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Editorial Board:

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Dr. Kedar Bhide
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All correspondence must be addressed to:

The Editor in Chief,
SVKM's Narsee Monjee College of Commerce and Economics (Autonomous),
JVPD scheme, Vile Parle (W), Mumbai 400 056.
Tel.: 022- 4233 8000 / 4200 8001
E-mail: Pricipal@nmcollege.in
Website: www.nmcollege.in

ENVISAGE

Students' Research Journal

Editorial

Envisage is an inter-disciplinary students' research journal of N.M College. It is an initiative to give the students an opportunity to develop critical thinking skills and writing skills needed to succeed in academia and the real business world. The articles written by the students have been reviewed by the Research Committee and edited under the guidance of faculty mentors. We believe that enhancing exposure to academic research, through the development of analytical appraisal skills in the peer review process, will enrich the conventional academic curriculum. The Research Fair and Epsilon facilitate to enhance their presentation skills as well.

The objectives of this research journal are as follows:

- To increase students' knowledge and promote their interest in future career research.
- To provide a medium to explore their knowledge related to current affairs and express their views.
- To develop analytical and critical skills and enhance their academic exposure.
- To enrich the academic education through experiencing the research publication process.

The current issue contains research articles on varied topics such as post-merger analysis, surrogate advertising, consumer behaviour in e-commerce boom, perceived returns to education, individual's happiness and their income, impact of ban of Chinese apps in India, thalonomics, Indian brand recognition practices, financial analysis on FMCG sector, cloud computing, analysis of media laws in India, impact of a marketing campaign on the brand image, Indian education system, role of targeted public distribution system during pandemic, motivation of employees during work from home, comparing the prices of gold over years, digital disruption in the Indian financial sector, and role of agriculture in rural development.

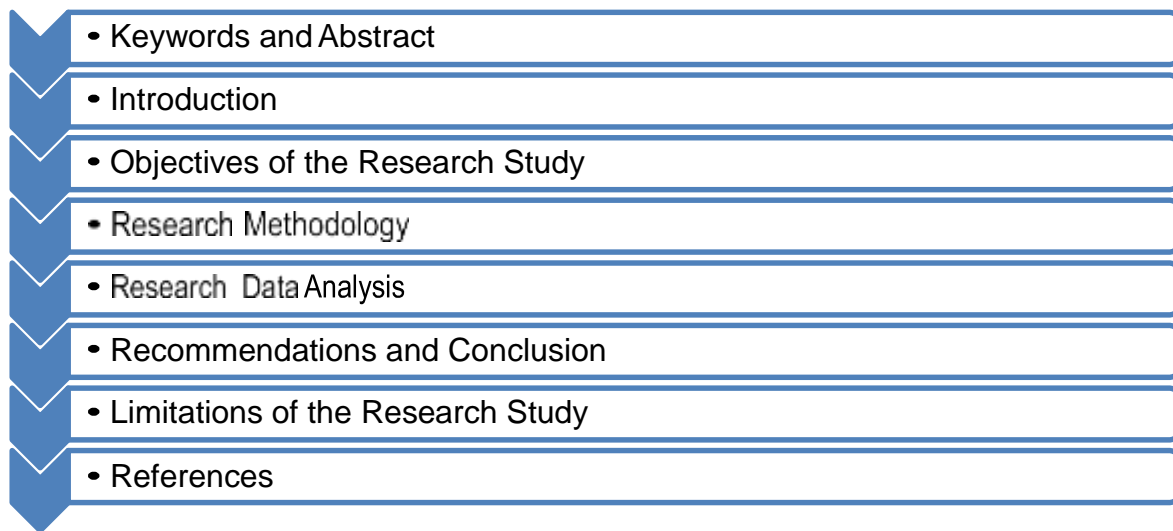
Envisage also provides an opportunity for students to participate in the editorial, review, and publication process. We hope that Envisage will serve as an exciting forum to engage young students in research initiatives in various subjects that nurtures the development and achievements of young social scientists.

GUIDELINES FOR RESEARCHERS

“Envisage” strives to open the doors of research for young students and academicians. It presents to you papers from varied fields in a structured and organised manner.

Manuscript:

The manuscript has the following flow:



Research

It includes research articles that focus on the analysis of economic, political, social, business and other related issues which impact the economy as well as society.

References

Through the text there are references and sources of knowledge which the authors have used. Citing those is important because good research is thought to be based on knowledge and empirical (observed) evidence.

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ENVISAGE
Students' Research Journal

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Post-merger analysis of VI (Vodafone-Idea)*

Author: Simran. M. Karkera

Guide: Dr. Kedar Bhide

Class: SY B.Com

**College: Narsee Monjee College of
Commerce and Economics**

E-mail: Simranmpkarkera@gmail.com

*This research paper won the **First prize** at Research Fair 2020-21: An Intercollegiate Research Paper Presentation Competition held by the Research Committee of SVKM's Narsee Monjee College of Commerce and Economics on 16th April 2021.

Abstract:

The research paper is intended to give an insight into the post-merger situation of Vodafone and Idea and to get an idea about the transition that has taken place in the Telecom industry due to the merger as perceived by the consumer. Survey method was used to get the data for the research and the findings are such that the merger has not brought out the expected results resulting into customer dis-satisfaction and the two networks are struggling to maintain their hold in the markets which they originally dominated.

Keywords: Mergers, Vodaphone, Idea, Telecom, Telecommunication companies merger

Introduction:

The telecommunications industries within the sector of information and communication technology consists of telecommunications/ telephone companies and internet service providers and plays the crucial role in the evolution of mobile communications and the information society.

Traditional telephone calls continue to be the industry's biggest revenue generator, but due to advances in network technology, telecom today is less about voice and increasingly about text (messaging, email) and images (e.g. video streaming). High-speed internet access for computer-based data applications such as broadband information services and interactive entertainment, is pervasive. Digital subscriber line (DSL) is the main broadband telecom technology. The value-added services delivered over mobile networks have led to their fast growth.

India's telecommunication network is the second largest in the world by number of users with 1171.80 million subscribers as on 31 Oct 2020. It has one of the lowest call tariffs in the world due to mega telecom operators and hyper-competition among them. The acquisition deal with Hutchison Telecommunications International Limited's (HTIL) stake in Hutchison Essar Ltd (HEL) paved the way for Vodafone's entry in the Indian market in 2007. Since then, it has earned a name in the telecom industry for providing fast, undisputed and seamless network and is the 2nd largest telecom company in terms of number of subscribers.

Idea cellular established by the Birla communication limited in 1995, known for its quirky adds was the 3rd largest telecom company in terms of number of subscribers. It has undergone a series of mergers and joint ventures with Grasim Industries, ATandT Corporation and Tata Group.

Owing to the tough competition brought out by Jio, Vodafone and Idea decided to merge in order to maintain their dominance in the Indian telecom sector. The move has not only created a telecom giant with the highest customer base but also given rise to more mergers in the sector. The merger of Vodafone and idea is the world's largest merger of the telecom industry.

Scope of research:

The focus of the research is to study the impacts of the merger on the telecom company in terms of financial data and it also studies the problems of the customer's post-merger. It tries to analyse the perception of customers regarding the changes in the services post-merger.

Aims and objectives of the research:

- To study the pros and cons of a merger
- To understand the views of the customers regarding the merger.
- To analyse the age-specific response of customers to the merger.
- To analyse area-specific response of customers.
- To find out the best service provider in telecom services as perceived by the customers.
- To compare the pre and post-merger results of the company.

Methodology used:

Hypothesis:

- i) H0: There is no significant difference between the opinion of customers about quality of services provided by Vodafone and Idea before and after merger.
H1: There is a significant difference between the opinion of customers about quality of services provided by Vodafone and Idea before and after merger.
- ii) H0: There is no significant difference between financial status of Vodafone and Idea in pre and post-merger of VI.
H1: There is a difference between financial status of Vodafone and Idea in pre and post-merger of VI.

Quality of services is analysed based on the following parameters:

1. Voice quality.
2. Data speed.
3. Network suitability for 4g handset.
4. Uninterrupted services.
5. Tarrif plans.
6. Complaints resolving.

1. Data collection technique:

- i) **Primary data:** Survey method.
- ii) **Secondary data:** Financial reports available on official website of Vodafone-Idea.
- 2. Sample size:** 150 (54-female, 46-male)
- 3. Sample technique:** Convenient sampling.
- 4. Period covered:** 2015-2020.
- 5. Data analysis techniques:** Descriptive statistic techniques involving percentage, ratio, mean.

Data analysis and interpretation:

Question 1: The respondents were asked whether they have experienced any changes in the service post-merger. The below mentioned quality parameters were used to assess whether the customers feel that the services have improved, remained the same or deteriorated.

(Analysis is done after the tabulation of data age wise and area wise.)

Quality parameters:

- 1. Voice quality.
- 2. Data speed.
- 3. Network suitability for 4g handset.
- 4. Uninterrupted services.
- 5. Tarrif plans.
- 6. Complaints resolving.

