between the means of Overall Consumer Demand of Gold in India before and during Covid is statistically insignificant. Hence, the sample selected provides enough evidence to conclude that the two-population means are indifferent and hence there is no significant difference in the means of Overall Consumer Demand of Gold in India.

Specifically, the mean of Demand of Bar and Coin in India before Covid (171.4667 tonnes) is significantly greater than that of during Covid (117.4667 tonnes) hence it can be said that Covid has an adverse effect on Overall Consumer Demand of Gold in India.

As the demand of any product is affected by its price, it is required to study the impact of Covid on Price of Gold in India. Hence, the next part of the section covers the analysis of the Gold Price during the study period.

#### (4) Price of Gold (Rs/10g)

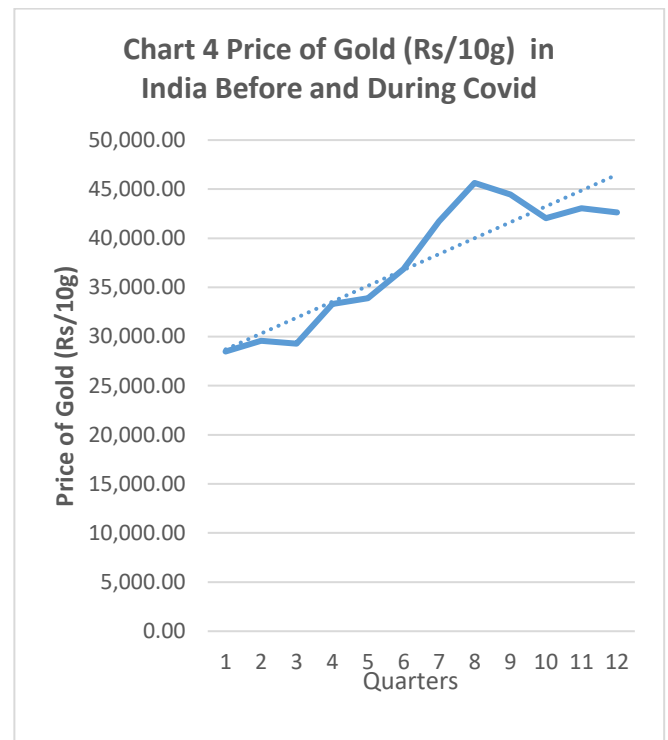


Chart 4 shows Price of Gold (Rs/10g) in India before and during Pandemic. The first six Quarters i.e. period before Pandemic show increase in Price of Gold (Rs/10g) from Rs. 28,474.30 to 36,874.4. The later six Quarters



i.e. period during Pandemic also show further increase in Price of Gold (Rs/10g) in India. The Seventh quarter i.e. First quarter of Pandemic in India was the quarter of lock down in which Price of Gold (Rs/10g) was Significantly increased to Rs. 41,734.40. The First wave of Pandemic in India i.e. the eighth and ninth quarters i.e. couple of quarters right after the lock down quarter showed further increase in Price of Gold (Rs/10g) to Rs. 45,640. During the period of second wave of Pandemic in India, there has been significant decrease in Price of Gold (Rs/10g) to Rs. 42,045.80. The last quarter of the study i.e. 6th quarter of Pandemic showed marginal increase in Price of Gold (Rs/10g) to 42,635.20.

As far as overall trendline is concerned, it shows continuous increase in Price of Gold (Rs/10g) in India before Covid but there has been significant effect of Covid on Price of Gold (Rs/10g) in India as the overall Price of Gold (Rs/10g) continued to rise significantly.

It can be seen that there has been significant positive effect of Pandemic on the Price of Gold in India. It is also observed that though the Price of Gold has been increasing significantly during Pandemic, people in India continued to demand for gold as and when economy has revived from the impact of Pandemic. However, increase in Price of Gold has also resulted into decrease in demand of jewellery, bar and coin and overall demand for gold in India over and above Pandemic.

