

IMPACT OF DEMONETISATION AND GST ON CONSTRUCTION INDUSTRY

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Abstract - 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 programme 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 demonetisation and GST implementation. The main objective is to find the impact of demonetisation and GST on construction industry in India. To 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.

Key Words: Demonetisation, GST, Questionnaire, SPSS.

I. INTRODUCTION

1.1 General

It is a commonly known fact that the construction 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 underlying reason is the actual value of the property can be undermined to the extent of cash payment and for loan purposes. Demonetisation is the most important and necessary when there is a change of national currency. The old unit of currency replaced with new currency. Demonetisation is the process where government declares the currently running currency notes illegal to be tender after the declaration is made.

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 programme to increase the capability, effectiveness and transparency of tax administration and management.

1.2 Real estate:

The primary sales segment is largely influenced by home finance players, and deals tend to be facilitated in a transparent manner. There will be a minimum impact on office / industrial leasing and transactions business, given that cash components do not play a significant role in such transactions.

1.3 Land sales and leasing

Where land transactions have been happening in the realm of joint ventures, joint development or facilitating corporate divestments, will see very little impact of the demonetization move.

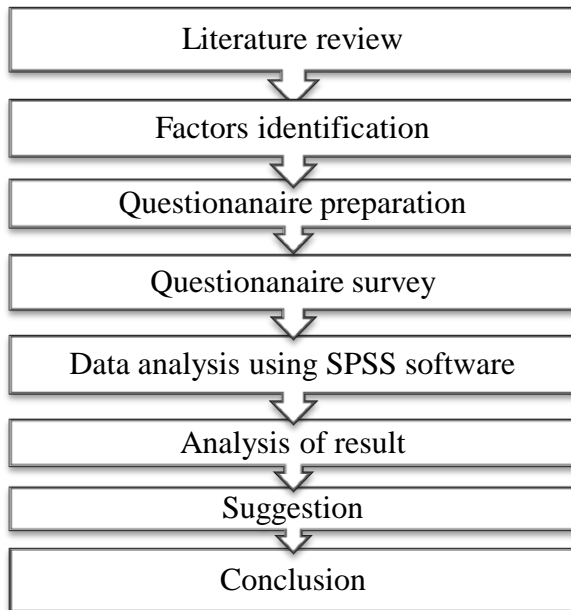
1.4 Time of Supply in GST

The many builders pay taxes on receipt basis (without complying with the point of taxation) in case of service tax i.e. tax is paid only once the monies are received from the customers. However, in the GST regime, tax needs to be paid immediately on earliest of completion of service, rising of invoice or receipt of monies from customers.

1.5 Expected Rate of Tax

The GST council has agreed upon the 4 rate structure for levying tax on various goods and services i.e. 5%, 12%, 18% and 28%. It is expected that the rate of GST that may be applicable on this sector would be mostly 12%. There may not be any further abatement/ composition on this rate. Although this rate will be little on the higher side as compared to current tax rates which is between 6% to 10%, however this impact could largely get reduced due to ease in credits availability.

2. METHODOLOGY



3. IDENTIFICATION OF IMPACT OF DEMONETISATION AND GST FACTORS

The following are 30 of impact factor of demonetisation and GST:

- ✓ Delay in labour payment
- ✓ Increase in online transaction
- ✓ Difficulty in bill payment
- ✓ Delay in procurement of materials
- ✓ Increase in demand of material
- ✓ Delay in completion of work
- ✓ Difficulty in payment through online transaction for unskilled labours
- ✓ Wiping out of small builders
- ✓ Decrease in productivity
- ✓ Improved access to bank loans
- ✓ Fall in prices of buildings
- ✓ Delay in transportation of material
- ✓ Increase in price of building property
- ✓ Difficulty in payment of employees
- ✓ Delay in payment of rent for equipment
- ✓ Increase in construction cost of new residential buildings
- ✓ Inflation of prices of construction materials
- ✓ Increase in property price in urban area
- ✓ Decreases in property price in rural area
- ✓ Major change in gross cost of construction
- ✓ Total cost of construction gets increased
- ✓ Unskilled labour have lost job
- ✓ Decrease in interest cost for house loans
- ✓ Decrease in bank loan interest rates
- ✓ Land acquisition cost gets affected
- ✓ Increase in price for end buyers

- ✓ Rise in price for housing to maintain profit and risk losses
- ✓ Government investment increases
- ✓ Fall in price of paint materials
- ✓ Duplicate billing increases

4. QUESTIONNAIRE PREPARATION

4.1 General

A questionnaire was designed based on the objectives of the study, which are the impacts of demonetisation and GST on construction industry. A questionnaire survey was developed to get the opinion and understanding from the experienced respondents regarding the demonetisation and GST on construction industry.