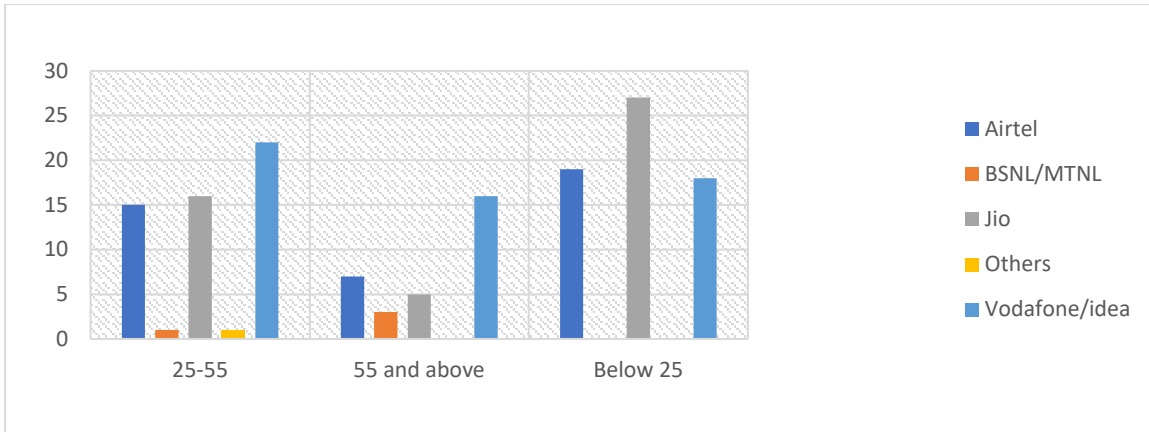
Demographic information:

Age\Area	Rural.	Semi-urban.	Urban.	(Blank)	Grand Total
25-55	3	8	43	1	55
55 and above	1	3	27		31
Below 25		15	49		64
Grand Total	4	26	119	1	150

There are 55 respondents from first age wise group of 25-55 (working class), 31 from 55 and above (Retired/pensioners) and 64 from below 25 (students/fresher's) age group. There are 4 respondents residing in Rural area, 26 in Semi-urban and 119 from Urban area. (One person chose not to disclose their area of residence).

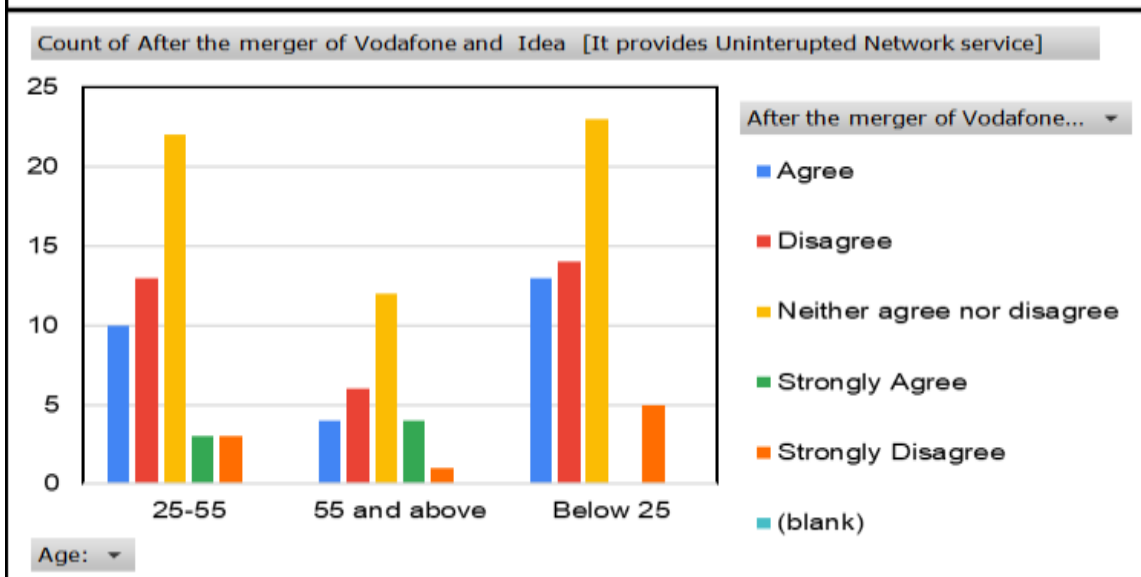
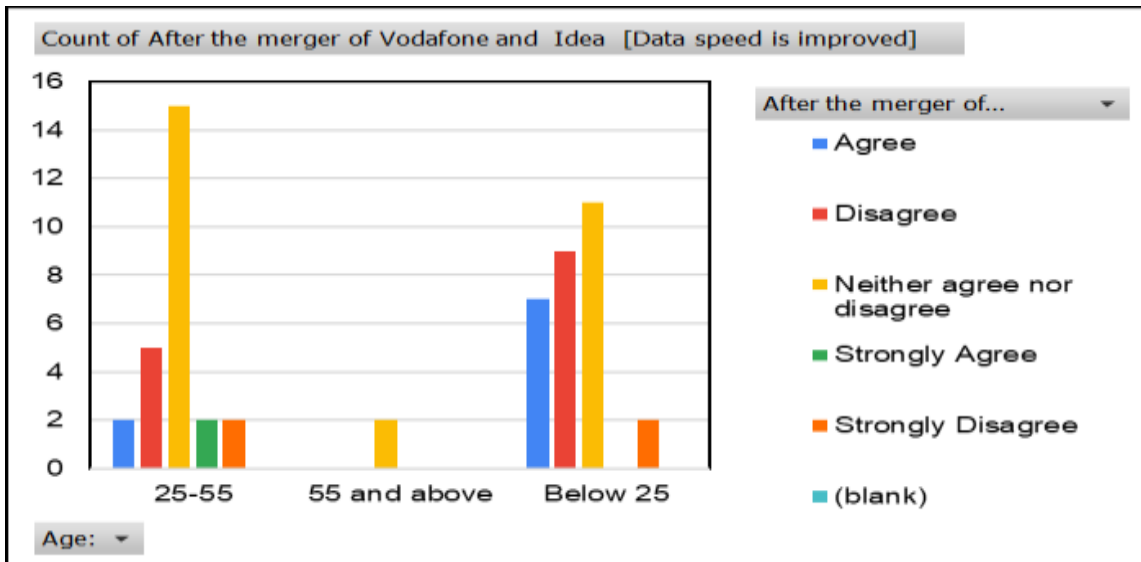
A) Age specific analysis:

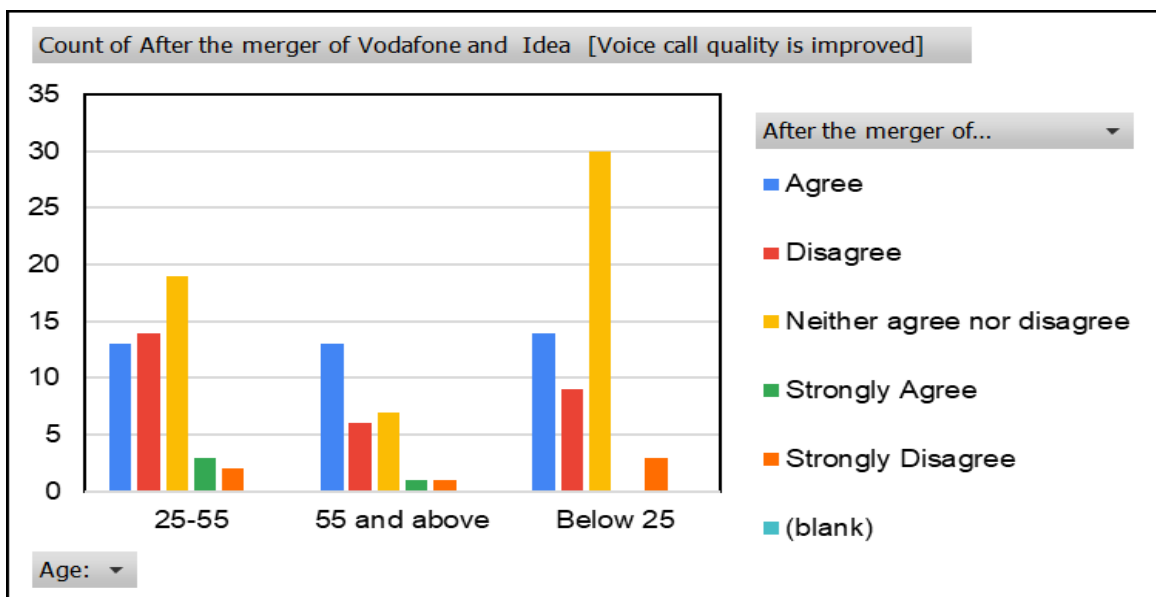
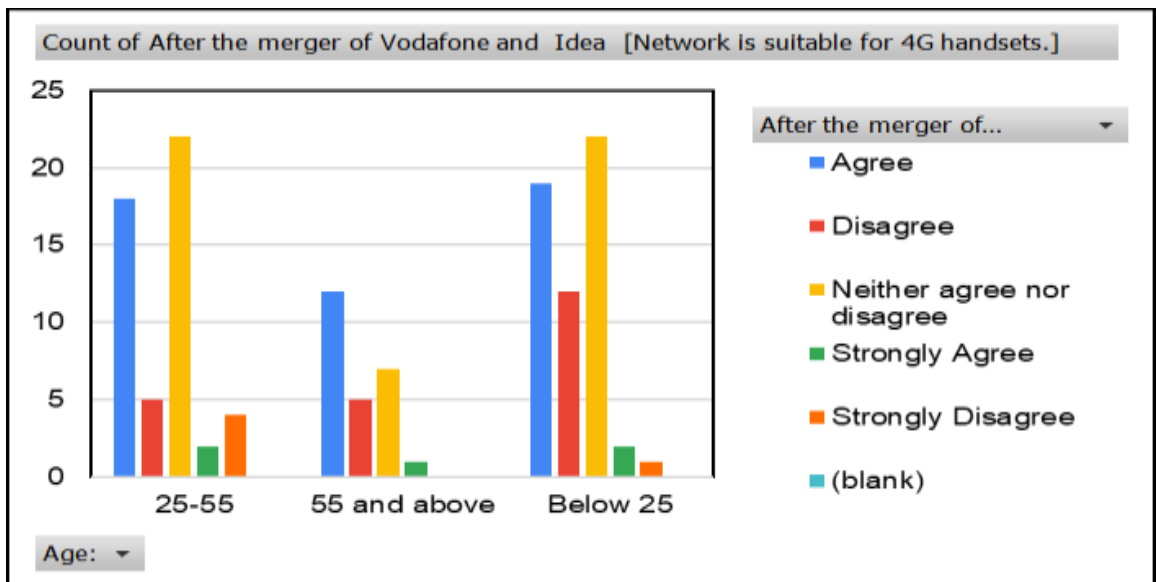
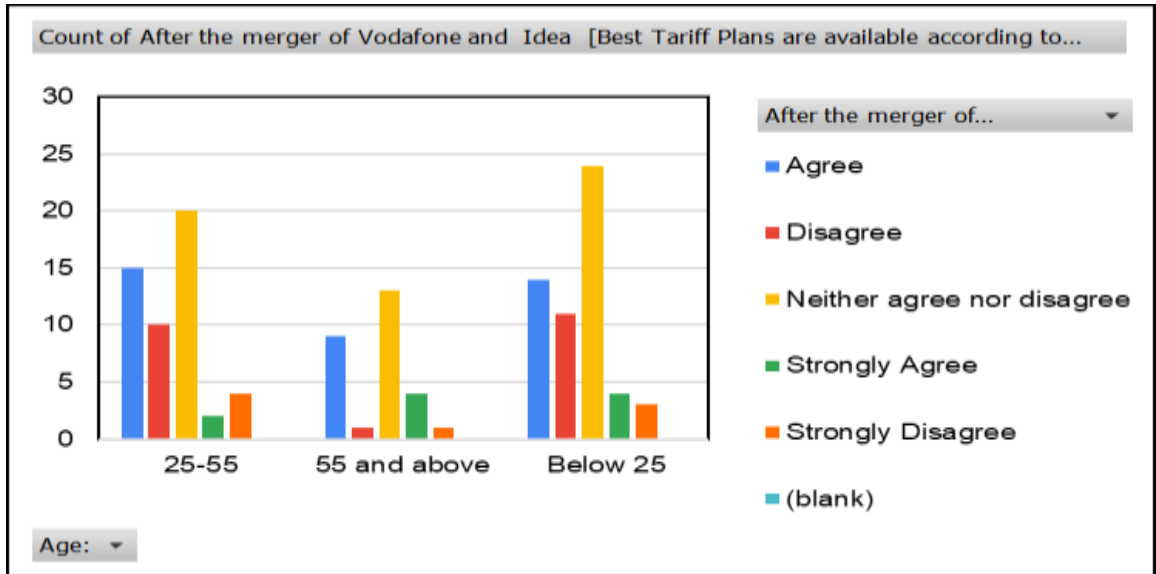
- i) Service provider:

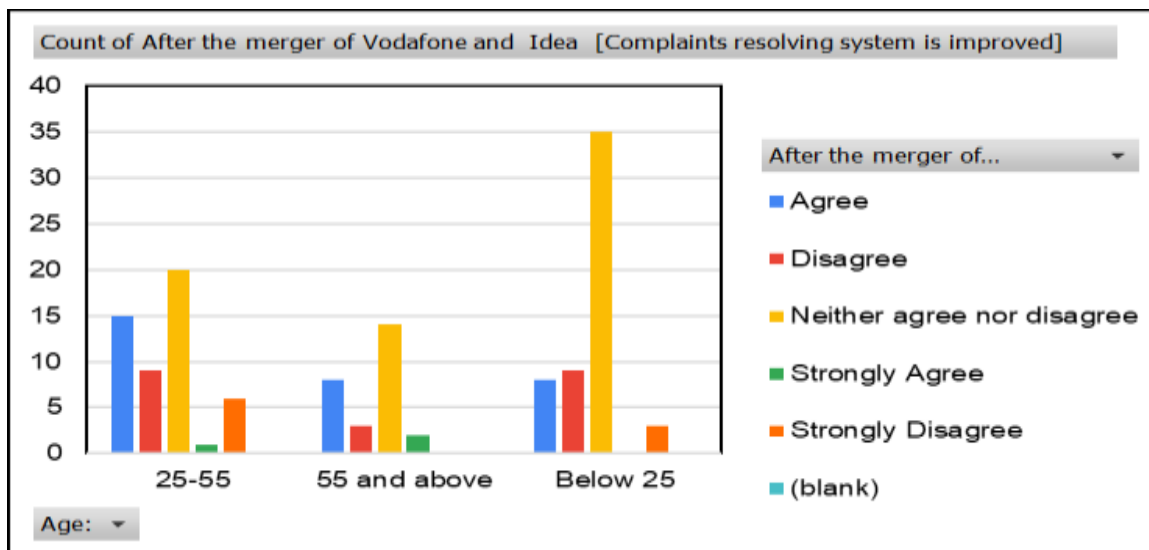


Majority in the below 25 age group use Jio (27 out of 64) followed by Airtel (19 out of 64). In the remaining two age groups, Vodafone/idea users are in majority i.e. 22 out of 55 use VI in 25-55 group and 16 out of 31 in 55 and above age group.

ii) Pre and post-merger differences:







In this question, respondents were asked to access the changes in their service post-merger based on the 6 parameter mentioned. The following table gives the percentage as to whether the customers feel that the services have improved, deteriorated or remained same post-merger.

1) Data speed			2) 4G Handset			
Agree+ Strongly agree	Neutral	Disagree+ Strongly disagree	Age group	Agree+ Strongly agree	Neutral	Disagree+ Strongly disagree
15.4	57.7	26.9	25-55	39.2	43.1	17.7
0	100	0	Above 55	52	28	20
24.1	37.9	37.9	Below 25	37.5	39.2	23.3

3) Uninterrupted services			4) Best tariff plan (In %)			
Agree+ Strongly agree	Neutral	Disagree+ Strongly disagree	Age group	Agree+ Strongly agree	Neutral	Disagree+ Strongly disagree
25.5	43.1	31.4	25-55	33.3	39.2	27.5
29.63	44.44	25.9	Above 55	46.5	46.4	7.1
23.64	41.82	34.55	Below 25	32.1	42.8	25

5) Complaint resolving: (In %)			6) Voice call quality (in %)			
Agree+ Strongly agree	Neutral	Disagree+ Strongly disagree	Age group	Agree+ Strongly agree	Neutral	Disagree+ Strongly disagree
31.3	39.2	29.5	25-55	31.4	19	31.6
37.0	51.9	11.1	Above 55	50	7	25
14.55	63.64	21.82	Below 25	25	30	21.4

Below 25:

The respondents are of the opinion that there has been no change in the all parameters: Complaint resolving (63.64%), Voice quality (30%), Data speed (37.9%) and tariff plans (42.8%), uninterrupted services (41.82%).

