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The Role of Cement Industry in Raising the Economy of India After Implication of GST

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Abstract

Cement is widely used in different sectors as a raw material from real estate to infrastructure development whether in the private sector or government sector. Cement production in India is the second-largest in the world after China, with a capacity of around 340 million metric tonnes. One of the reasons why India is in the second position after China is the increase in GST in cement production, where China is paying 9% VAT and India is paying 28% GST on cement. This has an impact on the production of the cement and also the consumers who are buying the cement whether they are individuals or construction companies. The non-availability of Input Tax Credit (ITC) after the implication of GST has a dismissive effect on the construction and real estate companies' growth and ultimately it affects the end-users or the consumers of cement. The impact of GST can also be analyzed through the decreased rate in FDI also. This study will study the impact of GST on the cement industry and analyze whether the implication of GST in the Indian economy has been increased or not. The findings from the study state that after the implication of GST, private and government sectors are findings new ways for exploring new opportunities.

Keywords*: *GST, cement industry, ITC, Indian Economy, FDI

Gel Code: 011, 014, 018, E61, L61, H25

1. Introduction

The cement industry in India plays a crucial role in the development of the Indian economy. Being the second-largest producer of cement with more than 8% of the global installed capacity keeps on increasing its potential in the real estate and construction industry as the main component is cement. According to the (ibef, August 2021 report), it is accounted that Indian cement market was 329 million tons in the financial year 2020 which is expected to be increased by 380 million tons by the financial year 2022, which has decreased to 294.4 million tons in the financial year 2021.

According to institutional brokerage and investment group named as CLSA acknowledged that there will be a rise in demand of the cement industry from the key players named as ACC, Dalmia, and Ultratech cement and it is assumed that in the second quarter of 2021 there will be a rise in the cement market industry in India. It is also expected to be a rise in the growth of the cement industry and EBITDA.

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1.1 GST and cement industry in the Indian context

The GST reform was passed in the 122nd amendment bill which was introduced in 2014 and late the bill was passed in Lok Sabha in 2015 and later on Rajya Sabha in 2016. Finally, the GST bill was passed on 1st July 2017. The implementation of GST reform in India is a two-fold process that consists of two different tax systems, one that is levied on the central level (CGST) and the second levied through state and union territories (SGST). The GST in India will be charged in four different tax rates that are 5, 8, 18 and 28 percent respectively. The distribution of the tax rate is mentioned in the below table.

Table 1: GST tax slab distribution

Goods and services	Category of good and services	Percentage of GST implied
Exempted rate	Agricultural goods, milk, Natural honey, sanitary napkins, preserved vegetables etc.	0%
Low Rate	Edible oils, sugar, Traditional sweets, Lifesaving drugs and medicines, walking sticks, incense stick, fly ash blocks, fertilizers, cashew nuts etc.	5%
Standard Rate	Frozen food items (Sauces, Ketchup, excluding Mayonnaise, curry paste and missed dressing) and others (sewing machine, corrective glasses, diesel engines, plastic bottles and jewellery box, real estate construction for selling,	12%
Standard Rate	Household products (toothpaste, hair oils, shampoo etc.), Non leather school bags and satchels, Aluminum foils, TV, services (accommodation, outdoor catering, movie tickets etc.)	18%
High Rate	Tobacco products, cars and two- wheelers, air conditioner, cement, dishwashing machine and services (Gambling, racecourse, entertainment)	28%

The cement industry is paying the tax before the GST was 12.5% for excise duty and standard VAT rate 14.5% and after the GST regime the rates were 28% whereas, refractory cement, mortars, furnaces used for building construction will be charged at 18% GST. The benefit that can be availed from the GST will be the reduced logistics and transportation cost levied and the advantage will also be catered by the manufacturing units.

Another industry that is directly related to the cement industry is the real estate industry which contributes around 8% of India's GDP, after the implementation of GST in the real estate industry the taxes are varied according to the different particulars which could be explained with the help of table 2.

Table 2: Real estate implied taxes Pre and Post GST

Table 2.1 Pre GST regime

Nature of Duty levied on Real Estate	Percentage or rate if tax implied
VAT (Value Added Tax)	1%- 4%
Service Tax	4.5%
Charges implied during registration	0.5%-1%
Stamp Duty Collection	5%-7%

Table 2.2 Post GST regime

Particulars	Percentage or Rate of Tax implied	Input Tax credit
The property which comes under the ready to move possession and builder has issued the completion certificate	-	Not applicable
The property which falls under the category of under construction and also the property which falls under the scheme of under credit- linked subsidy	8%	Available
The property which falls under the category of under construction and not falling under the category of any scheme	12%	Available
Under the resale property	-	Not available
On the purchase and sale of land	-	Not available
Work Contracts	18%	Available
Compounded supply of work contract	18%	Available

According to the above table with the implication of GST the builders will have input tax credit on GST which is paid for the services and goods purchased by them and later that will minimize the price of units. With the help of GST and with the introduction of one tax system, builders and real estate construction companies will have credit on GST paid for services and goods purchased through them will minimize the cost for the builders and this will be further passed to the final consumers.

