

A STUDY ON IMPACT OF GST ON JEWELLERY INDUSTRY

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ABSTRACT: *The Gems and Jewellery sector plays an important role in the Indian economy, wherein it contributes around 7 per cent to the country's GDP and 15 per cent to India's total merchandise exports. GST was introduced in India on 1st of July, 2017 which meant tax on Gold was increased to 3%. It was expected that there would be a negative market reaction but, it turned out to be a positive market reaction. The 3% tax rate was viewed as more manageable and will ensure greater compliance by small and independent retailers. The current research focuses on knowing whether there is any impact of GST on Jewellery Industry or not.*

The study used paired sample T test to know whether there is an impact of GST or not on Jewellery Industry by doing pre and post study of Gold Prices and top 5 companies (Rajesh Exports, PC Jeweller, Renaissance Jewellery Limited, Tribhovandas and Goldiam International Ltd.) in terms of their market capitalization as on 24th January 2019. The period of the study includes 6 days (short-term), 14 days (short-term) and 308 days (Long term).

KEY WORD: GST, Gold Prices, Jewellery Industry

I. INTRODUCTION AND LITERATURE REVIEW

The Gems and Jewellery sector plays an important role in the Indian economy, wherein it contributes around 7 per cent to the nation's GDP and 15 percent to India's total merchandise exports. It further gives employment to over 4.64 million people and is relied upon to give employment to 8.23 million by 2022. It is one of the fastest developing sectors in the country which is majorly export oriented and labour intensive.. In view of its potential for development and esteem expansion, the Government of India has proclaimed the Gems and Jewellery Industry as a focus area for export promotion. The Government has as of late attempted different measures to elevate speculations and to update innovation and abilities to advance 'Brand India' in the worldwide market.

GST is a tax that is levied on supply of Goods and Services. In India this tax system has three tiers that are CGST, SGST and IGST. This form of tax replaced previously existing taxes like VAT and any other indirect taxes. GST was introduced on 1st of July, 2017. This meant there is an increase in tax rate on gold from previously existing 1% to 3%. GST on gold was expected to be 5% or more because of which Industry has reacted positively to 3% tax rate. This 3% was viewed as manageable and expected to ensure greater compliance by small and independent retailers.

The change in tax rate on Gold from 1% to 3% due to introduction of GST was expected to have a significant impact on Jewellery Industry. So, the study is done to know whether it had a significant impact or not on Jewellery Industry in terms of changes in gold price and company's share price.

(Ashok & S, 2018): examines impact of GST on Miscellaneous Industry, Gold. The main objective of the study is to mainly identify the survival of GST in selected jewellery industries. The study is conducted on 30 gold industries and the findings states that 20 have moderate impact, 5 have high impact and 5 have no impact on gold price after implementation of GST. This overall concludes that there is no significant impact of GST on Gold Prices. The data for the study was collected from both primary and secondary sources. The primary data was collected using structured questionnaire.

(Raghav & Swami, 2017): examines volatile gold prices and its impact on the economy post GST. The study considered Hedge against Inflation, Global movement of price, Interest rate trends and Supply in the market of Gold to examine volatility in gold prices and its impact on the economy post GST. The major findings states that there has been a decrease in demand for Gold post GST and from the point of view of customers the gold market because of GST would be more organized and transparent. This will reduce black money in the society and in turn reduces corruption. Consumers and jewellers will take some time to adopt this new rule, however after some time the market would stabilize. The study used secondary data such as data published by world Gold Council.

(P, 2014): examines casual nexus between Gold Prices, Stock Prices and exchange rate of India. The studies main objective was to know whether there is any causality between Gold Price, Stock Price and Exchange rate. The findings of the study states that gold price and stock price have relationship with exchange rate only in long term and not in short run. The study was done by using monthly time series data and Autoregressive Distributed Lag (ARDL) bounds testing approach and Granger Causality test are the tools used for its analysis.

