International Research Journal of Management and Commerce
ISSN: (2348-9766)
Impact Factor 5.564 Volume 6, Issue 4, April 2019

www.aarf.asia, **Email** : editor@aarf.asia , editoraarf@gmail.com

Evaluating the Impact of GST on the Jewellery Industry: A Pragmatic Study

Corresponding Author
Dr. Ranu Sharma, Ph.D.
Department of Management,
IIS (Deemed to be University), Jaipur, Rajasthan

ABSTRACT: *The Gems and Jewellery sector is a key contributor to the Indian economy, accounting for about 7% of the GDP and 15% of total merchandise exports. When the Goods and Services Tax (GST) was implemented on July 1, 2017, increasing the tax on gold to 3%, it was anticipated that this would negatively affect the market. However, the market reaction was positive, as the 3% tax rate was deemed manageable and encouraged better compliance among small and independent retailers. This research examines the impact of GST on the jewellery industry using a paired sample T-test to analyze pre- and post-GST gold prices and the market capitalization of top companies (Rajesh Exports, PC Jeweller, Renaissance Jewellery Limited, Tribhovandas, and Goldiam International Ltd.) as of January 24, 2019. The study covers short-term (6 days and 14 days) and long-term (308 days) periods.*

KEY WORD*: GST, Gold Prices, Jewellery Industry*

1. INTRODUCTION AND LITERATURE REVIEW

The Gems and Jewellery sector is a crucial part of the Indian economy, contributing approximately 7% to the nation's GDP and 15% to total merchandise exports. Employing over 4.64 million people, it is projected to provide jobs for 8.23 million by 2022. This sector is one of the fastest-growing in the country, characterized by its export orientation and labor-intensive nature. Recognizing its potential, the Government of India has designated the Gems and Jewellery industry as a key area for export promotion. Recent government initiatives have focused on boosting investment, advancing technology, and enhancing skills to promote 'Brand India' globally.

The Goods and Services Tax (GST), introduced on July 1, 2017, replaced various indirect taxes like VAT, and is structured into CGST, SGST, and IGST. Under GST, the tax on gold increased from 1% to 3%. Although there were expectations that the tax rate might rise to 5% or higher, the actual 3% rate was perceived positively by the industry. It was considered manageable and was anticipated to improve compliance among small and independent retailers.

Given the significant increase in the tax rate on gold, this study aims to evaluate its impact on the jewellery industry. The focus is on analyzing how the change from 1% to 3% GST has affected gold prices and the share prices of major companies in the sector.

Ashok & S (2018) analyze the impact of GST on the gold sector within the miscellaneous industry. The primary aim of their study is to assess the effects of GST on the sustainability and performance of selected jewellery industries. The research includes a sample of 30 gold industries, revealing that 20 experienced a moderate impact, 5 faced a high impact, and 5 saw no impact on gold prices following the implementation of GST. Overall, the findings suggest that GST had no significant effect on gold prices. Data for the study was gathered from both primary and secondary sources, with primary data collected through a structured questionnaire.

Raghav & Swami (2017) investigate the volatility of gold prices and its economic impact following the implementation of GST. Their study examines various factors including inflation hedging, global price movements, interest rate trends, and gold supply to understand price volatility and its effects on the economy. Key findings indicate a decrease in gold demand post-GST. From a consumer perspective, the GST is expected to bring greater organization and transparency to the gold market, potentially reducing black money and, consequently, corruption. Although both consumers and jewellers will need time to adjust to the new regulations, the market is anticipated to stabilize over time. The study relies on secondary data, including information published by the World Gold Council.

P (2014) investigates the causal relationships between gold prices, stock prices, and the exchange rate in India. The primary objective of the study is to determine whether a causality exists among these variables. The findings reveal that gold prices and stock prices are related to the exchange rate only in the long term, with no significant short-term relationship. The analysis utilized monthly time series data, employing the Autoregressive Distributed Lag (ARDL) bounds testing approach and the Granger Causality test.

Godbole &Arekar (2014) explore the buying behavior of retail investors regarding gold. The study's primary objective is to identify the various positive and negative perceptions of retail investors concerning gold or jewellery investments, based on different attributes of the metal. Key attributes that favor investors include gold's safety as an investment, its role as a diversification tool, and its potential for high returns. The findings indicate that retail investors are drawn to gold primarily because of these favorable attributes. Data for the study were collected through a questionnaire with a sample size of 125, and the research was conducted in Mumbai.

