Abstract: The goods and service tax (GST) is a value added tax levied in India on the supply of goods and services. It is a comprehensive multistage, destination based on one nation one tax. Goods & Service Tax has made large scale changes in the working pattern of all the sectors of Indian economy. One of the sectors is construction industry. GST on construction sector hiked to 18%. The government has hiked the Goods Service Tax Rate for the construction sector to 18% from 12%. But it also allowed deduction of land value equivalent to one third of total amount charged by the developer for GST calculation. In this paper the factors which affect the construction industry through GST is identified. And the analysis of identified factors has been done.

Keywords— Construction industry, good service tax (GST), economy.

I INTRODUCTION
The Construction Sector, often known as an unorganized sector has been hit by it the most as in construction sector, there are large number of activities involved, a big budget is admire initially, intelligence considerate the form management as well as the direction of economic aspects is not done as per the required terms. Often there are alternative taken to deal with the tax boost activities, which is making the construction industry level to the cursed effects of GST on its working and is assign the random sector. There are illusion that construction sector is facing a slow down due to GST, there is a growth in the cost of materials, devices as well as personnel due to GST, but the actual status is being calculation by taking an surviving building if construction as per the old system of tax collection and if the same is constructed as per the GST reign. Introduction of Goods & Service Tax has made enormous changes in the working pattern of all the sectors of Indian recession. The disparity in the cost is calculated on unit basis to check the effects of GST on Construction Sector.

The detailed studies starting from the incubation stage to the submitting stage would detail in where is the area of disquiet where the cost of project has affected due to GST appliance. These consideration not only give a fair drawing of what all area of concern are to be seen to close out the avoidable charge but it will also help the project executive to evaluate and form such itinerary. Those are met with as per the lineup cost and time frame to avoid the effects of cost deviation in the building construction industry. So, to get a fair picture of increase or decrease in cost due to GST, detailed study of a project before and after GST is done for a check in cost deviation.

This alteration introduced a national Goods and Services Tax (GST) in India from 1 July 2017. The Goods and Service Tax Bill was approved in the SANSAD on March 30, 2017, with four extra commandments-
- The Central GST charge
- The Integrated GST charge
- The GST charge
- The Union Territory GST charge.

In Construction industry, there has always been a need to improvise the way of working to achieve better results, saving in time, energy and cost. In doing so, there are lot of shortcuts taken, lots of time saving activities are conducted which results in inadequate data regarding all aspects of the projects. There are certain things which are completely absent when it comes to documentation of all the project data on completion of project. In all these things, there exists a scope of improvement, in order to regularize this; the
finance ministry has put up Goods & Service Tax (GST) in order to regularize the construction sector. Introduction of Goods & Service Tax (GST) by the government of India has led to a lot of ambiguity in the Construction industry because it’s not only a new thing to deal with but, it will also regularize the so called “Unorganized Sector”.

To arrive at a conclusion, detailed studies starting from the gestation phase to the handover phase would depict in detail where are the area of concern where the cost of project has affected due to GST implementation. These studies not only give a clearer picture of what all area of concern are to be seen to eliminate the unnecessary cost but it will also help the project manager to analyze and form such schedules that are met with as per the scheduled cost and time frame to nullify the effects of cost variation in the building construction industry. So, to get a clear picture of increase or decrease in cost due to GST, detailed study of a project before and after GST is done for a check in cost variation.

The GST has changed the entire outline of the oblique taxation system in India. It is considered as the biggest ever tax reformation. GST undivided all the indirect taxes less than one gamp and created a soft national market. The main objective behind implementing GST is to avoid carbon copy of taxes and thus focus on one nation one tax. By 2020 the India Real Estate Sector is expected to grow annually. In Real estate sector, a huge percentage of each project costing goes unrecorded in the record. Real estate sector also has benefited with new tax law having a positive effect on all additional industries.