(Godbole & Arekar, 2014): examines Retail Investors and their buying Behaviour of Gold. The main objective of the study is to identify various favourable and unfavourable perceptions of retail investors on purchase of Gold or Jewellery due to different attributes of the metal. The attributes that favours investors are safety in Investment, acting as a diversification tool and excessive returns on Investment. The findings states that Retail investors are interested in investing in Gold because of their attributes. The data for the study was collected through a questionnaire wherein sample size was 125 and study was conducted in the city of Mumbai.

(Agarwal, Sekhani, & Mohan, 2018): examines short term impact of GST on small and medium businesses across India. The main objective of the study is to obtain a detailed and ethnographic account of GST across India and also its effects in states of Uttarakhand and kerela. The major findings of the study state that transition cost of businesses from VAT to GST is 3.5 times less. The small and medium businesses are facing an enormous threat from the increase in compliance costs which pushes the gross 'end' prices of products. The data was collected through oral interviews of 40 small and medium scale businesses.

(H.S, Bernard, Rajan, Jhunjunwala, & Balaji, 2018): examines 3 dimensional effects of Tax Reforms in India relating to GST. This papers main objective is to discuss on the effects of GST considering three main dimensions which are economy, industry and individuals and also depicts the effects on economic indicators and various sectors in the country. The main findings of the study states that Goods and Service Tax has a positive effect on three dimensions considered in this study and also helps country in the improvement of its tax system. This is a descriptive paper where data is collected from various secondary sources such as official publications from Government and various Journals.

(Kadam, 2018): examines the impact of GST after its being implemented, where it will show the current trends, challenges and future prospects. The major objectives of the study was to study the concept of GST, analyze the trends in GST and identify the future prospects challenges of GST. The major findings says that implementation of GST has mixed effects on Indian economy wherein FMCG sector, the pharmacy are likely to gain, with auto, banking, real estate, Jewellery and some others are undergoing short term pains. The major aim of GST has been to eliminate other indirect taxes and work towards effective functioning of the one tax, one nation. The study has used both primary and secondary data. Where primary data was collected through structured questionnaire, where sample consisted of 100 respondents. Secondary data was obtained through articles, reports and different online sources which were focused on various aspects of GST.

(Agrawal, 2017) : examines Goods and Services Tax and Its Impact on Indian Economy. The main objectives of the study was to highlight the impact of GST on Indian economy and also to explain the working mechanism of GST in India. The findings of the study says that GST has various negative as well as positive impacts on Indian economy. Where it includes positive impacts such as elimination of other indirect taxes that were in existence before GST, less tax compliance and also corruption free taxation system. And on the other side negative impacts such as short term difficulty, increase in cost of some services and for consumers it would be a mixed bag. This research paper is based on empirical study, which is a descriptive paper based on secondary data collected from different books , news-paper articles and research journals.

(Palil & Ibrahim, 2011): examines the impact of GST on Middle Income earners in Malaysia. The consumers worry on significant increase in price on basic needs after GST was implemented and also increase in living costs in major cities of Malaysia considered as another burden for middle income earners that led to this study. The papers main objectives are to get a overview on consumer's readiness, perceptions, acceptance and also to analyze the individuals purchasing behavior after GST is introduced. The results say that people think there will be an increase of at least 4% in prices across the board for end consumers. This paper would suggest relevant authorities on the social and economy impacts to reduce the financial burden of middle income earners in Malaysia if GST is implemented. The data for the study was collected through a structured survey among middle income earners and these respondents had been chosen on a random basis from various Government and Non-Government organizations in Malaysia. The t-test and one way ANOVA were used to analyze the objectives and research questions of the paper.

After doing the review of literature from researches in Jewellery Industry pre and post implementation of GST following gap was identified: The previous researches conducted included impact of GST through theoretical study from published sources and was mostly short term, in the point of view of customers. There was no study done on organised sector. Therefore, this study will be very useful for further researches done in this field.