Agarwal, Sekhani, & Mohan (2018) investigate the short-term impact of GST on small and medium businesses across India, with a particular focus on the states of Uttarakhand and Kerala. The study aims to provide a comprehensive, ethnographic account of GST's effects on these businesses. Major findings reveal that the transition cost from VAT to GST is 3.5 times lower than anticipated. However, small and medium businesses are facing significant challenges due to increased compliance costs, which elevate the gross prices of products. Data for the study were gathered through oral interviews with 40 small and medium-sized enterprises.

H.S, Bernard, Rajan, Jhunjhunwala, & Balaji (2018) explore the three-dimensional effects of tax reforms in India, focusing on GST's impact on the economy, industry, and individuals. The study aims to analyze how GST influences economic indicators and various sectors within the country. Key findings indicate that GST positively affects all three dimensions examined and contributes to the enhancement of the country's tax system. This descriptive study utilizes data from secondary sources, including official government publications and various journals.

Kadam (2018) investigates the impact of GST post-implementation, highlighting current trends, challenges, and future prospects. The study aims to explore the concept of GST, analyze its trends, and identify the challenges and future prospects associated with it. Findings reveal that GST has had mixed effects on the Indian economy: sectors such as FMCG and pharmaceuticals are likely to benefit, while industries like automotive, banking, real estate, and jewelry are experiencing short-term difficulties. The primary objective of GST is to consolidate various indirect taxes into a single system for better efficiency across the nation. The study employs both primary and secondary data, with primary data collected via structured questionnaires from 100 respondents, and secondary data sourced from articles, reports, and online materials related to GST.

Agrawal (2017) explores the Goods and Services Tax (GST) and its effects on the Indian economy. The study aims to highlight GST's impact on the economy and clarify its operational mechanism in India. Findings indicate that GST brings both positive and negative consequences. Positive effects include the elimination of previous indirect taxes, reduced tax compliance burdens, and a more transparent taxation system. Conversely, the study notes short-term challenges, increased costs for some services, and a mixed impact on consumers. This research is an empirical, descriptive analysis based on secondary data collected from books, newspaper articles, and research journals.

Palil and Ibrahim (2011) investigate the impact of GST on middle-income earners in Malaysia. The study explores concerns about rising prices for basic needs and increased living costs in major cities following GST implementation, which prompted the research. The main objectives are to assess consumer readiness, perceptions, and acceptance of GST, as well as to analyze purchasing behavior post-implementation. The findings suggest a predicted 4% increase in prices for end consumers. The paper aims to provide recommendations to authorities to mitigate the financial burden on middle-income earners. Data was collected through a structured survey of randomly selected middle-income earners from various government and non-government organizations in Malaysia. Analysis was performed using t-tests and one-way ANOVA.

After reviewing existing literature on the impact of GST in the jewelry industry, both pre- and post-implementation, the following gap was identified: Previous research predominantly focused on theoretical studies from published sources and mainly examined short-term effects from a customer perspective. Notably, there was a lack of studies addressing the organized sector of the industry. This study aims to fill this gap and provide valuable insights for future research in this field.

2. RESEARCH OBJECTIVES

The objective of this research is to assess the impact of GST on gold prices both before and after its implementation and to analyze the share price returns of selected companies during the same periods. Additionally, the study aims to determine whether GST has had a significant effect on the jewelry industry.

3.RESEARCH METHODOLOGY AND DATA ANALYSIS

This paper investigates the impact of GST on the jewelry industry by examining gold prices and the share prices of leading companies. The study focuses on Rajesh Exports, PC Jeweller, Renaissance Jewellery, Tribhovandas, and Goldiam International Limited, the top five companies in terms of market capitalization as of January 24, 2019. Data for the study was sourced from the NSE for daily stock prices and market indices, and from MCX for daily gold prices and market indices. The analysis employs a paired sample T-test to evaluate pre- and post-GST effects on gold prices and company share prices over short-term (6 and 14 days) and long-term (308 days) periods. Results are processed using SPSS software, and abnormal returns are calculated using the Capital Asset Pricing Model in Excel. Data is collected from NSE and MCX websites spanning 2016 to 2018.