The introduction of GST at the Central level is not only include comprehensively more indirect Central taxes and integrate goods and service taxes for the purpose of set-off relief, but may also lead to revenue gain for the Centre through widening of the dealer base by capturing value addition in the distributive trade and increased compliance. In the GST, both the cascading effects of CENVAT and service tax are removed with set-off, and a constant chain of set-off from the original producer’s point and service provider’s point up to the retailer’s level is established which reduces the burden of all cascading effects. This is the real meaning of GST, and this is why GST is not simply VAT plus service tax but an improvement over the previous system of VAT and disjointed service tax. Moreover, with the introduction of GST, burden of Central Sales Tax (CST) will also be removed. The GST at the State-level is, therefore, justified for-

- Additional power of levy of taxation of Services for the States
- System of comprehensive set-off relief,
- Subsuming of several taxes in the GST
- Removal of burden of CST

Engineer to study the GST impact, for the same following points can be stated for which a Civil Engineer needs to study GST & it’s consequences in construction sector:

- High Initial Investing Sector.
- Contractor’s Relied on Labour’s.
- Service Charges.
- Machinery Cost.
- Material Cost.
- Man Power Cost.
- Rate of Interest on Borrowings.
- Labour Contracts Turn Dicey.
- Transparency of Tax Reforms.
- No Scope of Cheat.
- Organizing the Unorganized Sector.
- Project Planning, Scheduling & Budgeting

A single tax structure is definitely a welcome move and the introduction of Goods and Services Tax (GST) seeks to do just that by way of amalgamating a large number of Central and State taxes into a single tax. GST will not only address the concerns of double taxation but will also help in reducing the overall tax burden on goods and services. Furthermore, it will also help in making Indian goods competitive internationally thus providing a much-needed boost to the economy.
The Construction industry is one of the most pivotal sectors in India and has seen a phenomenal growth, not just in cities, but even small towns. GST is another development that will have a significant impact on this sector. Let’s take a look at the impact of GST on the construction industry and the construction sector.

**GST on under construction property** – Affordable housing It is important to note that if GST exemption is extended to affordable housing projects (affordable housing is currently exempted from service tax and a clarification is expected from the government for exemption from GST), then, affordable homes may become cheaper under the GST regime.

<table>
<thead>
<tr>
<th>HSN</th>
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<tr>
<td>Chapter 72</td>
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<tr>
<td>6802</td>
<td>Marble &amp; Granite</td>
<td>28%</td>
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<td>2515</td>
<td>Blocks of Marble &amp; Granite</td>
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<tr>
<td>Chapter 68</td>
<td>Sand lime bricks and fly ash bricks</td>
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<tr>
<td>2505 &amp; 2517</td>
<td>Natural sand, pebbles, gravel</td>
<td>5%</td>
</tr>
<tr>
<td>8428</td>
<td>Lifts and elevators</td>
<td>28%</td>
</tr>
</tbody>
</table>

**Reverse charge mechanism in GST and its impact on construction costs**

The mechanism, where the recipient of services pays the service tax, is called as ‘reverse charge mechanism’ (RCM). The same concept, with wider application, has been borrowed from the service tax laws in the Goods and Services Tax (GST) regime.

A developer has to pay GST on services availed, like those provided by a person who is located in a non-taxable area, services provided by goods transporters, legal services provided by an individual or firm, etc. The developer also has to pay GST under the reverse charge mechanism, on the services provided by government or local authorities, like municipalities, etc. Nevertheless, some of the services provided by the government, like renting of premises, specific services provided by the postal authorities, transport of goods by railways or by state transport undertakings, etc., are outside the scope of the GST, similar to the service tax regime.

A significant departure under the GST laws, compared to the erstwhile service tax provisions, is that under the reverse charge mechanism in GST, a person who is registered under the GST has to pay GST on all the services and goods that are procured from a person who is not registered under GST.

This has significantly expanded the scope of the reverse charge mechanism for all taxable persons and it will adversely affect the developers. Moreover, the tax payable under the reverse charge mechanism under the GST, cannot be adjusted by the developer against the input credit available from the GST paid on the inputs, but has to be paid by cash/bank payment.

So, under the GST, the builders are worse off, due to the dual effect of the levy of GST on the services availed from unregistered person, as well as the requirement to 15 discharge the reverse tax on goods received from unregistered suppliers. This will certainly increase the costs for the developer, especially the small developers who were availing goods and services from unregistered suppliers earlier and were not bearing the cost of taxes to that extent.

**Will GST make home loans expensive?**

Before evaluating the likely impact of the GST on home loan costs, it is important to understand the components that will be impacted by the increased rates under the GST. The main cost of taking a home loan, is the interest payment on the money. This cost will not change, as there is no service tax or GST on it.

Similarly, any stamp duty charged in connection with the documentation of the home loan, will not change with the GST, as stamp duty is not subsumed under the GST.