1.2 Research Objectives

The objective of the research is to determine impact of GST on Gold Price pre and post its implementation and also to analyse share price returns of selected companies pre and post GST. Further to examine whether if GST had impact on Jewellery industry or not.

1.3 Research Methodology and Data Analysis

The paper's main focus is to study impact of GST on Jewellery Industry. In order to do this Gold Prices and company's share prices have been selected. The companies that are included for the study are Rajesh Exports, PC Jeweller, Renaissance Jewellery, Tribhovandas and Goldiam international limited. These are top 5 companies in terms of their market capitalization as on 24th January 2019. Data for the study has been collected from NSE for 5 company's daily stock price and market index and MCX for daily Gold prices and commodex market Index .

The tool used to facilitate this study is paired sample T test. This helps us to analyse whether there is an impact of GST or not on Jewellery Industry by doing pre and post study of Gold Prices and top 5 companies (Rajesh Exports, PC Jeweller, Renaissance Jewellery Limited, Tribhovandas and Goldiam International Ltd.). The period of the study includes 6 days, 14 days and 308 days. It takes both short term (6 days and 14 days) and long term (308 days) data for its analysis. These short term and long term durations are chosen to obtain accurate results and to know whether there is impact or not of GST on jewellery Industry in either of the durations. The results for the test were obtained by Statistical Package for the Social Sciences (SPSS) software.

The data for the above variables are collected from the NSE and MCX website from the period 2016 to 2018. The study has used Capital Asset Pricing Model to calculate abnormal returns on Excel.

This is based on the following

$$\text{ABNORMAL RETURNS} = \text{ACTUAL RETURNS} - \text{EXPECTED RETURNS}$$

Where,

$$\begin{aligned} \text{ACTUAL RETURNS ON EXCEL IS} &= \text{LN} \left(\frac{\text{TODAY'S PRICE}}{\text{YESTERDAY'S PRICE}} \right) * 100 \\ \text{EXPECTED RETURNS ON EXCEL IS} &= \text{INTERCEPT}(\text{ACTUAL RETURNS}, \text{MARKET RETURNS}) \\ &+ \text{SLOPE}(\text{ACTUAL RETURNS}, \text{MARKET RETURNS}) \end{aligned}$$

Further trend analysis was performed to test whether the results obtained from Paired Sample T test are in accordance with the graphical result or not. This trend analysis is done for all 3 time periods chosen in the study with the help of pre and post GST abnormal returns.

1.3.1 Data Analysis to determine impact of GST on Gold Price pre and post its implementation

H₀- There is no significant difference in performance of gold price before and after GST.

H₁. There is a significant difference in performance of gold price before and after GST.

Figure 1: Paired Samples Test 6 days Gold Prices

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 PREGST - POSTGST	.75498	.74195	.30290	-.02365	1.53360	2.492	5	.055

From figure 1 we can observe that the probability value is greater than 0.05, we accept null hypothesis and reject alternative hypothesis. So, There is no significant difference in performance of gold price before and after GST.

Figure 2: Paired Samples Test 14 days Gold Prices

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 PREGST - POSTGST	.12734	.52233	.13960	-.17425	.42892	.912	13	.378

From figure 2 we can observe that the probability value is greater than 0.05, we accept null hypothesis and reject alternative hypothesis. So, There is no significant difference in performance of gold price before and after GST.

Figure 3: Paired Samples Test 308 days Gold Prices

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 PREGST - POSTGST	-.02456	.84496	.04830	-.11961	.07049	-.508	305	.611

From figure 3 as well we can observe that the probability value is greater than 0.05, we accept null hypothesis and reject alternative hypothesis. So, There is no significant difference in performance of gold price before and after GST.