1.2 GST and its impact on construction property: the concept of RCM

The construction company needs to pay GST on the services such as legal services that are delivered by an individual entity, services provided by transporters, consumers staying at the remote location, and also in a non-taxable area. For this process the company has to pay GST under the reverse charge mechanism, these charges are charged under the services that are availed by government authorities such as municipalities. To explain this reverse charge mechanism, refer to figure 1 and 2 as under.

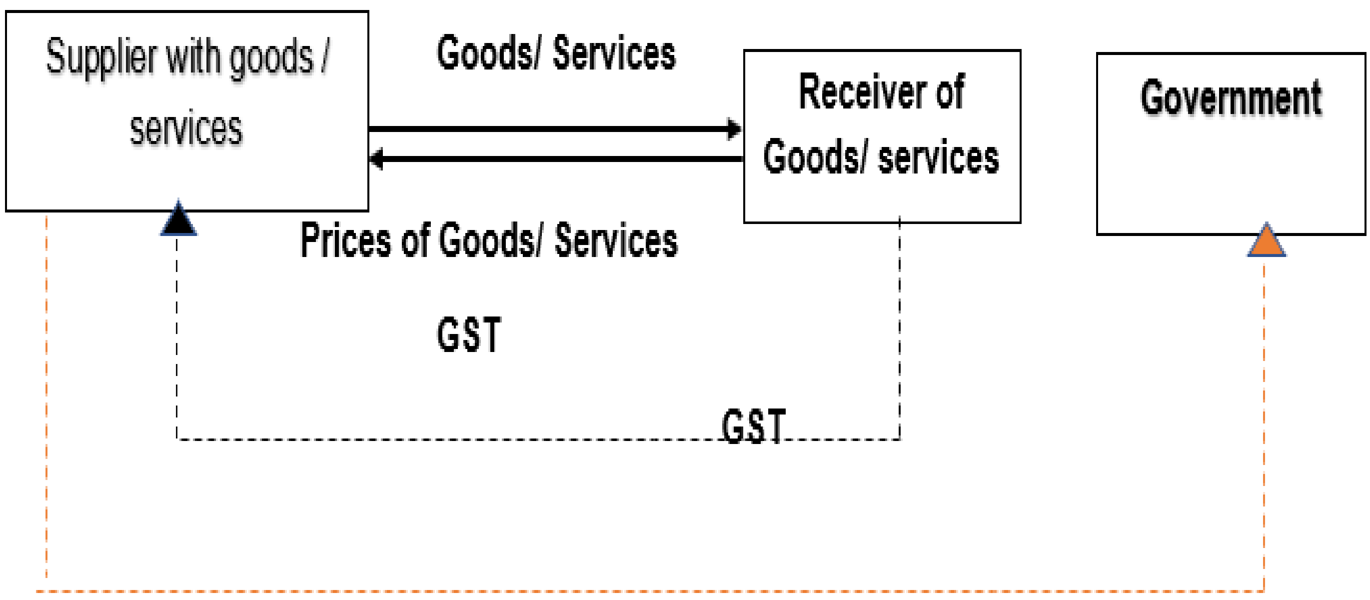

Figure 1 (Normal Payment GST payment)