However, there are various charges that are levied by lenders on home loans. First and foremost is the processing fee that is paid at the time of taking the home loan. At present, it is 15 per cent but it will go up by 3 per cent under the GST, to 18 per cent. This is generally a one-time cost and its overall impact on your home loan tenure, will be insignificant. The banks may also recover other charges like advocate fees, valuation charges, etc., in connection with the home loan, which will go up proportionately.

Like the processing fee paid at the time of application, you may have to pay prepayment charges, in case you
decide to prepay the home loan before the completion of its tenure or shift the home loan to another lender. This is generally payable; in case the home loan is taken under a fixed rate of interest. For floating rate home loans, banks cannot levy any prepayment charges. Housing finance companies can, however, levy the prepayment charges, if you decide to shift the home loan to another lender. However, for payment of the home loan from your own resources, the housing finance companies cannot levy any prepayment charges.

The lenders can also charge you for any EMI default, either due to return of the cheque or ECS return, on which the GST rates will go up. So, it is practically on all the charges that are recovered by the lenders that the GST rates will go up by 3 per cent.

**How are banks affected by the GST?**
The implementation of the GST, will bring some tax savings for the lenders, as the input credit with respect to the services availed, as well as goods purchased, will be available for set off, against the GST output taxes liability. However, the reverse charge mechanism, which is borrowed from the service tax regime and which is expanded under the GST, will adversely affect the profitability of banks. Moreover, lenders are now required to register in all the state under the GST, whereas, under the service tax regime, they could have obtained one centralised registration. This will significantly increase the compliance costs of the lenders and affect their profitability.

### 1.1 BACKGROUND

The Roles of Construction Actors in Construction cost there are diverse interests in the construction industry. The principal interest or actors in the construction industry are:

- The Client
- The Consultant
- The Contractor

The Client is, by far, the single most important member of the construction team. He is the initiator and financier of all the projects. Noted that the major contribution the client can make to the successful operations of the construction industry lies in his skill in specifying his needs prior to the preparation of the design. It is also important for the client to set cost limits of the project at the briefing. He should also ensure that adequate financial provisions are made prior to the commencement of any project.

The Consultant Cost considerations are among the most important and basic considerations that Consultants must deal with. It is essential to see that projects are contained within the client’s budget and cost forecasts. Cost has the final control over virtually every project. Accurate cost analysis and control is one of the necessary services the client requires from the consultants.

The Contractor further reveals that the major task of Contractors is to assemble and allocate the resources of labour, equipment and materials to the project in order to achieve completion at maximum efficiency in terms of time, quality and cost.

Tax policies play an important role on the economy through their impact on both efficiency and equity. A good tax system should keep in view issues of income distribution and, at the same time, also endeavor to generate tax revenues to support government expenditure on public services and infrastructure development. Cascading tax revenues have differential impacts on firms in the economy with relatively high burden on those not getting full offsets. Analysis of the tax levy can be extended to international competitiveness of the adversely affected sectors of production in the economy. Such domestic and international factors lead to inefficient allocation of productive resources in the economy. This results in loss of income and welfare of the affected economy.

Even though the country has moved on the path of tax reforms since yet there are various issues which need to be restructured so as to boost productivity and international competitiveness of the Indian exporters.

- Sales of services to consumers are not appropriately taxed with many types of services escaping the tax net.
- Intermediate purchases of inputs by the business firms do not get full offset and part of non-offset taxes may get added up in prices quoted for exports thus making exporters less competitive in world markets

With the implementation of Goods & Service Tax (GST), it seems beastly important for civil Engineers, Architects, Chartered Accountants, Builders & other allied agencies relating to manufacture activities to study, understand & correspondingly implement these new forms in their actual & impending projects.
• Working, testing & research referring to this topic have been done under the realm Project/Construction Management.

• With the implementation of one nation One Tax there has been a forceful change in the working situation of the construction industry which has led to changing costing of labourers, construction materials, and equipment referring to construction, automation used in construction, which has ultimately affected the cost of construction as well as the cost of obtaining & advertise of properties.

• Detailed analysis of both the act gave a positive conclusion as ultimately both these reforms are regularizing the so called “Disorganized Industry”.

• Basic approach to understand the actual impact of GST on building construction is to compute the cost of construction of a structure before & after implementation of GST.

• Basic assumption in cost analysis is that the time frame of construction of the project is same, only the change in taxation on the basic cost are studied & arrived at the impact on cost of construction.

1.2 RELATED WORK
In the earlier indirect tax regime, there were many indirect taxes levied by both state and center. States mainly collected taxes in the form of Value Added Tax (VAT). Every state had a different set of rules and regulations. Interstate sale of goods was taxed by the Centre. CST (Central State Tax) was applicable in case of interstate sale of goods.