4.2 Questionnaire outline

The questionnaires are all classified into 2 sections:

- ✓ SECTION A: Company and respondent profile
- ✓ SECTION B: Impacts of demonetisation and GST on construction industry.

Based on the literatures and factors considered, a questionnaire was designed as a measurement tool for impacts. The thirty factors were adapted to measure impacts of demonetisation and GST on construction industry. Also the respondents were asked to rate their level of argument according to 5 point scale (Likerts scale) according to level of contributing.

The questionnaire that is prepared is being attached in Appendix of this report.

4.3 Rating scale

- (1) => Strongly Agree
- (2) => Agree
- (3) => Neutral
- (4) => Disagree
- (5) => Strongly Disagree

5. DATA ANALYSIS

5.1 General

The computer software plays a vital role in analysing the collected data. The software would give an efficient result for our work study. The analysis software is discussed in detail.

5.1.1 Statistical package for social sciences (SPSS)

SPSS is a widely used program for statistical analysis in social science. SPSS can take data from almost any type of file and use them to generate tabulated reports, charts, and plots of distributions and trends, descriptive statistics, and conduct complex statistical analyses.

SPSS trends provide the power and flexibility required by experienced time series analysts, while at the same time being easy enough for those not familiar with time series techniques to use and master quickly. Its power and flexibility can be seen in the wide variety of identification, estimation, forecasting and diagnostic methods available and the opportunity for continuous interaction during the model-building process and the ability to quickly create new series as functions, transformation or components of the observed series for further analysis. Its graphical user interface, comprehensive manual and online helps system ensure easy use.

5.1.2 Importance of SPSS software

Producing descriptive and summary statistics, frequency tables and cross tabulations, for example, a Figure counting the number of visits made to an exhibition by the age group of the visitors.

Modelling different sets of data, for example, regression analysis to determine the strength of the relationship between two or more variables such as staffing levels and workload, this is useful technique for testing efficiency.

Calculating different average, for example weighed averages, geometric means used to average proportions, percentage and index number and trimmed means used to exclude extreme values.

5.2 Analysis by using SPSS (Descriptive Statistics)

| Description | Numbers |
|--|---------|
| Number of questionnaire distributed | 65 |
| Number of responses received (In Personal) | 26 |
| Number of response received (Through online) | 19 |
| Response rate (%) | 69 |

The collected data was analysed by using SPSS software. From this analysis mean value was founded. Based on the obtained mean value the factors are ranked.

6. RESULTS AND DISCUSSION

6.1 Ranking of factors

Questionnaire survey was conducted and factors are analyzed by using SPSS software and they are ranked based on mean. The results are represented by BAR charts.

The inference made from questionnaire survey is discussed in the following table according to the priorities.

Table 6.1 Factors causing impacts of demonetization and GST on construction industry

| Factors | Numbers | Mean |
|--|---------|------|
| Increase in price for end buyers | 26 | 3.77 |
| Total cost of construction gets increased | 26 | 3.73 |
| Increase in construction cost of new residential buildings | 26 | 3.69 |
| Land acquisition cost gets affected | 26 | 3.54 |
| Factors | Numbers | Mean |
| Difficulty in payment through online transaction for unskilled labours | 26 | 3.50 |
| Major change in gross cost of construction | 26 | 3.46 |
| Difficulty in payment of employees | 26 | 3.46 |
| Increase in online transaction | 26 | 3.42 |
| Rise in price for housing to maintain profit and risk losses | 26 | 3.42 |
| Increase in property price in urban area | 26 | 3.38 |
| Decrease in bank loan interest rates | 26 | 3.35 |
| Increase in demand of material | 26 | 3.31 |
| Increase in price of building property | 26 | 3.31 |
| Government investment increases | 26 | 3.23 |
| Improved access to bank loans | 26 | 3.23 |
| Wiping out of small builders | 26 | 3.23 |
| Inflation of prices of construction materials | 26 | 3.19 |
| Unskilled labour have lost job | 26 | 3.19 |
| Delay in procurement of materials | 26 | 3.19 |
| Difficulty in bill payment | 26 | 3.19 |
| Delay in payment of rent for equipment | 26 | 3.00 |
| Decrease in productivity | 26 | 2.96 |
| Duplicate billing increases | 26 | 2.96 |