This is based on the following ABNORMAL RETURNS=ACTUAL RETURNS−EXPECTED RETURNS

Where,

$$\text{ACTUALRETURNSONEXCELIS} = \text{LN}\left(\frac{\text{TODAY'S PRICE}}{\text{YESTERDAY'S PRICE}}\right) X\ 100$$

$$EXPECTEDRETURNSONEXCELIS$$
$$= INTERCEPT(ACTUALRETURNS, MARKETRETURNS)$$
$$+ SLOPE(ACTUALRETURNS, MARKETRETURNS)$$

A trend analysis was conducted to verify whether the findings from the Paired Sample T-test align with the graphical data. This analysis was performed for all three time periods considered in the study, using pre- and post-GST abnormal returns to assess consistency and validate the results.

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

H_0- There is no significant difference in performance of gold price before and after GST.

H_1- 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							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	PREGST - POSTGST	.75498	.74195	.3029	-.02365	1.5336	2.492	5	.055

From Figure 1, it can be observed that the probability value exceeds 0.05. Therefore, we accept the null hypothesis and reject the alternative hypothesis, indicating that there is no significant difference in gold prices before and after the implementation of 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, it is evident that the probability value is greater than 0.05. Consequently, we accept the null hypothesis and reject the alternative hypothesis, indicating that there is no significant difference in gold price performance before and after the implementation of 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

Figure 4: Trend analysis of Gold Prices for 6 days

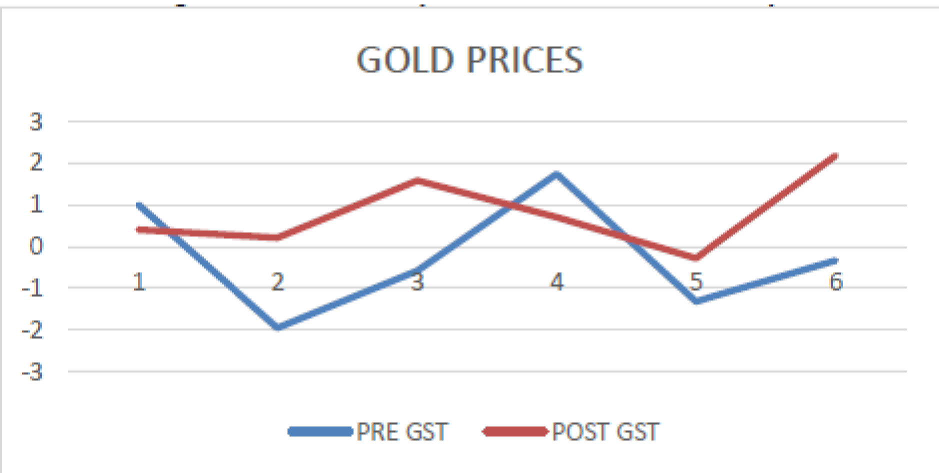

Figure 4 illustrates the abnormal returns of gold prices over a 6-day period before and after GST implementation. The data shows significant volatility in gold prices during both periods. However, since there is no noticeable change in the trend, it can be concluded that GST has not had a significant impact on gold prices.

Figure 5: Trend analysis of Gold Prices for 14 days

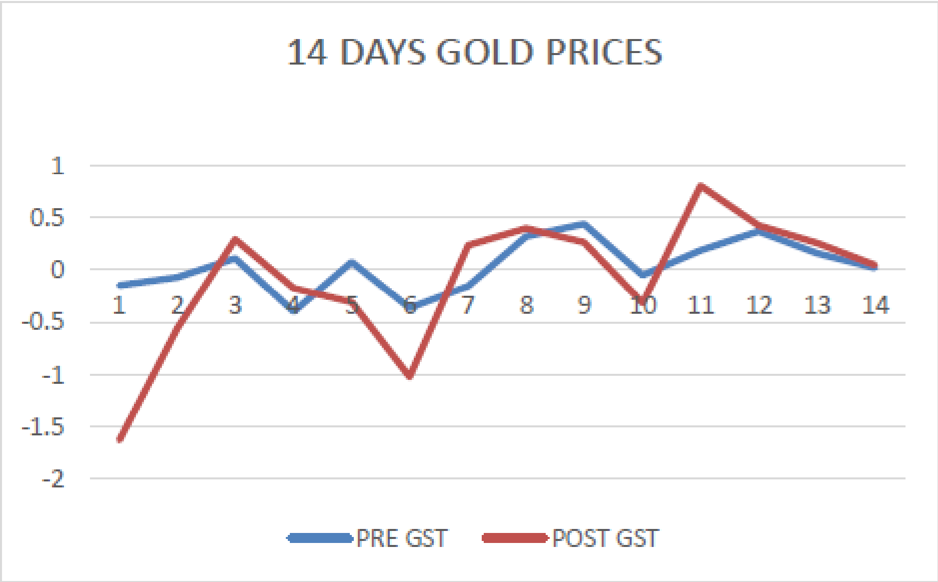

Figure 5 shows the abnormal returns of gold prices over a 14-day period before and after the implementation of GST. The data indicates notable volatility in gold prices during both periods. Since there is no observable change in the trend, it can be concluded that GST has not significantly impacted gold prices.