Other than above there were many indirect taxes like entertainment tax, octopi and local tax that was levied by state and center. This led to a lot of overlapping of taxes levied by both state and center. For example, when goods were manufactured and sold, excise duty was charged by the center. Over and above Excise Duty, VAT was also charged by the State. This lead to a tax on tax also known as the cascading effect of taxes. The following is the list of indirect taxes in the pre-GST regime:

- Central Excise Duty
- Duties of Excise
- Additional Duties of Excise
- Additional Duties of Customs
- Special Additional Duty of Customs
- CESS
- State VAT

CGST, SGST, and IGST have replaced all the above taxes. However, the chargeability of CST for Inter-state purchase at a concessional rate of 2%, by issue and utilization of c-Form is still prevalent for certain Non-GST goods such as:

- Petroleum crude
- High-speed diesel
- Motor spirit (commonly known as petrol)
- Natural gas
- Aviation turbine fuel
- Alcoholic liquor for human consumption in respect of following transactions only.
  - Resale
  - Use in manufacturing or processing
  - Use in the telecommunication network or in mining or in the generation or distribution of electricity or any other power

Goods and Services Tax (GST) in India is proposed to be the maiden reform (and not an amendment) in the existing indirect taxation structure. The proposed GST is a long pending and much awaited tax reform in India which is hoped to iron out the wrinkles in the existing indirect taxation system. This comprehensive tax policy is expected to be one of the most important contributors to the India growth story. (An insight of GST in India, Tax Research Department, and the Institute of Cost Accountants of India. Implementation of GST will have a far reaching impact on all the industrial sectors including real estate. The real estate sector is one of the most globally recognized sectors. In India, real estate is the second largest employer after agriculture and is slated to grow at 30 per cent over the next decade.

1.3 AIMS AND NEED OF GST STUDY
Construction industry comes under the Industry Sector out of the three sectors of Indian Economy. As it is a known fact that India is one of the fastest growing economies, there is lot of infrastructure development going on in the country to constantly grow at this faster
rate of growth in the range of 6-7%. In the second quarter of 2017, growth rate of Indian Economy was at 7.2% which surpassed China too. Contribution of industrial sector to GDP is 29% of the total GDP. In this 29%, construction industry contributes to 11% of the industry sector. This seems to be a big digit when it comes to revenue generation of the nation. Even the latest annual budget has given due importance to the infrastructure development as a country is said to be developed if it has the best infrastructure facilities which invites other sectors, leading to generation of revenue and growth of country.

The study has the following objectives:

- To understand the concept of GST
- To understand the current scenario of real estate sector in India.
- To analyze the possible impact of GST on the Construction Industry

Construction industry comes under the Industry Sector out of the three sectors of Indian Economy. As it is a known fact that India is one of the fastest growing economy, there is lot of infrastructure development going on in the country to constantly grow at this faster rate of growth in the range of 6-7%. In the second quarter of 2017, growth rate of Indian Economy was at 7.2% which surpassed China too. Contribution of industrial sector to GDP is 29% of the total GDP. In this 29%, construction industry contributes to 11% of the industry sector. This seems to be a big digit when it comes to revenue generation of the nation. Even the latest annual budget has given due importance to the infrastructure development as a country is said to be developed if it has the best infrastructure facilities which invites other sectors, leading to generation of revenue and growth of country.

II LITERATURE REVIEW

Impact of GST on Indian real estate sector
Author: Ms. Shalini R et al. (2016)

In India complicated indirect tax system is followed with different types and rates of taxes imposed by union and states separately. GST will unify all the indirect taxes under an umbrella and will create a smooth national market. Experts say that GST will help the economy to grow in more efficient manner by improving the tax collection as it will disrupt all the tax barriers between states and integrate country via single tax rate. GST was first introduced by France in 1954 and now it is followed by 140 countries. This paper focuses on the impact of GST on the real estate sector in India. Goods & Service Tax (GST) is a comprehensive tax system expected to subsume all indirect taxes of states and central government and simplify the present indirect tax regime. It is expected to iron out wrinkles of existing indirect tax system and play a vital role in growth of various industrial sectors including real estate. The real estate sector is one of the most globally recognized sectors. In India, real estate is the second largest employer after agriculture and is slated to grow at 30 per cent over the next decade (IBEF Dec 2016). This Paper presents an overview of GST, current types of tax and tax rates in real estate sector, issues and challenges in the implementation of GST and its impact on the real estate sector.