Age 25-55:

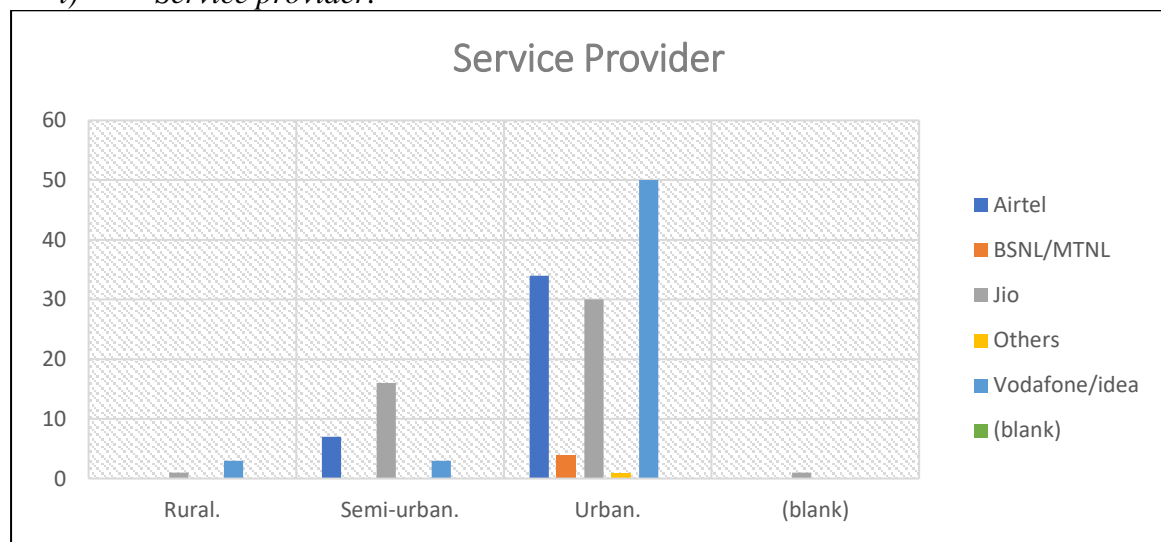
Here too majority of the respondents feel the services have remained the same in following 4 parameters: Data speed (57.7%), complaint resolving (39.2%), tariff plans (39.2%) and uninterrupted services (43.1%). However, 31.6% of the respondents feel that the voice quality has deteriorated post-merger.

55 and above:

In 3 parameters i.e. data speed (100%), complaint resolving (51.9%) and uninterrupted network (44.44%), respondents feel there has been no change. Respondents feel that services have improved in 2 parameters i.e. Voice quality (50%) and tariff plans (46.5%)

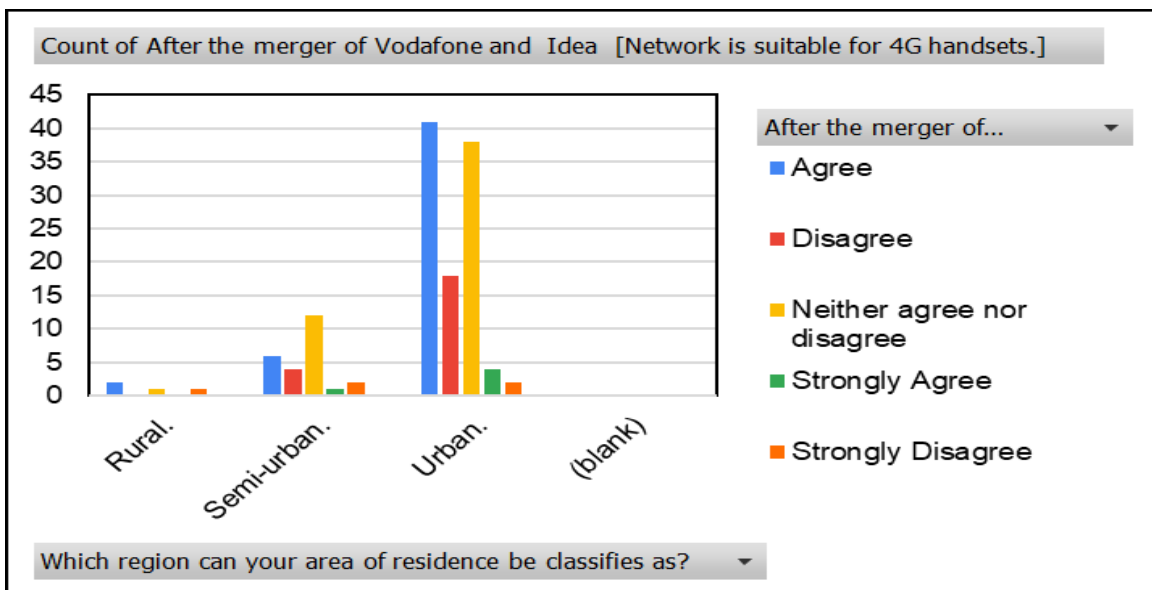
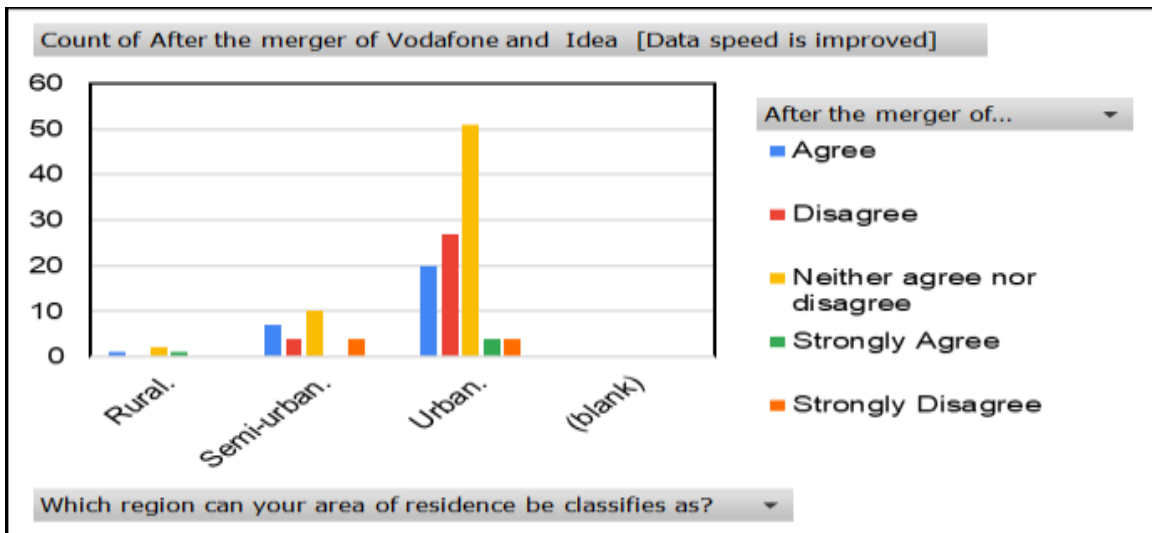
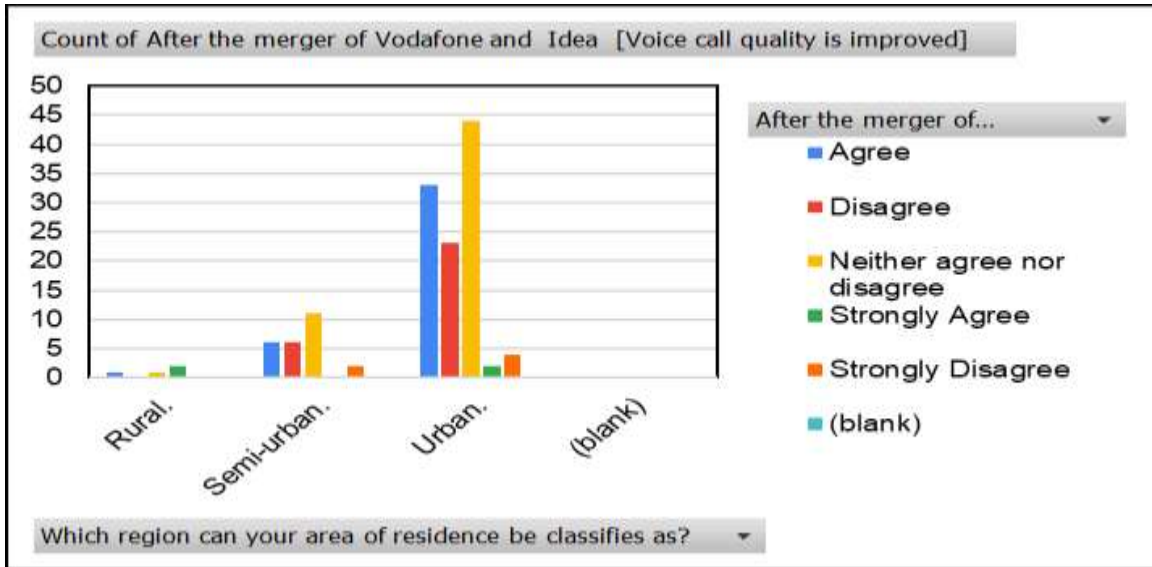
B) Area specific:

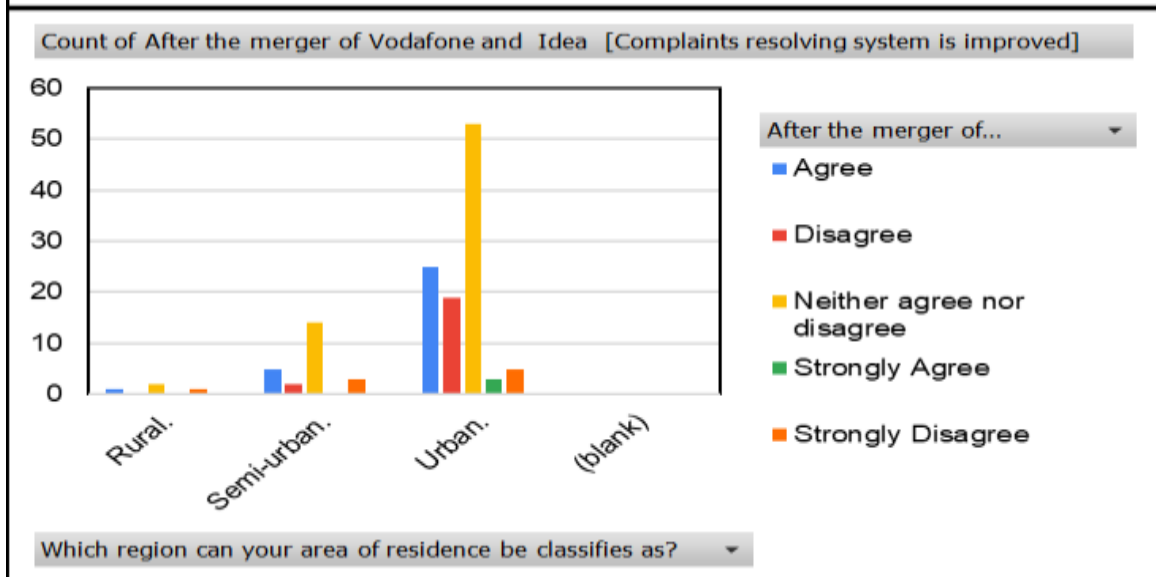
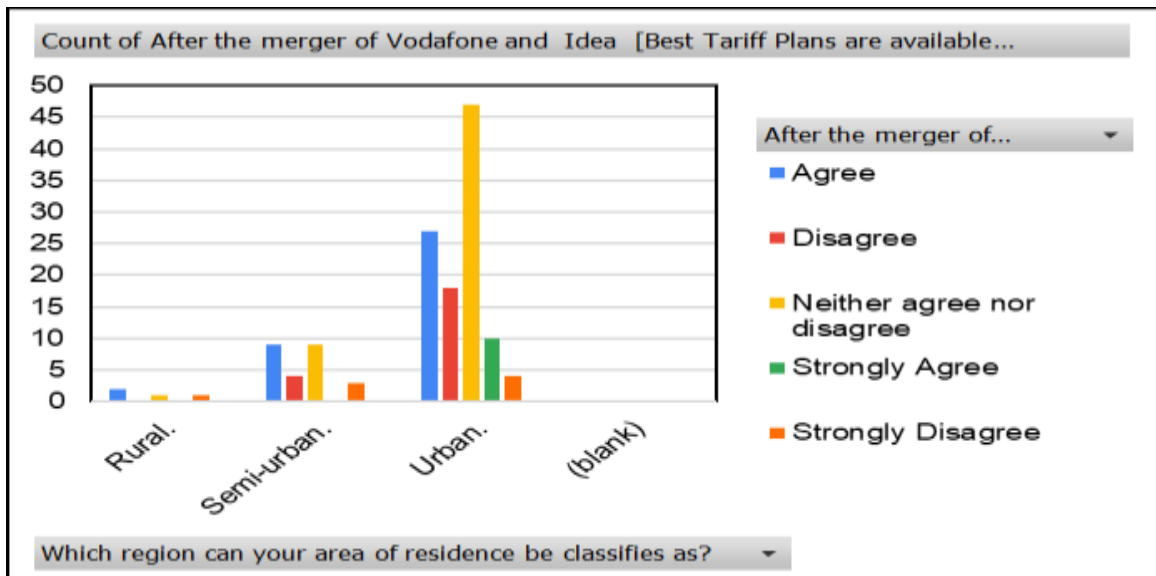
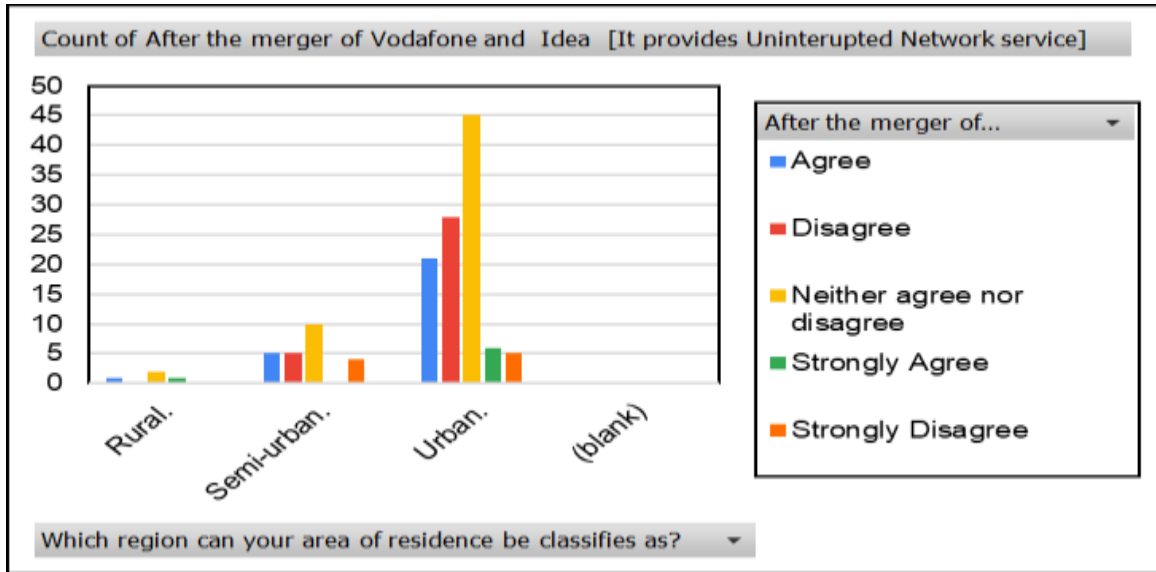
i) Service provider:



Majority of the respondents in rural and urban area use VI (3 out of 4 and 50 out of 119 respectively) while Jio is more prevalent in semi-urban areas (16 out of 26).

ii) Pre and post-merger differences:





In this question, respondents were asked to access the changes in their service post-merger based on the 6 parameter mentioned. The following table gives the percentage as to whether the customers feel that the services have improved, deteriorated or remained same post-merger.

1)Voice quality (in %)				2) Data speed (In %)		
Agree+ Strongly agree	Neutral	Disagree+ Strongly	Area	Agree+ Strongly agree	Neutral	Disagree+ Strongly
75	25	0	Rural	50	50	0
24	44	32	Semi-Urban	28	40	32
33	41.5	25.5	Urban	22.6	48.1	29.3

3)4G Handset				4) Uninterrupted services		
Agree+ Strongly agree	Neutral	Disagree+ Strongly	Area	Agree+ Strongly agree	Neutral	Disagree+ Strongly
50	25	25	Rural	50	50	0
28	48	24	Semi-urban	20.8	41.7	37.5
43.7	36.92	19.4	Urban	25.7	42.8	31.5

5)Tariff plans: (in %)				6) Complaint resolving (in %)		
Agree+ Strongly agree	Neutral	Disagree+ Strongly	Area	Agree+ Strongly agree	Neutral	Disagree+ Strongly
50	25	25	Rural	25	50	25
36	36	28	Semi-urban	20.8	58.4	20.8
34.9	44.3	20.8	Urban	26.7	50.5	22.8

Rural:

75% of the respondents strongly agree to the point that voice quality has improved. In all parameters except tariff plans, 50% of the respondents feel the services have improved. 50% are of the opinion that tariff plans are not pocket-friendly.

Semi-urban:

Here, majority of the respondents in all parameters responded saying “Neither agree nor disagree” (more than 40% in all parameter). Looking at the second trend, respondents feel the complaint resolving (20.8%), tariff deals (36%) have improved. The respondents feel the services deteriorated in flowing parameter: uninterrupted services (37.5%), data speed (32%), Voice quality (32%).

Urban:

Majority of the respondents find no change in the services post-merger in the following parameter: voice quality (41.5%), network, data speed (48.1%), tariff plans (44.3%) and complaint resolving (50.5%). If we look at the 2nd trend, respondents feel the quality has deteriorated in the 2 parameters of data speed (29.3%) and uninterrupted network (31.5%). The other parameters where improvements have been experienced are: voice quality (33), tariff deals (34.9%), complaint resolving system (26.7%).

C) Question 2: Here keeping the same parameters as in question 1, the respondents were asked to select the best service provider in order to know who is currently being perceived as the best service provider and perhaps in a position to dominate the market now and in future.