| | | |
|---|----------------|-------------|
| Delay in labour payment | 26 | 2.96 |
| Fall in prices of buildings | 26 | 2.96 |
| Decrease in interest cost for house loans | 26 | 2.92 |
| Delay in completion of work | 26 | 2.92 |
| Factors | Numbers | Mean |
| Decreases in property price in rural area | 26 | 2.81 |
| Delay in transportation of material | 26 | 2.77 |
| Fall in price of paint materials | 26 | 2.54 |

Table 6.2 Top significant factors causing impacts of demonetization and GST on construction industry (In Personal)

| Factors | Mean value | Rank |
|--|------------|------|
| Increase in price for end buyers | 3.77 | 1 |
| Total cost of construction gets increased | 3.73 | 2 |
| Increase in construction cost of new residential buildings | 3.69 | 3 |
| Land acquisition cost gets affected | 3.54 | 4 |
| Difficulty in payment through online transaction for unskilled labours | 3.50 | 5 |

Table 6.3 Top significant factors causing impacts of demonetization and GST on construction industry (Through online)

| Factors | Percentage | Rank |
|------------------------------------|------------|------|
| Increase in demand of material | 22.22 | 1 |
| Wiping out of small builders | 22.22 | 2 |
| Decrease in productivity | 16.67 | 3 |
| Difficulty in payment of employees | 16.67 | 4 |
| Unskilled labour have lost job | 16.67 | 5 |

6.2 Reliability statistics

Statistical reliability is needed in order to ensure the validity and precision of the statistical analysis. It refers to the ability to reproduce the results again and again as required. This is essential as it builds trust in the statistical analysis and the results obtained.

There are many methods available to scientists to determine and improve the reliability of their experiment. For example, certain surveys might establish their reliability by asking the participants of the study the same or similar questions at two different times under similar conditions.

A reliability analysis can be done to establish that the experiment is reliable. This works only when the errors are uncorrelated. When errors are correlated, it might point to something deeper in the experiment which might be causing a problem. Such assumptions are important to note to fully appreciate the utility of statistical tools.

Cronbach's alpha is the most common measure of internal consistency ("reliability"). It is most commonly used when you have multiple Likert questions in a survey/questionnaire that form a scale and you wish to determine if the scale is reliable.

Cronbach's alpha will generally increase as the inter correlations among test items increase, and is thus known as an internal consistency estimate of reliability of test scores.

Because inter correlations among test items are maximized when all items measure the same construct, Cronbach's alpha is widely believed to indirectly indicate the degree to which a set of items measures a single uni-dimensional latent construct.

It is easy to show, however, that tests with the same test length and variance, but different underlying factorial structures can result in the same values of Cronbach's alpha.

Alpha treats any covariance among items as true-score variance, even if items covariance for spurious reasons.

A commonly accepted rule for describing internal consistency using Cronbach's alpha is as follows however, a greater number of items in the test can artificially inflate the value of alpha and a sample with a narrow range can deflate it, so this rule should be used with caution.

Table 6.4 Cronbach Alpha Consistency

| Cronbach's alpha | Internal consistency |
|-------------------------|---------------------------------|
| $\alpha \geq 0.9$ | Excellent (High-Stakes testing) |
| $0.7 \leq \alpha < 0.9$ | Good (Low-Stakes testing) |
| $0.6 \leq \alpha < 0.7$ | Acceptable |
| $0.5 \leq \alpha < 0.6$ | Poor |
| $\alpha < 0.5$ | Unacceptable |

Table 7.4 Reliability Statistics Output from SPSS

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | No of Items |
|------------------|--|-------------|
| 0.824 (Good) | 0.821 (Good) | 30 |

7. CONCLUSION

A questionnaire based survey was conducted from owners, site engineers and contractors from various companies. Totally 45 responses were collected through online and personal. The analyzed by using SPSS. Based on the results the top factors which cause impact of demonetisation and GST on construction industry, design changes by owner or his agent during construction, ineffective project planning and scheduling, shortage of labour, the top factors which impact of demonetisation and GST on construction industry. Through personal, increase in price for end buyers, total cost of construction gets increased, increase in construction cost of new residential buildings, land acquisition cost gets affected, difficulty in payment through online transaction for unskilled labours with corresponding mean values 3.77,3.73,3.69,3.54 and 3.50 respectively. Through online increase in demand of material, wiping out of small builders, decrease in productivity, difficulty in payment of employees, unskilled labour have lost job corresponding percentage value 22.22,22.22,16.67,16.67 and 16.67 respectively.