Impact of goods and services tax on building construction projects at Islampur city
S. Ramesh Kumar et al. (2018)

The introduction of goods and services tax (GST) aims to increase the government’s revenue. The GST implementation is part of the government’s tax reform programmer to increase the capability, effectiveness and transparency of tax administration and management. It is a commonly known fact that the construction sector is the one where cash transactions play a pre dominant role. Even the educated people, prefer to do it more with liquid cash than by going in for explicit bank loans. The GST implementation is part of the government’s tax reform programmer to increase the capability, effectiveness and transparency of tax ministration and management. Building materials and land acquisition costs are the major construction cost components which are affected due to demonetization and GST implementation. The main objective is to find the impact of demonetization and GST on construction industry in India. Recommend strategies to overcome the impact of demonetization and GST on construction industry in India. The questionnaire is prepared based on the factors obtained from the literature survey. The questionnaire consists of totally 30 questions. Questionnaire is distributed to various construction companies through mail and in personal. The collected questionnaire is analyzed by using SPSS (Statistical Package for Social Science). The top factors were ranked and suggestions were made for those factors.
Introduction of Goods & Service Tax has made large scale changes in the working pattern of all the sectors of Indian Economy. The Construction Sector, often known as an “unorganized sector” has been hit by it the most as in construction sector, there are large number of activities involved, a big budget is put up initially, knowledge regarding the document management as well as the management of financial aspects is not done as per the required terms. Often there are shortcuts taken to deal with the tax enhancing activities, which is making the construction industry prone to the bad effects of GST on its working and is regularizing the unorganized sector. There are myths that construction sector is facing a slow down due to GST, there is a rise in the cost of materials, machinery as well as man power due to GST, but the actual scenario is being studied by taking an existing building if construction as per the old system of taxation and if the same is constructed as per the GST regime. The difference in the cost is calculated on unit basis to check the effects of GST on Construction Sector. In Construction industry, there has always been a need to improvise the way of working to achieve better results, saving in time, energy and cost. In doing so, there are lot of shortcuts taken, lots of time saving activities are conducted which results in inadequate data regarding all aspects of the projects.

**Goods and Services Tax (GST) in India – An Overview and impact**

**Songara Manoj et al. (2019)**

GST would be a major move towards Indian economy as since independence India has faced some of the issues because of complex indirect tax system, this complexity is assumed to be resolved by present GST structure replacing all state and central indirect taxes in to one simple unique tax.1 GST is a comprehensive indirect tax on manufacture, sale and consumption of goods and services at national level. One of the biggest taxation reforms in India is the (GST) all set to integrate state economies and boost overall growth. The aim of this research paper is regarding impact of GST and its impact on various sectors. With the introduction of GST, there is chaos and confusion among common man. GST bill will be a form for economic integration of India. The main trait of the GST is to transform India into a unified market by dismantling the present fiscal barrier among states and can expect improved tax compliance. There would be only one tax that too at the nation all Level, monitored by the central government. GST is also different in the way it is levied at the final point of consumption and not at the manufacturing stage.

**Study on impact of RERA and GST on construction sector**

**Dr. Ansuman Sahooet al. (2017)**

Goods and Services Tax (GST) is a broad based and a single comprehensive tax proposed to be levied on goods and services consumed in the country. It is necessary for the growth of the country. It will help the country to improve the GDP. GST, in fact is the association of all indirect taxes. GST is levied at every stage of the production-distribution chain with applicable set offs in respect of the tax remitted at previous stages. It is basically a tax on final consumption. In simple terms, GST may be defined as a tax on goods and services, which is to be levied at each point of sale or provision of service, in which at the time of sale of goods or providing the services the seller or service provider may claim the input credit of tax which he has paid while purchasing the goods or procuring the service. India, being one of the largest democratic countries in the world, has to follow the convention of welfare state. The federal structure of the country provides a relatively powerful government at the center accompanied by 28 state governments. All of them require finance to govern the country and the states. After introduction of Value Added Tax (VAT) from 2005, the country has been experimented with Goods and Services Tax from April 1, 2013. This paper is an analysis of the impacts and implications of GST on industrial sectors.