Data interpretation:

Sr. No.	Parameter/ Service provider	Jio	Airtel	VI	Others (BSNL/ MTNL+ Tata docomo+ MTS India)	Total
1	Voice quality	61	56	28	5	150
2	Data speed	86	43	19	2	150
3	Network suitability for 4g handset	86	41	23	0	150
4	Uninterrupted services	69	50	28	3	150
5	Tarrif plans	85	32	29	4	150
6	Complaints resolving	58	56	33	3	150

Here, in all parameters, customers feel that Jio and Airtel are perceived as the best service providers.

1. For voice quality, 40.7% feel Jio is the best followed by 37.3% of Airtel. Only 19% of the respondents find VI suitable in terms of voice quality.
2. 57.3% of the respondents feel Jio offers the fastest data while 28.7 % find Airtel data speed good. Only 12.7% are convinced that Vi provides a decent data speed.
3. 57.3% of the respondents are of the opinion that Jio is suitable for a 4g handset followed by 27.3% in favour of Airtel. Here the share of Vi is just 15.3%
4. 46% of the users find Jio services uninterupted with a very close response in favour of Airtel which 33.3%. Only 19% find Vi network uninterupted.
5. 56.7% of the respondents fine Jio plans more pocket friendly followed by 21.3% in favour of Airtel. Here Vi gets only 18.67% respondents in its favour.
6. 38.67% find the complain resolving of Jio satisfactory followed very closely by Airtel (37.3%). 22% of the respondents are satisfied with the complain resolving service of Vi.

Before the merger, Vodafone held the 2nd position while Idea was 3rd . They expected to combine and get to the top but have in fact slipped down to number 3.

Analysis:

- 1) In all the questions, people in all age group have majorly selected the response “Neither agree nor disagree” which points out to the fact that all of them feel no major changes have taken place post-merger and the services are pretty much the same. However, the 2nd trend is the one which really helps us understand the perception. Respondents up-to 55 which comprises of students and working class feel that the service has deteriorated in parameters like voice call, data speed etc. Respondents above 55 feel the services have improved in all parameter. Owing to the current scenario, the first 2 groups rely heavily on data speed to finish their job and hence expect the services to be faster which is apparently not happening in VI so there is some dis-satisfaction among users of these age groups. However, people above 55 which comprises mostly of retired class have few basic expectations from the service for e.g. they may not require high speed data. So they seem to be quite satisfied from the services.
- 2) Rural areas have responded quite positively to the merger as they are finding the services improved. Semi-urban and urban areas see no changes or improvements as such in the services provided. However, in the 2nd trend, respondents in the semi-urban and urban areas find the network, voice quality and data speed deteriorated.
- 3) The last question was the litmus test to access the success of the merger. While majority of the respondents were VI users, the leading network provider in all parameters was Jio, followed by Airtel! (Since majority of the respondents came from the student and working class, we can assume that they are well aware not just about their network but also about the services of other network providers we can analyse the contradiction in following way). This points out to the fact that the current users are also not satisfied with the services of VI and have thus opted for either Jio or Airtel as being the best in all the parameters. The merger has thus failed to improve the market position of the 2 merging companies.

Limitations of study:

Due to pandemic situation, questionnaire is circulated online. it could have been done offline along with scheduling of personal interviews

D) Financial results (secondary data):

In order to analyse the impact of the merger on the companies we essentially need to compare a few important Pre-merger and Post-merger figures.

Ratio	Company	Pre-Merger			Post-Merger		
		2015	2016	2017	2018	2019	2020
Debt-equity ratio	Vodafone	0.74	1.52	2.81	1.86	1.71	10.71
	Idea	1.17	1.72	2.23			
Net profit margin	Vodafone	8.98%	7.39%	2.35%	16.02%	38.13%	163.50%
	Idea	31.90 %	27.30 %	-0.04			
Subscribers (in millions)	Vodafone	183.3	210.5	208.8	387.2	368.3	117.19
	Idea	158	175	190			

These figures when compared with industry's set standard will help us identify whether the merger was successful or not. Starting from one of the most important ratios, i.e.

1. **Debt to equity ratio (Total liabilities/share-holder's equity):** In general, a debt-to-equity ratio is considered to be good if it's between 1 to 1.5 and acceptable up till 2. On observing the figures for the 2 companies, it can be seen that before the merger their debt-to-equity ratio was below 2 which means the companies were in a good financial state. Vodafone however had a higher ratio which improved post the merger. However, in 2020 it shot up to 10.71 indicating that the debts of the company had increased exorbitantly due to excess borrowings and reduction of their assets.
2. **Net profit margin:** In India a net profit margin of 20% is considered as good. From the table, we observe that Idea was in a good position but just before the merger with a margin of more than 20% while it had entered into losses just before the merger while Vodafone had a lower profit margin (below 9%) and had entered the negative quadrant right before the merger. However, the situation instead of improving worsened post-merger.
3. **Subscribers (in millions):** While Vodafone had a higher customer base than Idea, both the companies showed a stable growth in the number of subscribers' year on year. Post-merger they experienced a huge increase in their subscriber base as people expected the firms to perform better. However, due to a series of events like the introduction of the minimum balance scheme by the company, network and bandwidth issues, Jio launching more customer friendly schemes etc. the no of users dropping the service increased drastically. It currently stands at the 4th position in terms of number of subscribers.

Conclusion:

While Vodafone was considered the best network for urban areas, idea had a strong grip in rural and semi-urban markets. The merger of these two was thus expected to generate a network suitable Pan-India and perhaps a new leader in the telecom sector of India! However, the results show that the two networks are losing out on the markets where they once held a dominant position. As seen above, although the rural areas seem to be responding positively to the merger, the other two areas are not finding it up to the mark and hence switching to Jio and Airtel. The group which avails maximum telecom services are the working class and students. Here too Vodafone and Idea seem to be losing their grip as this class is also preferring other networks in all service parameters which is perhaps the reason why the company is seeing huge decline in its subscribers for a very long time now. Thus, there has been a change in the preference of customer's post –merger and the market share is changing in favour of Jio and Airtel. This has also resulted in decreased revenues for the company which is reflecting badly on their financial statements too. To conclude, the merger seems to have failed to achieve its objectives.

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Surrogate Advertising and Its Impact On People Of Mumbai City*

Author: Delzeen Marfatia

Guide: Dr. Ritu Vashisht

Class: SY B.Com

**College: Narsee Monjee College of
Commerce and Economics**

E-mail: delzeen0811@gmail.com

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Abstract:

Surrogate Advertising is a new emerging ethical situation in India. Not many people knew about it in the beginning but as time passed and as the number of Surrogate advertising increased, the awareness too increased. It leads to duplication of brands and creates confusion in the minds of the people. The objective of this paper is to know whether surrogate advertising, is known to people in proper sense and whether it has an impact on the lives of people. For this, 10 questions have been asked to the respondents which will give a clearer view to understand Surrogate advertising and its impact. The problem of Surrogate advertising today is that it has an impact on youngsters more, which can break their bright future in totality.

Keywords: Surrogate Advertising, alcohol, intoxicants, cigarettes.

Introduction:

Merriam Webster defines surrogate as a 'substitute'¹. The products that are banned by the Government of India are indirectly promoted through advertisements which helps the advertisers to increase sales and earn more profit. Alcohol drinks, tobacco, cigarettes and other intoxicants are not projected directly but are masked by other products under the same brand name so that the people can associate it with the banned product's brand name. It uses different medias like TV, Magazines, newspapers, etc. which increases the exposure of these advertisements to the viewers and prospected consumers. These brands are often associated with products like Music CD's, soda, fruit juice, bottled water, etc. This form of advertising reminds the consumers about the banned products and indirectly influences the mindset of the consumers to buy these products. This helps the marketers to earn profit but it is harmful for the consumers who consumes these products. Hence, it is one of the emerging ethical issues in India. Celebrity endorsements are also seen on a large scale in these advertisements. Celebrities like Ajay Devgan, Saif Ali Khan, Pulkit Samrat, Badshah, etc. are seen promoting banned products in an indirect manner. **Bagpiper** was one of the earliest brands that took to advertise their products indirectly through surrogate advertising.

¹ <https://www.merriam-webster.com/dictionary/surrogate>

The brand's slogan "Khoob jamega rang jab mil bhaitenge teen yaar. Aap, main aur Bagpiper" was one of the famous slogans of 1993. This brand also endorsed celebrities like Dharmendra, Jackie Shroff, etc. to feature in their 'soda' campaigns. That's when other prohibited product brands started to use surrogate advertising to promote their product. That's when it all started. The **evolution** of surrogate advertising was seen in Britain where women protested to put a ban on alcohol. The marketers and the producers of alcohol did not know how to increase their sales and so they decided to promote alcohol in an indirect manner and masked it with products like soda, fruit juice, mineral water, music CD's, etc. This was found in India, too. People would get influenced by cigarette, alcohol and tobacco advertisements which led to an increase in smokers and drunkards. Hence, the right measure taken by the government was to ban the advertisements of these products which led to a fall in the number of smokers and drunkards. But, as soon as the marketers witnessed a fall in sale, they started to find new means to promote their products, whether ethical not. That's how surrogate advertisements came into the picture. Promotion of a product with the same brand name as the banned products helped the marketers to increase awareness and to remind the viewers and the consumers about the products which again helped in an increase in sales and profit.