<b>Table 4 t-Test: Paired Two Sample for Means of Price of Gold (Rs/10g) in India</b>		
	<b>Before Covid 19 Pandemic</b>	<b>During Covid 19 Pandemic</b>
Mean	31904.63	43267.82
Variance	10984521	2273079
Observations	6	6
Pearson Correlation	-0.3501	
Hypothesized Mean Difference	0	
Df	5	
t Stat	-6.79962	
P(T<=t) one-tail	0.000524	
t Critical one-	2.015048	

tail		
P(T<=t) two-tail	<b>0.001048</b>	
t Critical two-tail	2.570582	

Table 4 shows t-Test: Paired Two Sample for Means of Price of Gold (Rs/10g) in India. It can be seen that p-value is less than 0.05 and hence Null hypothesis is rejected and alternate hypothesis is accepted. The difference between the means of Price of Gold (Rs/10g) in India before and during Covid is statistically significant. Hence, the sample selected provides enough evidence to conclude that the two-population means are different and hence there is significant difference in the means of Price of Gold (Rs/10g) before and during Covid in India. Specifically, the mean of Price of Gold (Rs/10g) in India before Covid (31904.63) is significantly less than that of during Covid (43267.82) hence it can be said that during Covid Price of Gold (Rs/10g) in India has increased significantly.

To have clearer picture, it is required to study whether the people in India has sold gold to face financial crisis in terms of loss of employment and business created by Covid or not.

(5) Gold Scrapped/ Recycled (Tonnes) by the Consumers and Sale of Gold by the Companies advancing loans against gold

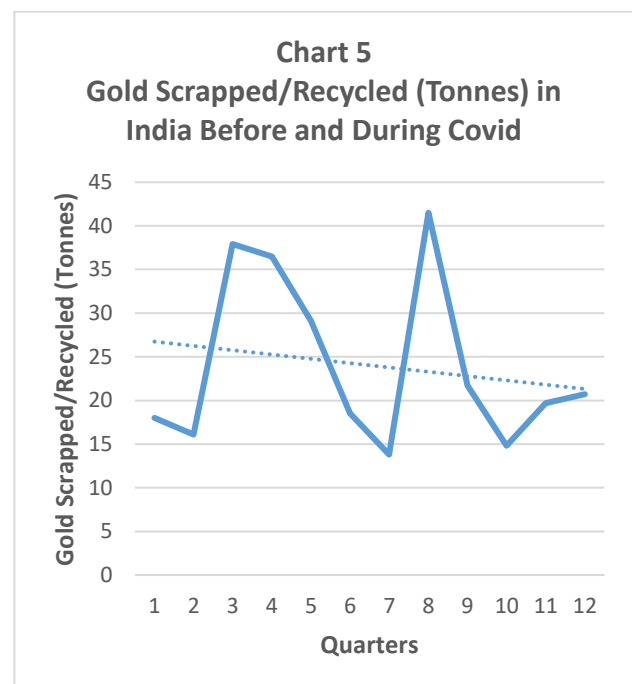


Chart 5 shows Gold Scrapped/recycled (Tonnes) in India before and after Covid 19. The first six Quarters i.e. period before Covid 19 show increase in Scrapping and Recycling of Gold (Tonnes) in the third and fourth quarters, thereafter it has gone down to its initial range.

The later six Quarters were period after Covid 19. The Seventh quarter i.e. First quarter of Covid 19 in India was the quarter of lock down in which the scrapping and recycling of gold was the lowest i.e. 13.8 tonnes during the study period but in the eighth the quarter i.e. quarter after the lock down showed the highest scrapping and recycling of gold i.e. 41.5 tonnes during the study period. The ninth quarter was the period of First wave. During the first wave of covid the scrapping and recycling of gold was of 21.7 tonnes i.e. second highest during Covid in India. Then it reduced to 14.8 tonnes in the next quarter i.e. The last two quarters were the period of second wave. During second wave of covid, again the scrapping and recycling of gold has touched the level of 20.7 tonnes i.e. the third highest during the Covid in India.

It can be said that the people could manage their day to day expenditure from their saving, from help and support from government as well as institutions doing social services. Right after lock down, business and employment did not get streamlined. Hence, the people who lost their job and business were forced to sell gold possessed by them for the livelihood. Similar trend of selling of gold was also observed during First Wave and Second Wave of Covid in India. If we look at the picks of the sale of gold during covid, it can be seen that sale of gold during the quarter right after lock down, during the quarter of the first wave and during the quarter of the second wave was 41.5 tonnes, 21.7 tonnes and 20.7 tonnes respectively.