**Construction costs and housing prices: impact of goods and services tax**

**Teoh Chai Teng et al.**

The introduction of GST is aim to increase the government’s revenue and reduce the fiscal deficit that suffers us for nearly 30 years since 1980 and Malaysia had only facing a budget surplus which is the year of 1992 to 1997. This study surveyed 36 housing developer and an experiences property consultant who comes from Henry Butcher (International Asset Consultant) at Penang, Malaysia so that to identify the
major GST effect on construction capital cost, the impact to the developer and housing property price through difference point of view via questionnaire and interview measure. Argue this impact is significant for the public administrators to make consideration on implementing or changing the rates of GST for the construction industry and also the construction parties so that able to accommodate with the implementation of this tax. Concludes that, building materials and land acquisition are the major construction impact gain from the GST implementation further capital flow turnover is the prior and significant impact that developer facing and subsequently result to an increment on housing property price in which end buyer is the one who suffer the price increment where government is the one who plays an important role in transferring such scenario into a win-win situation and the objectives of this study had been achieved.

The Effects of GST (Goods and Services Tax) on Construction Capital Costs and Housing Property Prices

Rozlin Zainal et al.

Examining the GST effects associated with construction capital costs and its influences towards the housing developers and housing property prices is this study’s primary objective. This study also aims to highlight the developers’ point of view regarding how GST impacts upon them as well as the housing prices of further future proposal of initiatives. The findings are obtained by surveying the opinion of 36 housing developers and an experienced property consultant under the employment of Henry Butcher (International Asset Consultant) in Penang, Malaysia. It was concluded that building materials and land acquisition are the major construction capital costs affected by the GST implementation while capital flow turnover is the post and significant consequence that developers now face which subsequently led to an increment of housing property prices. Ultimately, the end buyers are the ones who bear the brunt of the price increment where the government plays the central role within this scenario.

Building construction before and after GST

Arpit Vyas (April 2018)

Introduction of Goods & Service Tax has made large scale changes in the working pattern of all the sectors of Indian Economy. The Construction Sector, often known as an “unorganized sector” has been hit by it the most as in construction sector, there are large number of activities involved, a big budget is put up initially, knowledge regarding the document management as well as the management of financial aspects is not done as per the required terms. Often there are shortcuts taken to deal with the tax enhancing activities, which is making the construction industry prone to the bad effects of GST on its working and is regularizing the unorganized sector. There are myths that construction sector is facing a slow down due to GST, there is a rise in the cost of materials, machinery as well as man power due to GST, but the actual scenario is being studied by taking an existing building if construction as per the old system of taxation and if the same is constructed as per the GST regime. The difference in the cost is calculated on unit basis to check the effects of GST on Construction Sector.

III OBJECTIVES

➢ To understand the concept of GST
➢ To understand the current scenario of real estate sector in India.
➢ To analyze the possible impact of GST on the Construction Industry
➢ To provide a conceptual framework of GST and its salient features.
➢ To highlight the benefits associated with the implementation of GST
➢ To analyze the effects of GST on different sectors in India.

IV METHODOLOGY

Methodology Adopted on Site

- Documentation of the Quantities.
- Project Planning & Scheduling.
- Rate Analysis of all items of Project.
- Finding Tax Rates & Their Breakup.
- Working Out for Area Statement.
- Documentation of Quantities in BOQ.
- Working out cost of all items.
- Arriving with comparative results.
V. PROBLEM DEFINATION

The present study is done on effects of GST on specific sectors of Indian economy like FMCG, agriculture, Transportation, financial services, pharmaceuticals and textiles etc. The time period for the study is from July 2017 to September 2017.

VI. IMPORTANT CONCEPTS

Impacts of GST on Construction Capital Costs

Building material costs are the major components in construction development costs while GST implementation has been identified to have inflated the construction material prices within a year of implementation. Findings as shown in Table 1 indicate that all building materials set the highest cost increase after GST implementation is not surprising as prior to GST implementation only second schedule materials were being charged of sales and service tax (SST). On the other hand, GST had also led to an increment to the land acquisition cost although supply of land for housing properties is exempted from GST. Hence, the argument of Dato’ Subromaniam Holsay saying that the “biggest cost components” which is land being exempted from GST would lead to cost saving for housing developers is imprecise. Besides, marketing costs has also been raised after GST implementation which may be a result of developers outsourcing marketing agents to help them boost the sales of Moreover, labour cost as indicated at Table 1 does not get a significant GST impact as neither increase nor decrease.