In India, around Rs. 600 – Rs. 800 crores are spent by the marketers behind surrogate advertising annually out of which 70% of these advertisements are broadcasted on TV. These brands also sponsors events, merges with other companies, expand their business, etc. People do get influenced by these advertisements and they buy these intoxicants for consumption. So, it can be said that the money spent on these advertisements by the marketers and the advertisers are spent well as it generates positive results for the marketers. During this pandemic, online delivery of alcohol is permitted in some states of India. This has also helped in boosting up the sales.

Scope and Objectives:

The scope of this research paper is based on Mumbai residents and advertising of Surrogate advertising using different medias. Broadcasting media is the most popular media that is used to promote products indirectly, followed by the internet and the billboards. Surrogate advertising on billboards can be seen in a large number during IPL seasons in India.

The objectives of the research paper are :

1. To know whether people are aware about Surrogate Advertising
2. To know whether it has an impact on the people
3. To see how the marketers are finding new ways to promote their products in the market

Research Methodology:

This study is based on primary data, collected from 322 respondents that resides in Mumbai. They were asked questions on Surrogate Advertising to know what they think about it and whether it has a negative impact on people or not. The tool used in this paper are tables, pie charts and percentage method, which helps to analyze the data properly and easily. There are 162 females (50.3%) and 160 men (49.7%) respondents.

Review of Literature:

Advertisements are considered to be a mean of information about the brands and now it confuses people as Surrogate advertising came into the picture. These advertisements become controversial, having a negative attitude, a negative reaction, falling in sales which leads to

boycotting of goods (Prof. Manjunath G and Mr. Sreekanth P.K, September 2015)

Surrogate Advertising can be an issue which needs to be understood with respect to India's legal and ethical environments on promotion (Seema A Suryawanshi, October 2013)

It is one of the emerging trend in this competitive world and this has an impact on consumer's perception. It creates confusion in the minds of the consumers and due to this, there is a fall in the brand image. (Shivesh Rajpal and Amrita Nayak, April 2015)

Cigarettes and Liquor companies have been among the prime sponsors of sporting events worldwide due to which there are debates on the ban that has been imposed by the government which are called 'hypocrisy'. (Dr. Saswati Gangopadhyay and Mr. Soumya Dutta (June 2015)

Where the government has issued legal rules to ban the advertisements of these intoxicants, the marketers / advertisers are finding new and creative ways to advertise their products (Shashank Vihari, Yash Saxena, Bianca Mascarenhas and Aakash Sharma, 2015 – 2016)

Different factors have been identified that influences the effects of Surrogate advertising in the minds of the viewers. There is also an association between demographic profiles and its impact on Surrogate advertising (D. Ganesan, Umayya Salma Shajahan and R. Kiruthika, December 2019)

Data Analysis and Interpretations:

Table 1 analyses the age of the respondents.

Table 1 - Age

15-19	20-39	40-59	60 and above
74 (23.1%)	68 (21.2%)	116 (36.8%)	64 (19.9%)

Table 2 talks about the educational qualifications of the respondents

Table 2 - Education

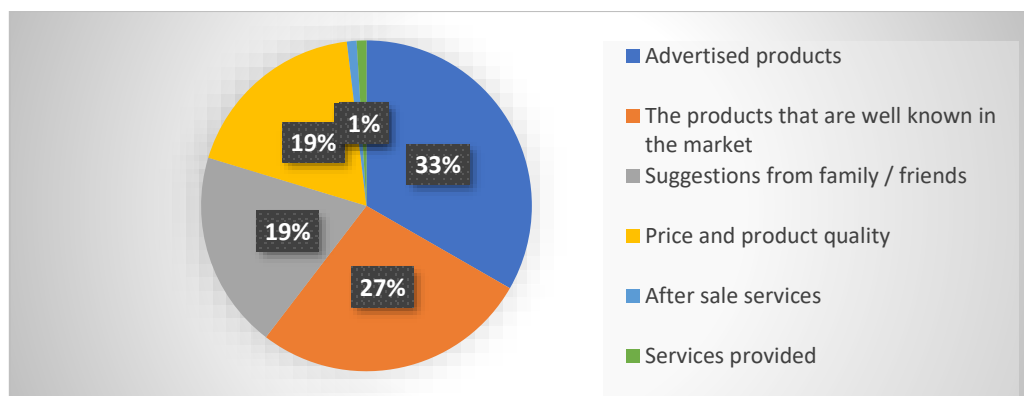
HSC	Graduate	Masters	Others
73 (22.7%)	122 (37.9%)	60 (18.6%)	67 (20.8%)

Table 3 analyses the annual income of the respondents

Table 3 – Annual Income

1 – 5 Lakh	5 – 10 Lakh	10 – 50 Lakh	50 Lakh and above
89 (28.7%)	88 (28.3%)	83 (26.2%)	62 (16.7%)

The respondents were then asked about the elements that influences their buying behavior. The response:



Advertising is selected by most of the respondents (33%), followed by the recognition of the brand (27%). 19% of respondents chose price and quality as well as suggestions from family and friends. After sale services or the services provided is chosen by 1% of the total respondents.

The table below analyses the questions with options ‘yes, no and maybe’ which helps to get a clearer view and helps in understanding the mindset of the respondents.

Questions	Yes	No	Maybe
Do you know what Surrogate Advertising is?	260 (81%)	62(19%)	-

Some of them would relate Surrogate Advertising to Surrogacy, but when we told them that the two concepts are extremely different, they did not know what to say and hence it was concluded that they knew nothing about it. By this analysis, we can say that most of the people are educated, but still there are some of them who are deprived of this privilege.

Questions	Yes	No	Maybe
Do you know it is ethical?	26 (8.1%)	213 (66.4%)	83 (25.8%)

When some of the respondents were asked about it being unethical, they say advertisements are done to give information about products which are safe to use and are not harmful when consumed. But this style of advertising tarnishes the image of advertisements as a whole.

Questions	Yes	No	Maybe
Do you support Surrogate Advertising?	96 (29.6%)	226 (70.4%)	-

When one of the 95 respondents were asked as to why does she support Surrogate Advertising, she said “It is someone’s work and they earn from it. So it does not matter whether it is ethical or not, it should be advertised”. Here the response was shocking but when it is seen in a practical manner, many poor families

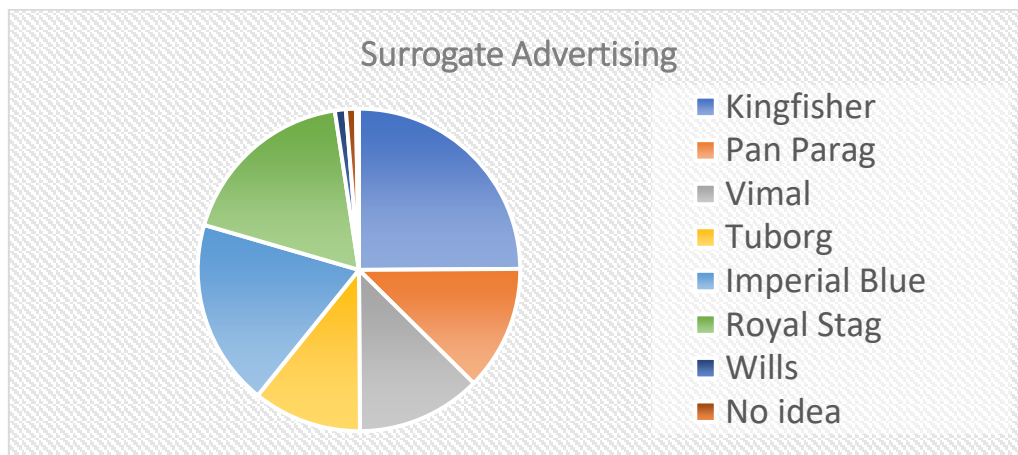
earn through it.

Questions	Yes	No	Maybe
Would you buy a product that encourages Surrogate Advertising?	102 (31.8%)	143 (44.5%)	77 (23.7%)

Most of them disagreed with the statement and said that they wouldn't buy a product which is advertised in an unethical way whereas the second highest response was an affirmative one. According to them, it is advertised to be bought and consumed.

Questions	Yes	No	Maybe
Do you think Surrogate Advertising has an impact on the total sale?	211 (65.4%)	47 (14.6%)	64 (19.9%)

When they were asked why did they agree to the statement, they said “Jo dikhta hai vohi bikta hai” whereas when the other group of respondents were asked why did they disagree to it, they said “It is promoted in an indirect manner, so technically they do not advertise the intoxicants and so there is no point of a growth in sale”.