Figure 6: Trend analysis of Gold Prices for 308 days

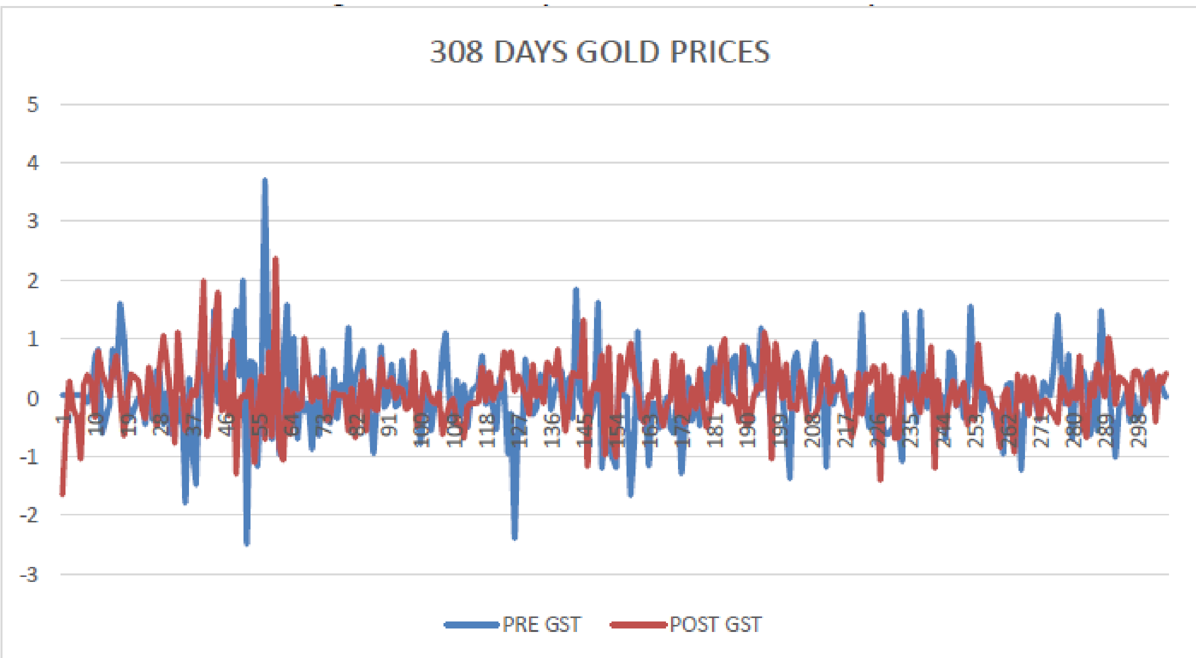

Figure 6 illustrates the abnormal returns of gold prices over a 308-day period before and after GST implementation. The data reveals volatility in gold prices for both periods, with greater volatility observed before GST. This increased volatility prior to GST may be attributed to external factors not covered in this study. However, since there is no discernible change in the trend of gold prices post-GST, we can conclude that GST has not had a significant impact on gold prices.

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. have been selected for the study as the top five companies based on market capitalization.

RAJESH EXPORTS

- **Short-Term Analysis:** The paired sample T-test conducted for short-term periods of 6 days and 14 days reveals that there is no significant difference in the performance of Rajesh Exports' share price before and after the implementation of GST. This conclusion is supported by the probability value, which is greater than 0.05, leading to the acceptance of the null hypothesis and the rejection of the alternative hypothesis. This suggests that GST did not have a notable short-term impact on the company's share price.
- **Long-Term Analysis:** For the long-term period of 308 days pre and post-GST implementation, the paired sample T-test indicates no significant difference in Rajesh Exports' share price performance. The probability value being greater than 0.05 leads to accepting the null hypothesis and rejecting the alternative hypothesis. Therefore, GST did not significantly affect the company's share price over the long term.
- **Trend Analysis:** The trend analysis of Rajesh Exports' stock price abnormal returns, including both short-term and long-term periods, shows increased volatility in the share prices prior to GST implementation compared to post-GST. Despite this volatility, there was no significant change in the overall trend of the share price due to GST. Consequently, it is concluded that GST did not have a substantial impact on the company's stock price.