Figure 4: Trend analysis of Gold Prices for 6 days

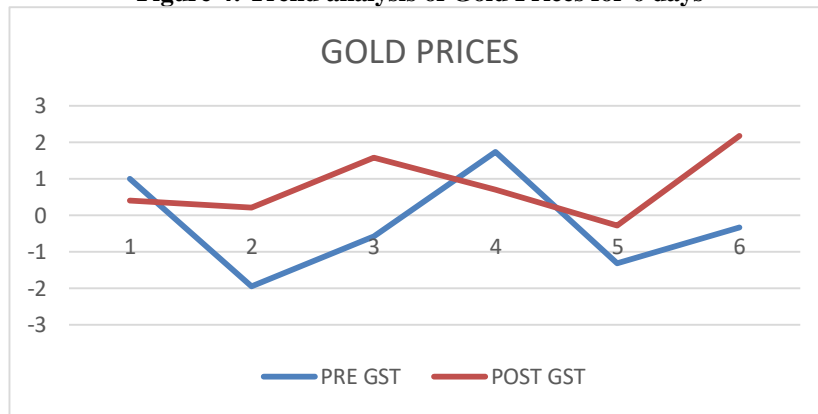


Figure 4 depicts 6 days Pre and Post GST of Gold Prices abnormal returns wherein, we can see that there is more volatility in Gold Prices for both pre and post GST and also as we cannot see that there is any change in trend, we can conclude that there is no significant impact of GST on Gold Prices.

Figure 5: Trend analysis of Gold Prices for 14 days

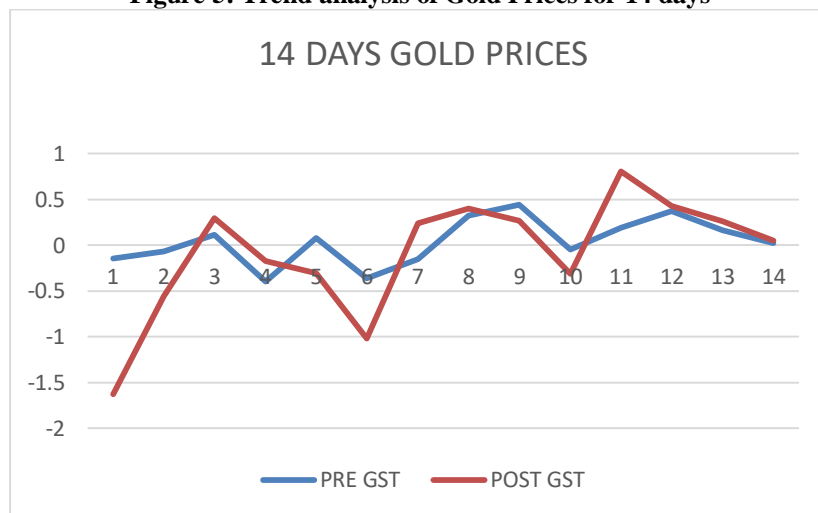


Figure 5 depicts 14 days Pre and Post GST of Gold Prices abnormal returns wherein, we can see that there is more volatility in Gold Prices for both pre and post GST and also as we cannot see that there is any change in trend, we can conclude that there is no significant impact of GST on Gold Prices.