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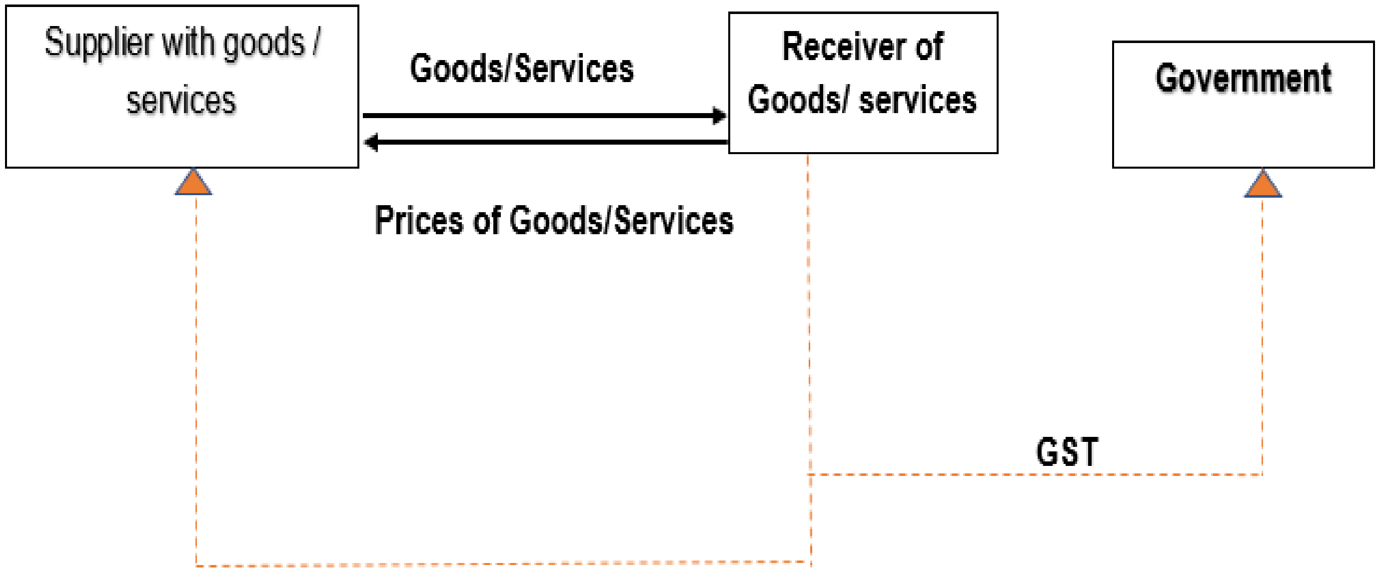

Figure 2: GST payment process in Terms of Reverse Payment Process

In most cases, GST is the responsibility of the person who provides the products or services. However, under the reversed charge system, the obligation may be transferred to the beneficiary in certain circumstances, such as imports and other defined suppliers. Reverse Charge indicates that the beneficiary of goods or services is liable to pay tax rather than the seller of such products or services for the types of supply that have been recognized.

There are two types of reverse charges which are applied by the law

Firstly, it's a function of supply and/or vendor characteristics. Section 9 (3) of the CGST/SGST (UTGST) Act and section 5 (3) of the IGST Act apply to this circumstance. The second situation is addressed by section 9 (4) of the CGST/SGST (UTGST) Act and section 5 (4) of the IGST Act, which prohibits unregistered persons from making taxable deliveries to registered persons.

According to section 9(3) of the CGST / SGST (UTGST) Act, 2017 / section 5(3) of the IGST Act, 2017, the Government could, on the suggestion of the Council, clearly state criteria of supply of goods and services or perhaps both, the tax on which shall be reimbursed on a reverse charge model . Based by the beneficiary of such goods or services or both, and all the provisions shall implement to such beneficiary as if he were the individual held responsible to pay tax in reference to such supply (cbic.gov.in)

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2. Literature Review

Rajamani, K., Lekshmi, R. S., & Ravi, A. (2018) conducted a study on the dealer's opinion on the cement industry after the implication of GST and whether it has a positive impact or negative impact on the dealers. The study was conducted from the 50 different dealers of the cement industry and most of the dealer's GST was aggrandized among all the old taxation systems, which in turn left GST taxation as the least complicated and cumbersome taxation system.

Kour, M et al (2016) examines the impact of GST after its implication, also the study analyses the gap that exists between the GST and the old tax regimes and the benefits which the Indian economy will have after the implementation of GST. As per the study, the authors concluded that GST does not have any impact on riches but the middle and lower-class people face a lot of issues as many products and services rates have increased. Whereas the authors also discussed that there will be an impact on the Indian economy and will prove to be a boom for the backward states.

The study conducted by Shaik, S. et al (2015) states that the GST will be an important step forward in the country's overall indirect tax changes. Indian taxpayers would benefit from a superior tax system that included both goods and services taxes, as well as more efficiency in collecting taxes. It would put an end to unfair treatment of the industrial sector relative to the service sector. As a consistent tax rate is imposed, GST is supposed to foster a business-friendly climate by lowering prices and hence inflation rates over time. Having a clear tax collecting system makes tax evasion more difficult, which improves the fiscal health of the government.