PC JEWELLER

- **Short-Term Analysis:** The paired sample T-test for short-term periods of 6 days and 14 days reveals no significant difference in the performance of PC Jeweller's share price before and after the implementation of GST. This conclusion is based on the probability value being greater than 0.05, which leads to the acceptance of the null hypothesis and rejection of the alternative hypothesis. This indicates that GST did not have a notable impact on PC Jeweller's share price in the short term.
- **Long-Term Analysis:** For the long-term period of 308 days pre and post-GST implementation, the paired sample T-test shows no significant difference in the

performance of PC Jeweller's share price. The probability value exceeding 0.05 results in accepting the null hypothesis and rejecting the alternative hypothesis, suggesting that GST did not significantly affect the company's share price over the long term.

- **Trend Analysis:** The trend analysis of PC Jeweller's stock price abnormal returns, encompassing both short-term and long-term periods, indicates that share prices exhibited greater volatility before GST implementation compared to after. Despite this increased volatility, it did not result in a significant impact on the overall trend of the share price. Therefore, it is concluded that GST did not substantially affect PC Jeweller's stock price.

RENAISSANCE JEWELLERY LIMITED

- **Short-Term Analysis:** The paired sample T-test results for short-term periods, specifically 6 days and 14 days, show no significant difference in the performance of Renaissance Jewellery Limited's share price before and after the implementation of GST. With probability values exceeding 0.05, the null hypothesis is accepted and the alternative hypothesis is rejected. This finding indicates that GST did not significantly affect the company's share price in the short term.
- **Long-Term Analysis:** Similarly, the paired sample T-test for the long-term period of 308 days also reveals no significant difference in Renaissance Jewellery Limited's share price performance before and after GST. The probability value for this test is greater than 0.05, leading to the acceptance of the null hypothesis and the rejection of the alternative hypothesis. This suggests that the long-term impact of GST on the company's share price was not significant.
- **Trend Analysis:** The trend analysis of abnormal returns for Renaissance Jewellery Limited's stock price, encompassing both short-term and long-term periods, shows increased volatility in prices prior to GST compared to after its implementation. Despite this higher volatility observed before GST, it did not translate into a significant impact on the overall share price trend. Consequently, it is concluded that GST did not have a substantial effect on Renaissance Jewellery Limited's stock price.

TRIBHOVANDAS

- **Short-Term Analysis:** The paired sample T-test for the short-term periods of 6 days and 14 days indicates that there is no significant difference in the performance of Tribhovandas's share price before and after the implementation of GST. The probability values for both periods are greater than 0.05, leading us to accept the null hypothesis and reject the alternative hypothesis. This suggests that GST did not have a significant short-term impact on the company's share price.

- **Long-Term Analysis:** The paired sample T-test for the long-term period of 308 days also shows no significant difference in Tribhovandas's share price performance pre- and post-GST. With probability values exceeding 0.05, the null hypothesis is accepted, and the alternative hypothesis is rejected. This implies that over the long term, GST did not significantly affect the company’s share price.
- **Trend Analysis:** Trend analysis of the abnormal returns for Tribhovandas’s stock price, across both short-term and long-term periods, reveals that there was higher volatility in share prices before GST compared to after its implementation. Despite this increased volatility prior to GST, it did not result in a significant impact on the overall trend of the share price. Therefore, it can be concluded that GST did not have a substantial effect on Tribhovandas’s stock price.

GOLDIAM INTERNATIONAL LTD.

- **Short-Term Analysis:** The paired sample T-test conducted for short-term periods of 6 days and 14 days reveals no significant difference in the performance of Goldiam International Limited's share price before and after the implementation of GST. The probability values for both periods exceed 0.05, which leads us to accept the null hypothesis and reject the alternative hypothesis. This finding indicates that GST did not have a noticeable impact on Goldiam International Limited’s share price in the short term.
- **Long-Term Analysis:** For the long-term analysis covering 308 days pre- and post-GST, the paired sample T-test similarly shows no significant difference in Goldiam International Limited’s share price performance. With probability values greater than 0.05, we accept the null hypothesis and reject the alternative hypothesis, suggesting that GST did not significantly affect the company’s share price over an extended period.
- **Trend Analysis:** The trend analysis of abnormal returns for Goldiam International Limited’s stock price, encompassing both short-term and long-term periods, indicates that share prices exhibited higher volatility before GST was implemented compared to after. Despite this increased volatility prior to GST, it did not lead to a significant change in the overall trend of the share price. Consequently, it can be concluded that GST did not have a significant impact on Goldiam International Limited’s stock price.