Figure 6: Trend analysis of Gold Prices for 308 days

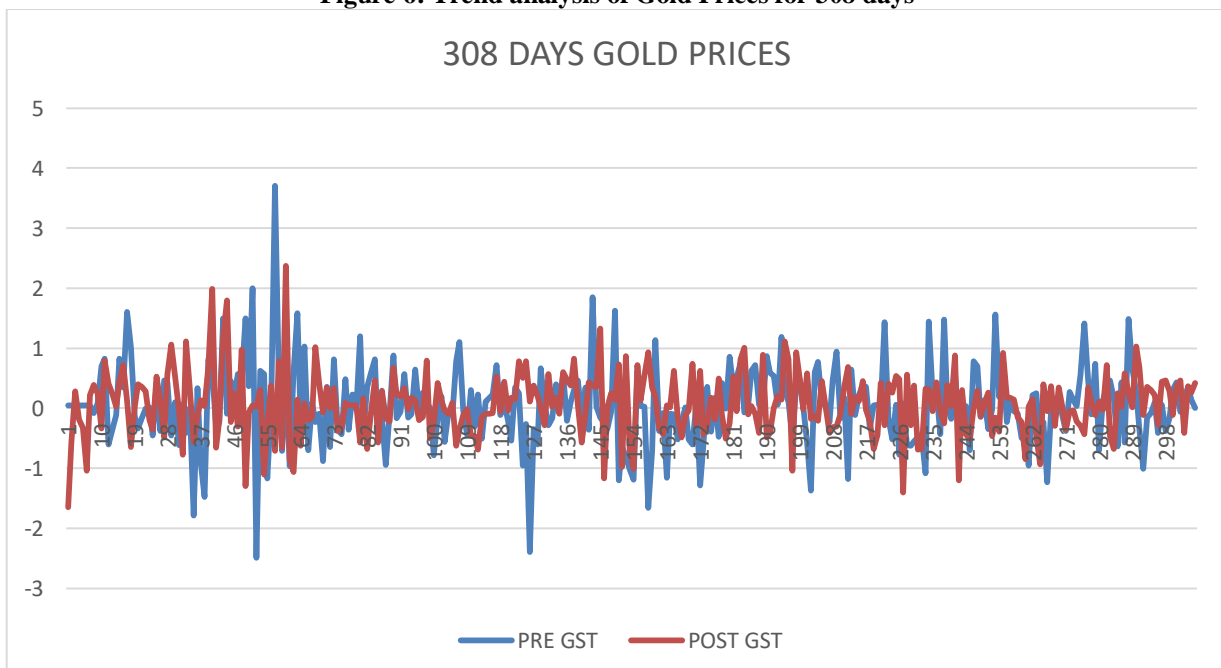


Figure 6 depicts 308 days Pre and Post GST of Gold Price abnormal returns wherein, we can see that there is volatility in Gold Prices for both pre and post GST. It can also be noticed that Gold Price before GST was more volatile than after GST which might be because of external factors that are not part of this study. Hence we can conclude that there is no significant impact of GST on Gold Prices as we cannot see any change in trend of Gold prices Post-GST.

1.3.2 Data Analysis to analyse share price returns of selected companies pre and post GST

Rajesh Exports, PC Jeweller, Renaissance Jewellery Limited, Tribhovandas and Goldiam International Ltd. are the Top 5 companies in terms of market capitalisation that have been selected for the study.

RAJESH EXPORTS

- The paired sample T test for short-term that is for 6 days and 14 days states that there is no significant difference in performance of Rajesh Exports Share price before and after GST, which is because the probability value is greater than 0.05 and hence we accept null hypothesis and reject alternative hypothesis.
- The paired sample T test for long-term that is for 308 days pre and post GST implementation states that there is no significant difference in performance of Rajesh Exports before and after GST, which is because the probability value is greater than 0.05 and hence we accept null hypothesis and reject alternative hypothesis.
- Trend Analysis done on abnormal returns of Rajesh Export's company's stock price which includes short term and long term shows that there is more volatility in prices Pre GST compared to post GST. But, this could not make a significant impact on share price and hence it is concluded there was no significant impact of GST on company's stock price.

PC JEWELLER

- The paired sample T test for short-term that is for 6 days and 14 days states that there is no significant difference in performance of PC Jeweller Share price before and after GST, which is because the probability value is greater than 0.05 and hence we accept null hypothesis and reject alternative hypothesis.
- The paired sample T test for long-term that is for 308 days pre and post GST implementation states that there is no significant difference in performance of PC Jeweller before and after GST, which is because the probability value is greater than 0.05 and hence we accept null hypothesis and reject alternative hypothesis.
- Trend Analysis done on abnormal returns of PC Jeweller's company's stock price which includes short term and long term shows that there is more volatility in prices Pre GST compared to post GST. But, this could not make a significant impact on share price and hence it is concluded there was no significant impact of GST on company's stock price.