Conceptual framework of GST and its salient features

Goods and service tax is the tax levied by the government with an idea to replace all the indirect taxes and improve the economy of the nation. One of the biggest taxation reform in India. It is one of the simplest, transparent and efficient systems of doing business. Before GST companies and business organizations used to pay number of indirect taxes levied by both central and state government. GST is going to consolidate these multiple taxes into one as One Nation One Tax. As it is going to reduce layers to taxes definitely leads to boosting tax collection. This can also see movement of unorganized sectors to organized sector which will change the business dynamics of industries. Some products like hair oil, soaps and toothpaste, two wheelers are expected to benefit on the grounds of lower tax incidence leading to growth in demand and boosting the margins for the sectors. Infrastructure and real estate, financial services, insurance, telecommunication, paints are going to get affected because of increase in its duty. Increase in duty may leads to increase in cost to absorb the higher tax incidence leading to temporary slowdown in demand.

Salient features of GST

• GST is applicable to whole country including Jammu and Kashmir.
• GST is applicable on “SUPPLY” of goods or services as against the present concept of tax on the manufacture of goods or on sale of goods or on provision of services.
• Based on the principle of destination based consumption taxation as against present principle of origin based taxation
• Centre and state simultaneously are levying the tax on a common base hence it is a Dual GST. GST levied by centre is central GST and that levied by states is state GST.
An integrated GST is levied on interstate supply of goods or services by Centre.

Import of goods or services is treated as interstate supply and subject to IGST.

A common threshold exemption of Rs. 20 Lakhs for both CGST and SGST; Further a person whose aggregate turnover in the preceding financial year is less than 75 lakhs (Rs. 50 Lakhs for special category states like Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura, and Himachal Pradesh) has an option to pay tax under composition scheme which allows to pay tax at concessional rates on the turnover in the state without the benefit of ITC.

Exports are zero rated.

Credit of CGST paid on inputs may be used only for paying CGST on output and credit of SGST/UTGST paid on inputs may be used for paying SGST/UTGST.

Various modes of payment of tax is available to the taxpayer like internet banking, debit/credit card, National Electronic Fund Transfer (NEFT) / Real Time Gross Settlement (RTGS).

Audit of registered persons to be conducted in order to verify compliance with provisions of the Act.

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</tr>
<tr>
<td>3</td>
<td>Bricks</td>
<td>4.03</td>
<td>High</td>
</tr>
<tr>
<td>4</td>
<td>Cement</td>
<td>4.00</td>
<td>High</td>
</tr>
<tr>
<td>5</td>
<td>Roofing Material</td>
<td>4.00</td>
<td>High</td>
</tr>
<tr>
<td>6</td>
<td>Glass</td>
<td>3.97</td>
<td>High</td>
</tr>
<tr>
<td>7</td>
<td>Ready Mix Concrete</td>
<td>3.97</td>
<td>High</td>
</tr>
<tr>
<td>8</td>
<td>Iron/ Steel Reinforcement/Bar</td>
<td>3.90</td>
<td>High</td>
</tr>
</tbody>
</table>

Construction Hard Cost – Labour

<table>
<thead>
<tr>
<th>SR.N O.</th>
<th>CONSTRUCTION COST</th>
<th>MEAN SCORE</th>
<th>FREQUENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bricklayer</td>
<td>3.52</td>
<td>High</td>
</tr>
<tr>
<td>2</td>
<td>Tiller</td>
<td>3.52</td>
<td>High</td>
</tr>
<tr>
<td>3</td>
<td>Roofer</td>
<td>3.52</td>
<td>High</td>
</tr>
<tr>
<td>4</td>
<td>Plumber</td>
<td>3.52</td>
<td>High</td>
</tr>
<tr>
<td>5</td>
<td>Painter</td>
<td>3.52</td>
<td>High</td>
</tr>
<tr>
<td>6</td>
<td>Concretor</td>
<td>3.48</td>
<td>Medium</td>
</tr>
<tr>
<td>7</td>
<td>Steel Barbender</td>
<td>3.45</td>
<td>Medium</td>
</tr>
<tr>
<td>8</td>
<td>Structural Steel Worker</td>
<td>3.42</td>
<td>Medium</td>
</tr>
<tr>
<td>9</td>
<td>Plasterer</td>
<td>3.39</td>
<td>Medium</td>
</tr>
<tr>
<td>10</td>
<td>Carpenter (Formwork)</td>
<td>3.39</td>
<td>Medium</td>
</tr>
<tr>
<td>11</td>
<td>General Labour</td>
<td>3.39</td>
<td>Medium</td>
</tr>
<tr>
<td>12</td>
<td>Carpenter (Joinery)</td>
<td>3.35</td>
<td>Medium</td>
</tr>
</tbody>
</table>