4 FINDINGS AND INTERPRETATION

The current study aimed to determine the impact of GST on the Jewellery Industry by analyzing gold prices and the share prices of five major companies: Rajesh Exports, PC Jeweller, Renaissance Jewellery Limited, Tribhovandas, and Goldiam International Ltd. The analysis covered different time periods, including 6 days, 14 days, and 308 days, both before and after the implementation of GST.

The study utilized paired sample T-tests, conducted using IBM SPSS software, to evaluate the secondary data collected from the National Stock Exchange of India (NSE) and the Multi Commodity Exchange of India (MCX). The findings from these tests indicated no significant impact of GST on the Jewellery Industry.

In addition to the T-tests, trend analysis was performed using the same secondary data sources to verify whether the results were consistent with graphical representations. This analysis confirmed that there was no significant change in the trend of gold prices or the share prices of the companies studied. As a result, the study concludes that GST has not had a significant impact on the Jewellery Industry.

There is considerable scope for further research in the field of GST's impact on the Jewellery Industry. Future studies could explore additional variables such as consumer purchasing behavior and the influence of the unorganised sector. Given that a significant portion of the gold sector in India operates in the unorganised market, understanding how consumer investment behavior and the dynamics of this sector affect the industry could provide valuable insights.

Moreover, since only one year has passed since the implementation of GST, longer-term studies could offer a more comprehensive understanding of its effects on the Jewellery Industry. Research extending over several years could reveal whether GST has had a positive or negative impact in the long term. Although this study indicates that GST did not significantly affect the Jewellery Industry within the first year, examining the impact over a more extended period could yield different results.

Additionally, comparing the effects of GST with the previously existing tax system, VAT, could provide a clearer perspective on the short-term impacts of GST. Studies conducted three to four years post-GST implementation could further investigate its effects on the unorganised sector, offering a more detailed view of the changes in the industry.

BIBLIOGRAPHY

1. Ashok, A., & S, D. R. (2018, November). A STUDY ON IMPACT OF GST ON MISCELLANEOUS INDUSTRY; GOLD .*International Journal of Mechanical Engineering and Technology, 9*(11), 608 - 613.
2. Raghav, H., & Swami, D. A. (2017). An Analytical Study of Volatile Gold Prices: With Effect of GST. *Business Journal, 5*(1), 59 - 65.
3. P, S. (2014, June). Gold Price, Stock Price and Exchange rate Nexus: The Case of India. *The Romanian Economic Journal* , 77 - 94.
4. Godbole, S. S., &Arekar, K. A. (2014, October 28). Retail Investors and Gold Buying Behaviour – A Perpetual Study of Indian Retail Investors. *Accounting and Finance Research, 3*(4), 99 - 104.
5. Agarwal, A., Sekhani, R., & Mohan, D. (2018). Short-Term Impact of GST on Small & Medium Businesses across India: Reflections from Case of Local Markets in Uttarakhand and Kerala .*JINDAL SCHOOL OF INTERNATIONAL AFFAIRS*, 1-29.
6. H.S, P., Bernard, A., Rajan, A., Jhunjhunwala, S., & Balaji, S. (2018, June). A STUDY ON THREE DIMENSIONAL EFFECTS OF TAX REFORMS IN INDIA: GST. *INDIAN JOURNAL OF RESEARCH, 7*(6), 11 - 15.
7. Kadam, P. V. (2018, August). GST-CAN IT BE A GAME CHANGER? *International Journal of Recent Scientific Research, 9*(8(F)), 28671-28677.
8. Agrawal, D. Y. (2017, october). Goods and Services Tax and Its Impact on Indian Economy .*Journal of Business and Management , 19*(10), 26 - 30.
9. Palil, M. R., & Ibrahim, M. A. (2011, July). The Impacts Of Goods And Services Tax (GST) On Middle Income Earners In Malaysia. *World Review of Business Research, 1*(3), 192-206.