As per the study conducted by Gupta, N. (2014) states that as opposed to the former system of VAT and separate service taxes, GST shows a significant improvement over that system and is, therefore, a justifiable step ahead. The GST will be implemented simultaneously by the national and state governments as the Central and the State GST, and it indicates that various tax rates would apply. India is the largest democracy. However, by classifying all items uniformly, a single tariff would assist to keep things simple and transparent.

Vishwanathan V (2019) was established to simplify numerous tax procedures such as VAT, Service Tax, and so on. There has been a substantial movement in working accord accounting principles due to GST impact, with differences being made depending on taxes imposed before and after GST went into effect. In an employment agreement, services are provided, and goods are moved under one agreement. Construction companies use a range of work agreement activities, including masonry, fabrication, electrical, and interior design, to complete projects.

The study conducted by Jayendrasinh J and Jaimin P (2019) assessed UltraTech cement's financial efficiency over two distinct periods, 2014-2015 phase and 2018-2019 phase. The author based his study on India's growing cement production, which is offering companies to more interconnected companies like transportation and real estate, with the assumption that this growth will yield surplus as well as help export the merchandise. UltraTech cement's financial efficiency was also assessed by the author

Nayyar, A., & Singh, I. (2018) state in their study that GST will bring a positive impact after its implication and to all the different sectors of the economy and the study has conducted through the secondary data available about the different sectors such as manufacturing, telecommunication, small scale enterprises, service industry etc. GST was considered by the author as a transparent taxation system but will encounter different challenges.

Singh, A. (2021) in his study argued that Indian taxes have been revolutionized with the introduction of the Goods and Services Tax (GST). Various federal and state taxes were rolled into one. GST's implementation in the future is intended to entice foreign investors and boost exports. The author also concluded that all indirect taxes, including VAT, service tax, and others have been replaced with a single GST or goods/services tax that applies across the country. A more straightforward tax system in comparison to the one in place before. It will also be simpler to manage and administer the new tax structure, making Indian goods and services more lucrative both at domestically and abroad. Value-added tax will affect the structure of commerce and endanger medium-level trading companies with reduced promotion while driving economic growth in the next years.

3. Objective of the study

The objective of the study was to analyze the role of the cement industry in raising the Indian economy. The study was performed to examine the specific objectives that are stated as under:

a. To understand that whether the implication of GST in the cement industry and alike industry has a positive impact on the Indian economy.

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b. To analyze the changes that occurred before and after the implication of GST in the cement industry.

4. Hypothesis for the study

As per the objective of the study, the hypothesis that can be framed is mentioned as below:

I. H1: There is a significant impact on the Indian Economy by the implication of GST in the cement industry

II. H2: There is a significant impact on the import and export of cement after the implication of the GST regime

III. H3: There is no significant impact on the purchase of cement after the implication of GST.

IV. H4: There is no significant impact on the FDI investment in Indian Cement Industry.

5. Methodology

The detailed analysis will be carried for the study using the secondary data by analyzing how the cement industry has impacted on Indian economy by examining the changes in the prices before and after GST, whether after the implication of does the Foreign Direct Investment is affected or not. The statistical tool used for the study will be standard deviation, co-relation, and paired T-test.

6. Data Analysis and Findings

Table 1: Cement Prices Pre and After GST regime

Year	Before GST		Year	After GST	
	Wholesale price of the cement	Retail Price of the cement		Wholesale Price of the cement	Retail Price of the cement
2013-2014	268.5	280.5	2017-2018	314	324.4
2014-2015	302.3	311.4	2018-2019	306.4	315.2
2015-2016	294.3	296.4	2019-2020	342.1	354.6
2016-2017	301.6	315.2	2020-2021	320.0	328.0
Mean	291.675	300.875	Mean	320.625	330.55

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S.D.	6.3773	9.9506	S.D.	20.815	22.6126
Paired t-Test values for wholesale prices			Paired t-Test values for Retail prices		
N 4 Correlation 'r' 0.8557 Paired Sample t-test 2.6846 P-value of Paired Sample t-test 0.1265			N 4 Correlation 'r' 0.8182 Paired Sample t-test 2.9738 P-value of Paired Sample t-test 0.0876		

Table 1 shows the result obtained by analyzing the result of the changes in the cement prices pre and after the GST implication. To examine the figures paired T-Test and correlation coefficient statistical methods are implemented. From the result, it can be analyzed that there is a high degree of correlation between the prices of cement before the GST implication in the wholesale price and the selling price which is around 85.57%, and after the implication of the GST regime the correlation of the cement prices is 81.82%. As per the paired T-Test value, it can be assessed that there is no such difference between the pre and post-GST regime in the prices of the cement industry.