It is also observed that the people who did not want to sell the gold have gone for the option of taking loan against gold because the amount of loan against gold during lock down and first wave of the Covid was Rs. 69,296 Crore which showed increase of about 88 % as compared to

the amount of loan against gold before Covid i.e. March, 2020.

Even the people those who have already taken loan against gold before Covid found it difficult to repay the instalments because of loss of employment and adverse impact of Covid on Trade and Industry. Hence, even the companies advancing loans against gold forced to sell the gold mortgaged by the customers through auction because of default in repaying the instalments by the people during lock down and first wave of Covid in India. The quantum of sale of gold through auction by the companies advancing loans against gold was raised to almost five times during the second wave of the Covid as compared to quantum of sale of gold during lock down and first wave of Covid in India. It shows that the proportion of defaulters has increased significantly during the second wave of Covid.

**Table 5 t-Test: Paired Two Sample for Means of Gold Scrapped/ Recycled (Tonnes) by the Consumers in India**

	<b>Before Covid 19</b>	<b>During Covid 19</b>
Mean	26.01667	22.03333
Variance	95.94567	101.2787
Observations	6	6
Pearson Correlation	-0.4139	
Hypothesized Mean Difference	0	
df	5	
t Stat	0.584327	
P(T<=t) one-tail	0.292185	
t Critical one-tail	2.015048	
P(T<=t) two-tail	<b>0.58437</b>	
t Critical two-tail	2.570582	

Table 5 shows t-Test: Paired Two Sample for Means of Gold Scrapped/Recycled (Tonnes) by the Consumers in India. It can be seen that p-value is more than 0.05 and hence Null hypothesis is accepted and alternate hypothesis is rejected. The difference between the means of Gold Scrapped/Recycled (Tonnes) by the Consumers in India before and during Covid is statistically insignificant. Hence, the sample selected provides enough evidence to conclude that the two-population means are indifferent

and hence there is no significant difference in the means of Gold Scrapped/Recycled (Tonnes) by the Consumers in India before and during Covid in India. Specifically, the mean of Gold Scrapped/Recycled (Tonnes) by the Consumers in India before Covid (26.01667) is marginally more than that of during Covid (22.03333) hence it can be said that during Covid Gold Scrapped/Recycled (Tonnes) by the Consumers in India has decreased marginally.

### Findings and Conclusion

The study found that during the lock down and second wave of the Covid in India, there has been significant adverse impact on the demand of the jewellery in India. It is interesting to see that during the first wave of the Covid, there has been significant increase in demand of the jewellery in India. As a result, there has not been significant difference in the jewellery demand before and after Covid in India. Hence, It can be concluded that the people in India continued to demand jewellery as and when their income rose on revival of Indian economy from the adverse impact of Covid.

As far as Demand of the Bar and Coin in India is concerned, the study found that during the lock down and second wave of the Covid in India, there has been significant effect on the demand of the Bar and Coin in India. Like Jewellery, it is interesting to see that during the first wave of the Covid, there has been significant increase in demand of the Bar and Coin in India. As a result, there has not been significant difference in the bar and coin demand before and after Covid in India. Hence, it can also be concluded that people in India continued to demand Bar and Coin as and when Indian economy has revived from the adverse impact of Covid.

The study found that during the lock down and second wave of the Covid in India, there has been significant effect on the overall consumer demand of gold in India. It is interesting to see that during the first wave of the Covid, there has been significant increase in overall consumer demand of gold in India. As a result, there is no significant difference between

overall consumer demand in gold in India before and after Covid. It can be concluded that almost similar trends have been seen in demand of jewellery, Bar & Coin and overall consumer demand of gold in India because fluctuations in demand go hand in hand not only in case of jewellery and bar & coin but overall consumer demand of gold also.