8. SUGGESTIONS

The following suggestion helps in avoiding impact of demonetisation and GST on construction industry and it is based on the literatures and respondents feedbacks. The suggestions are made for the top factors causing delay in construction of demonetisation and GST on construction industry.

8.1 Suggestions for impact of demonetisation in construction industry

The government could consider a few ways to help the sector and itself, with a focus on

1. Encouraging the developer to sell finished stock which is piled up in apartments, plots of developed layouts of residential property. A 'buyers' and 'sellers' tax on the cash component would encourage transactions in unsold stock without a substantial drop in prices.
2. Resale or subsequent sale of property would be encouraged. This would provide some liquidity to individuals and traders in realty. Positives of this are a more active realty market and taxes raised by the government.
3. Buyers and sellers should be allowed to do cash transaction within decent margin spreads, say 20 to- 30% over and above the guidance value. And the system display transparency in transactions.
4. A 'buyers' and 'sellers' tax on the cash component could have the corollary of allowing cash transactions for a margin, say about 15% above

the guidance value. This is less than registration and stamp duty value.

5. The cash tax would encourage ordinary "clean" people to overcome current challenges without jeopardizing their ethics, positive intentions and industry.

8.2 Suggestions for GST impact of demonetisation in construction industry

Transferring all the cost increment to the end buyers is the priority decision among all of the developers. However such a measure will result in an increment of the housing property prices and thus is inadvisable. The initiative of using in-house sources which is recommended by MCT Executive Director is not an effective solution to soften the GST impact either as professional soft costs are just a small portion in a project. However, such small portioned savings can help an organization to allocate their resources onto other operational fields. On the other hand, promotions such as giving discounts between 5-10% for those buyers who can pay their installments within a single payment is necessary in order to push up sales rate although developers will still sustain some losses. Additionally, the late claiming issues can be overcome if an organisation establishes a GST specialist department to handle all GST related issues. Although investment in a new department may be costly initially, however it can provide a positive return in the long run. The federal government needs to improve itself and cooperate with the developers to ensure that all related can benefit from this tax implementation.

9. REFERENCES

- [1] K. Veerakumar, "A Study on People Impact on Demonetization", International Journal of Interdisciplinary Research in Arts and Humanities, Volume 2, Issue 1, Page Number 9-12, 2017
- [2] Rozlin Zainal, Teoh Chai Teng, Sulzakimin Mohamed "Construction Costs and Housing Prices: Impact of Goods and Services Tax" International Journal of Economics and Financial Issues, 2016, 6(S7) 16-20.
- [3] Yalamanchili Azith "GST Impact On Housing And Construction Industry" e-ISSN: 2348-6848 p-ISSN: 2348-795X Volume 04 Issue 10 September 2017
- [4] S Radhakrishnan, Dr K G Selvan, Dr S Senthil Kumar "Impact of Demonetisation on Construction Industry" SSRG International Journal of Economics and Management Studies (SSRG-IJEMS) - volume4 issue1 January 2017.

- [5] Prof .Sandeep Kaur “Demonetization and Its Impacts in India” p-ISSN: 2348-6848 e-ISSN: 2348-795X Volume 03 Issue 17 November 2016.
- [6] Dr.K.Rajini ,Mrs. Shanthini. B Demonetization: A Game Changer from Black Economy to Digital Economy 11 | Page “ Impact of Demonetization – A Concetual Framework” IOSR Journal Of Humanities And Social Science (IOSR-JHSS) e-ISSN: 2279-0837, p-ISSN: 2279-0845. PP 11-14 (2016).
- [7] C.A. Sandesh Mundra “GST and Construction Sector (Based on Model GST Law released in June, 2016)”.

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