RENAISSANCE JEWELLERY LIMITED

- The paired sample T test for short-term that is for 6 days and 14 days states that there is no significant difference in performance of Renaissance Jewellery Limited Share price before and after GST, which is because the probability value is greater than 0.05 and hence we accept null hypothesis and reject alternative hypothesis.
- The paired sample T test for long-term that is for 308 days pre and post GST implementation states that there is no significant difference in performance of Renaissance Jewellery Limited before and after GST, which is because the probability value is greater than 0.05 and hence we accept null hypothesis and reject alternative hypothesis.
- Trend Analysis done on abnormal returns of Renaissance Jewellery Limited company's stock price which includes short term and long term shows that there is more volatility in prices Pre GST compared to post GST. But, this could not make a significant impact on share price and hence it is concluded there was no significant impact of GST on company's stock price.

TRIBHOVANDAS

- The paired sample T test for short-term that is for 6 days and 14 days states that there is no significant difference in performance of Tribhovandas Share price before and after GST, which is because the probability value is greater than 0.05 and hence we accept null hypothesis and reject alternative hypothesis.
- The paired sample T test for long-term that is for 308 days pre and post GST implementation states that there is no significant difference in performance of Tribhovandas before and after GST, which is because the probability value is greater than 0.05 and hence we accept null hypothesis and reject alternative hypothesis.
- Trend Analysis done on abnormal returns of Tribhovandas company's stock price which includes short term and long term shows that there is more volatility in prices Pre GST compared to post GST. But, this could not make a significant impact on share price and hence it is concluded there was no significant impact of GST on company's stock price.

GOLDIAM INTERNATIONAL LTD.

- The paired sample T test for short-term that is for 6 days and 14 days states that there is no significant difference in performance of Goldiam International Limited Share price before and after GST, which is because the probability value is greater than 0.05 and hence we accept null hypothesis and reject alternative hypothesis.
- The paired sample T test for long-term that is for 308 days pre and post GST implementation states that there is no significant difference in performance of Goldiam International Limited before and after GST, which is because the probability value is greater than 0.05 and hence we accept null hypothesis and reject alternative hypothesis.
- Trend Analysis done on abnormal returns of Goldiam International company's stock price which includes short term and long term shows that there is more volatility in prices Pre GST compared to post GST. But, this could not make a significant impact on share price and hence it is concluded there was no significant impact of GST on company's stock price.

1.4 Findings and Interpretation

The present study which has been done to know whether GST has an impact on Jewellery Industry or not by considering Gold Prices and 5 companies (Rajesh Exports, PC Jeweller, Renaissance Jewellery Limited, Tribhovandas and Goldiam International Ltd.) share prices for different time periods that include 6 days, 14 days and 308 days pre and post GST, concludes that there is no significant impact of GST on Jewellery Industry.

This conclusion has been arrived after performing Paired Sample T test using IBM SPSS software for the secondary data collected from National Stock Exchange of India limited (NSE) and Multi Commodity Exchange of India Limited (MCX). Further this secondary data collected from National Stock Exchange of India limited (NSE) and Multi Commodity Exchange of India Limited (MCX) was used to do Trend Analysis to know whether the results obtained from paired sample T test are in accordance

with the graphical results or not. This trend analysis also concluded that there is no significant impact of GST on Jewellery Industry as there was no change in trend of Gold Prices or Companies share prices that are part of the study.

Further there is a lot of scope for research in this area wherein, firstly other variables like consumer purchasing behaviour and unorganised sector can be considered for the study. It is because majority of the Gold Sector in India is unorganised and consumer's Investment behaviour also creates an impact. And secondly as it has been only one complete year after implementation of GST there can be more researches done on this topic to study its long term impact. Whether it had a positive or negative effect on Jewellery Industry. But, GST implementation after the period of one year did not have a significant impact on the Jewellery Industry according to the variables considered in this study. The future study in this field can also be done by considering previously existing tax i.e., VAT with comparison with GST that will give a far clearer picture of the short term impact and study done after 3 to 4 years of GST implementation would show the effect on unorganised sector.

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