The study found that there has been significant positive effect of Covid on the Price of Gold in India because the price of gold has been increasing irrespective of covid in India. The study found negative relation between price and demand of the gold because with the increase in price of gold, there has been decrease in demand for gold in India. It can be concluded that with increase in Price of Gold, there has been decrease in demand of gold during Covid but it can also be concluded that people in India continued to demand for gold as and when their income became stable.

It was found that during the quarter after lock down, the scrapping and recycling of gold was the highest. The reason of the highest scrapping and recycling of gold was loss of employment, unemployment, exodus of the labourers to their home states from the other parts of the sub-continent. There has been adverse impact on trade and industry due to lock down which has resulted into salary cut or loss of employment. Hence, people sold the gold for their livelihood and fortunately they got good return on their investment because there has been significant increase in price of gold during covid in India. Hence, it can be concluded that in adverse situation created by Covid, investment in gold came to the great support to the people in India because through sale of gold they could compensate the loss in income. It can be concluded that during Covid in India, investment in gold considered to be the most profitable and hence as and when people's income got stable during Covid, they continued to make investment in gold.

The study found that there has been increase in tendency of taking loan against gold during Covid in India because those who did not want to sell gold or who had time being requirement of funds created by Covid and who could repay

the instalments from their available sources of incomes, they raised the fund by taking loan against gold. Hence, it can be concluded that people in India considered the investment in gold as chain in times of crisis. Hence, they continue to demand gold even though the price of gold has been increasing.

It was found that the proportion of defaulters of loans to companies advancing loans against gold has increased significantly because there has been remarkable increase in sale of gold through auction by the companies advancing loans against gold. Due to increasing price of gold even during critical time of Covid in India, they could realize good amount on auction of gold. Hence, it can be concluded that investment in gold not only helps the consumers during crisis but companies giving loan against gold also because they managed to survive even though default in repaying loan by the consumers.

## Reference

- [1] Anderson, R. M., Heesterbeek, H., Klinkenberg, D., & Hollingsworth, T. D. (2020). How will country-based mitigation measures influence the course of the COVID-19 epidemic? *Anderson, R. M., Heesterbeek, H., Klinkenberg, D., & Hollingsworth, T. D. (2020). How will cou*The lancet, 395(10228), Anderson, R. M., Heesterbeek, H., Klinkenberg, D., & Hollingsworth, T. D. (2020). How will 931-934.
- [2] Angeles, L. C., Domingo, R. S., & Juan, P. C. (2020). All that Glitters is not Gold. The Rise of Gaming in the Covid 19 Pandemic. *Journal of Innovation and Knowledge*, 5(1), 289-296.
- [3] Baber, P., Baber, R., & Thomas, G. (2013). Factors affecting Gold prices: a case study of India., (pp. 1-13).
- [4] Baur, D. G., & Lucey, B. M. (2010). Is gold a hedge or a safe haven? An analysis of Stocks,
- [5] Bonds and Gold. *The Financial Review*, 45(2), 217-229.
- [6] Baur, D. G., & McDermott, T. K. (2010). Is gold a safe haven? *International evidence. Journal of Banking and Finance*, 34(8), 1886-1898.
- [7] Ji, Q., Zhang, D., & Zhao, Y. (2020). Searching for Safe-Heaven Assets during the Covid 19 Pandemic. *International Review of Financial Analysis*, 71(1), 1-10.
- [8] Kannan, R., & Dhal, S. (2008). India's Demand for Gold: Some Issues for Economic Development and Macroeconomic Policy. *Indian Journal of Economics & Business*, 7(1), 107-128.
- [9] Sashikala, P. (2018). Factor Influencing the Gold Prices: An Empirical Investigation in the Indian Context. *Theoretical Economics Letters*, 8(15), 3444-3456.
- [10] Sasikala, D. D., & Padmaja, D. V. (2020). Gold Performance And Its Impact On Economy During Covid-19. *Dogo Rangsang Research Journal*, 10(8), 176-182.
- [11] Singh, P. (2013). Gold Prices in India: Study of Trends and Patterns. *International Journal of Innovations in Engineering and Technology*, 2(4), 345-351.
- [12] Vidhyapriya, P., & Mohanasundari, M. (2014). A Study on The Performance of Gold ETF in India. *Indian Journal of Applied Research*, 4(8), 414-417.