Table 2: The Export and Import of Cement Pre and Post GST regime

Year	**Before GST**		**Year**	**After GST**	
	Cement Exported (metric Ton)	**Cement Imported**		**Cement Exported**	**Cement Imported**
2013-2014	228.13	110.17	2017-2018	374.87	119.81
2014-2015	312.26	68.34	2018-2019	433.87	174.36
2015-2016	378. 31	91.93	2019-2020	280.10	83.56
2016-2017	335.62	101.19	2020-2021	302.12	97.45
Mean	292.033	92.9075	Mean	347.74	118.795
S.D.	9.9405	3.4569	S.D.	8.50416	2.1809
Paired t-Test values for Cement exports			Paired t-Test values for Cement imports		
N 4 Correlation 'r' -0.9786 Paired Sample t-test 1.2841 P value of Paired Sample t-test 0.3506			N 4 Correlation 'r' -0.9852 Paired Sample t-test 0.5172 P value of Paired Sample t-test 0.6822		

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Table 2 shows the import and export of the cement post and Pre GST regime. As per the stated figure obtained is negatively correlated and is 97.86% before the GST and 98.52% after GST. The paired T-Test also signifies that there is no certain difference between the import and export of cement pre and post-GST regimes.

Table 3: FDI inflows in cement and construction industry pre and post GST period

Year	FDI inflow before GST		Year	FDI inflow After GST	
	Cement industry (In cr)	Infrastructure activities		Cement industry (In cr)	Infrastructure activities
2013-2014	6853.00	1260.00	2017- 2018	117.47	1866.07
2014- 2015	1202.06	2915.72	2018- 2019	122.33	1282.73
2015- 2016	66.24	585.25	2019- 2020	39.45	3818.44
2016- 2017	13262.67	722.57	2020-2021	448.00	4878.00
Mean	5869.99	1363.118	Mean	184.81	2958.81
S.D.	8715.54	1508.50	S.D.	65.57	1528.76
Paired t-Test values for FDI inflow into cement industry and infrastructure industry			Paired t-Test values for FDI inflows to cement industry and infrastructure industry		
N 4 Correlation ‘r’ -0.9861 Paired Sample t-test 1.089 P value of Paired Sample t-test 0.3763			N 4 Correlation ‘r’ -0.5169 Paired Sample t-test 0.2885 P value of Paired Sample t-test 0.7951		

Table 3 shows the FDI inflows in the cement industry and infrastructure industry post and Pre GST regime. As per the stated figure obtained is negatively correlated and is 98.61% before the GST and 51.69% after GST. The paired T-Test also signifies that there is no certain difference between the import and export of cement pre and post-GST regimes. From the above data, it can also be implemented that there is a decreased number of FDI in the cement industry and infrastructure industry.

As per the data analyzed it can be examined that all the four hypotheses have been accepted as a null hypothesis that is there is no significant difference between the changes in the price of the cement pre and post GST regime, there is no significant difference between the export and import and FDI inflow on the cement industry and the relatable industry. This also implies that the objective that is considered for the study is that there is a positive impact on the Indian economy by the cement industry and there are no significant changes that can be analyzed after the GST implication. From the GST implication, the allied sector of the cement industry that is the construction industry, real estate industry, and the transport industry were also benefited from GST with one tax one nation scheme.

7. Conclusion

GST has been considered to aid our economy to flourish because of its transparency, dependability, and simplicity when compared to the old tax system. It will also prove to be more lucrative. The government collects more tax income through GST, and this additional funding will be used to provide services to the general population. Additionally, it aids in the acceleration of the country's total GDP. The Goods and Services Tax (GST) is widely recognized across the world. The current effeminacy load has been lessened because of the GST. It is also clear from the union budget 2021-2022 will be introducing the affordable housing scheme, infrastructure development, and construction of roads and highway for the increased production of cement, which will indirectly increase the economy of the country. This will also increase the inflow of FDI in India in the cement industry which has decreased because of the pandemic (ibef.org).

For the future perspective for the increase in the growth of cement industry time to time government are taking initiatives for the cement industry development as well as the major player in cement industry like Ambuja Cement, Ramco Cement, Utratech Cement, JSW Cement, Vedanta Cement, Shree Cement, and ACC cement have done their major investment from January 2021 to August 2021 (ibef.org). Cement companies may find fresh and unexplored markets in India's eastern regions, which might help their profit margins in the future. In the next ten years, India might overtake the United States as the world's largest supplier of clinker and grey cement. (ibef.org)

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