Construction Hard Cost – Building Materials

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>CONSTRUCTION COST</th>
<th>MEAN SCORE</th>
<th>FREQUENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Land Acquisition</td>
<td>3.74</td>
<td>High</td>
</tr>
<tr>
<td>2</td>
<td>Title Insurance</td>
<td>3.58</td>
<td>High</td>
</tr>
<tr>
<td>3</td>
<td>Site Demolition</td>
<td>3.52</td>
<td>High</td>
</tr>
<tr>
<td>4</td>
<td>Transfer Taxes</td>
<td>3.52</td>
<td>High</td>
</tr>
<tr>
<td>5</td>
<td>Commission &amp; Fees</td>
<td>3.42</td>
<td>Medium</td>
</tr>
<tr>
<td>6</td>
<td>Feasibility/Survey</td>
<td>3.42</td>
<td>Medium</td>
</tr>
</tbody>
</table>

Construction Hard Cost – Equipment and Machinery
INTERNATIONAL JOURNAL OF ADVANCE SCIENTIFIC RESEARCH AND ENGINEERING TRENDS

SR. NO. | CONSTRUCTION COST | MEAN SCORE | FREQUENCY
--- | --- | --- | ---
1 | Excavator | 3.65 | High
2 | Marble/Granite Polisher | 3.61 | High
3 | Concrete Mixer | 3.61 | High
4 | Concrete Vibrator | 3.58 | High
5 | Mobile Crane | 3.58 | High
6 | Bar Cutter/Bender | 3.55 | High
7 | Power Trowel | 3.55 | High

**Construction Soft Cost**

SR. NO. | CONSTRUCTION COST | MEAN SCORE | FREQUENCY
--- | --- | --- | ---
1 | Marketing Fees | 3.65 | High
2 | Insurance Fee | 3.61 | High
3 | Legal Fees | 3.58 | High
4 | Others | 3.55 | High
5 | Engineering Fees | 3.55 | High
6 | Architectural Fees | 3.55 | High
7 | Loan/Interim Fee | 3.52 | High

**PRE & POST GST**

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Service Tax</th>
<th>VAT</th>
<th>TOTAL</th>
<th>GST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sale of Flats and Units-Under Construction</td>
<td>4.50%</td>
<td>1%</td>
<td>5.50%</td>
<td>18% (1/3 Reduction of Land)</td>
</tr>
<tr>
<td>Joints Development-Owner Area</td>
<td>4.50% to 6%</td>
<td>NIL</td>
<td>4.50% to 6%</td>
<td>18% (1/3 Reduction of Land)</td>
</tr>
<tr>
<td>Rehabilitation of Flats</td>
<td>6%</td>
<td>NIL</td>
<td>6%</td>
<td>18%</td>
</tr>
</tbody>
</table>

**Tax Credits – Implications**

<table>
<thead>
<tr>
<th>Procurement</th>
<th>Pre-GST position</th>
<th>Post-GST position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials</td>
<td>• No Cenvat of excise duty, CVD, etc paid on materials</td>
<td>Full ITC available</td>
</tr>
<tr>
<td></td>
<td>• No VAT credit on materials</td>
<td></td>
</tr>
<tr>
<td>Input Services</td>
<td>Cenvat credit of service tax was available</td>
<td>Full ITC available</td>
</tr>
<tr>
<td>Capital Goods</td>
<td>Cenvat credit of excise was available in two trenches</td>
<td>Full ITC available in the year of receipt</td>
</tr>
</tbody>
</table>

**Acknowledgment**

We express our sincere thanks to PG coordinator S.S Wadalkar, for his continuous support. We also thankful to our Head of Department of Civil Dr. Deepa A. Joshi, for support.

**References**


[2]. Akshara Mahesh “Impact of GST on Automobile Industry in India” IOSR Journal of Business and Management (IOSR-JBM) e-ISSN: 2278-487X, p-ISSN: 2319-7668

[3]. PP 01-03 www.iosrjournals.org


[5]. Niraj Dhar Dubey “An Enquiry into the Effect of GST on Real Estate Sector of India”

[7]. RozlinZainal “The Effects of GST (Goods and Services Tax) on Construction Capital Costs and Housing Property Prices” ISSN: 2357-1330 Selection and peer-review under responsibility of the Organizing Committee of the conference