The last question in the questionnaire was ‘Which of these advertisements are known to you’. 81 respondents chose Kingfisher (24.9%) which was followed by Imperial Blue (that was selected by 60 respondents). 40 respondents each selected Pan Parag and Vimal. Royal Stag was selected by 58 respondents whereas Tuborg was selected by 35 respondents. Wills was not an option already mentioned. The respondents typed their answer it in the ‘Other’ option. Only 4 respondents chose Wills. 3 respondents did not know any of the above brand’s advertisements and did not even know any other brand that performs or advertises their products through surrogate advertising and so they chose the option ‘No Idea’. Only 1 of the total 321 respondents knew all the brands mentioned and also knew how they advertise their product by masking it with the other. Through this

analysis, it can be said that people know what is happening in their surroundings. They are well educated but no action is taken against it.

Some critics are with a view “Why sell these products when you know it is dangerous when consumed” while the affirmative says “ It is one’s own decision whether they wish to consume it or not. If you do not like it, stay away from it. Banning these intoxicants altogether is not a good idea.” The ones that are neutral are says “Advertising these products does not matter. Those who are addicted to it will buy these products; with or without the advertisements.”

Regulatory Measures²:

Since 1995, India has banned the advertisements of tobacco and liquor. This was done after the research by the **Indian Ministry of Health** on products like tobacco and liquor and how they were hazardous to life. Another reason was that after consumption of liquor, the person is of an unstable mind and cannot react like a rational person which can be dangerous for others. Consumption of tobacco can lead to cancer. Also, it makes the person lazy and unmotivated to do anything. Surrogate advertising is the concern of today. The Indian administration is finding ways to reduce the use of this type of advertisements. Most of the advertisements are under the law borders which protects the rights of the viewers. Use of filmable ideas are used to portray products indirectly. Before 1995, the Cigarettes (Regulation of Production, Supply and Distribution) Act 1975 made it mandatory to display a statutory health warning on all the packages and advertisements as it has a strong influence on consumer’s mind. In movies, too, it is seen that the health warning is displayed whenever the actor or any other cast member is shown smoking in the movie or the TV show. The Food Safety and Standards (Alcohol Beverages) Regulations, 2018 has also made it mandatory for the manufacturers of alcohol to carry a statutory warning which says “Consumption of alcohol is injurious to health”. The Ministry of Information and Broadcasting (I and B) through Cable Television Network (Regulations) Act 1995 and the Cable Television Network Rules, 1994 regulates the advertisements which are to be broadcasted on televisions and also issues guidelines which are to be followed by all the advertisers and the advertising agencies. Rule 7 (2) specifically enlists the advertisements that the cable operators would not be allowed to broadcast. It prohibits advertisements that promotes production, sale or consumption of cigarettes, tobacco products, liquor or other intoxicants directly or indirectly. But, a provision to the above rule was also inserted on August 9th 2006 which states that advertisements of products that use a brand name or logo similar to that of cigarettes, tobacco, wine, alcohol, liquor or other intoxicants are permitted only when:

- The story board or visual of the advertisement must only depict the product advertised and not the prohibited one in any form or manner.
- It must not make any direct or indirect reference to the prohibited product.
- The advertisement must not contain any nuances / phrases promoting prohibited advertisements.
- It must not use particular colors, layouts or presentation associated with prohibited products.

² <https://www.mondaq.com/india/advertising-marketing-branding/606974/surrogate-advertisements-in-india#:~:text=Surrogate%20advertisements%20are%20used%20to,Blue%20Cassettes%20and%20CDs%20etc.>

- The advertisement must not use situations typical for promotion of prohibited products when advertising other products.

Suggestions and Conclusion:

It is unethical for advertising agencies to promote surrogate advertisements even when they know it is wrong. Few suggestions that can be implemented to stop Surrogate Advertising / to reduce its impact on people are :

1. To make sure that surrogate advertisements are banned in totality.
2. Conducting consumer awareness programs where people are educated about surrogate advertisements and its impact.
3. To provide more power to self-regulatory bodies so that they can stop surrogate advertisements in totality.
4. Awareness through NGO's, word of mouth, newspapers, etc. which can help the consumers to get proper knowledge which helps in making the right decisions.
5. To reduce the production of these intoxicants and to increase the number of taxes implemented on them.
6. To increase fines on advertisers / marketers that are using Surrogate advertising to promote their products

Proper knowledge about things helps one to make the correct decisions. Also, just by mentioning "Smoking is harmful" when an actor is shown smoking in a movie or a TV show is not enough. According to Food Safety and Standards (Prohibition and Restriction on Sales) Regulations 2011, misleading advertisements of these products invite a fine of Rs. 10,00,000. Also, it can be seen that celebrity endorsements are used extensively to promote their products. They should be held responsible for the promotion. They are as guilty as the marketers. The youth of today looks up to these celebrities and cricketers. Young men look up to these cricketers and would wish to be like them one day. The others look up to and adore the actors and try to copy their lifestyle by using the products that are promoted by them. Hence, the youth are the ones that are affected the most in this case. Parents should keep a proper check on what their children are doing and should correct them if things go wrong. Also, these Air Pod covers in shape of a beer bottle, or a cigarette case have been popular these days. Many youngsters have been seen using them and 'flaunting' them in front of others. Is this a new way of these brands to advertise and market their products in today's world? Is this the next form of advertising? Will they start selling their own clothes and apparels with pictures or logos of these intoxicants? Well, time will tell.

One of the limitations of this research paper is that it is limited to Mumbai residents only. If the reach of the respondents were a tad vast, then the statistics would have changed and the data could have been a little more clearer. Also, due to this pandemic, it was not feasible to interview people on a one-on-one basis. It would have been better to interview them and talk to them in person. This is because the body language and the gestures of a person speaks louder than words.

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E-commerce boom in India due to COVID-19: Study of Consumer Behaviour

Author: Danisha Pasaya

Guide: Dr. Vaishali Dawar

Class: M.Com (Banking and Finance) Part-1

**College: Narsee Monjee College of
Commerce and Economics**

E-mail: pasaya.danisha@gmail.com

Abstract:

With the advent of high-speed internet and advanced technology, online trading has increased tremendously. As we entered 2020, we were hit by a global pandemic caused by the coronavirus. Governments started shutting down local markets and restaurants and issued a lockdown to prevent the spread of the virus. Not knowing how long will it take to get vaccinated and returning back to their normal lives, citizens started panic buying. In the fear of coming in contact with the virus and unable to go to the market, individuals began to order goods online. This is when e-commerce hiked in India. This research paper helps to understand the boom of e-commerce by studying the change in the preferences of the consumers.

Keywords: E-commerce, consumer behaviour, life in Covid19, online business

Introduction:

Before September 2016, India was operating on 2G/3G data but after the entrance of Reliance Jio in the market, people now have access to 4G and 5G network speed. The online market has been growing since then but COVID-19 has completely changed the face of trading in India.

Mr. Narendra Modi, the prime minister of India, declared a nationwide lockdown on 24th March 2020 for 21 days and restricted gathering of people which forced the entire market to shut down. Soon the residents of India resorted to online shopping to buy basic necessities such as medical items, kitchen requirements, sanitation and hygiene products. As a situation of emergency was declared and employees were asked to work from home, they started ordering items in larger stock thinking they would go unavailable on the online market in the near future.

Amazon, a leading e-commerce company has reported net sales of 125.56 billion US dollars in the 4th quarter of 2020 as compared to 87.44 billion US dollars sale in 2019 quarter 4.¹ E-commerce has been promoted and preferred by numerous users. This report helps to understand the mindset of the consumers and analyse where the online industry stands right now and its future scope of development.

Scope of research:

The scope of research of this paper is to understand the changes in the e-commerce

business in India due to the pandemic. It focuses on the current preferences of the consumers to further study the growth of online business in the coming years.

Aims and objectives of the research:

The following are the aims and objectives of the research study conducted:

1. To identify the customer satisfaction level with online shopping.
2. To know the preferences of the consumers while buying goods from online websites.
3. To analyse the frequency of online purchases during the pandemic.
4. To understand whether e-commerce has replaced the traditional offline shopping.
5. To compare the variables that cause an increase in the usage of e-commerce and the variables that make individuals reluctant towards it.

Research Methodology and Design:

Research methodology is the specific procedures or techniques used to identify, select, process and analyse information about a topic. It is a systematic way to solve a problem. Research design facilitates as an orderly conduct of research process and acts like a blue print for conducting a formal investigation. It is a logical and systematic outline of research project prepared for directing, guiding and controlling a research work.

Primary research comprises of first-hand data or raw data collected by an individual which has not yet been processed into useful conclusions. It comprises of survey, interviews and experiments. Secondary research, also known as desk research, uses the findings of research papers already published in the past. This study report has used both primary data and secondary data. Findings of other reports are also stated to substantiate the outcomes of the research conducted. Although it has been difficult to use secondary reports as limited number of reports are available on the analysis of e-commerce boom in India due to COVID-19.

The method of sampling is random sampling. The source of collecting the data was through questionnaire method where responses of 367 individuals were collected. The sampling includes students, employees, businessmen/women, home-maker and retired personals residing in India. The population resides across several cities in India such as Mumbai and Kolkata and a few from other states which include Jharkhand and Bihar. The target population for my research are the individuals who have bought goods online amidst the pandemic in the last year.

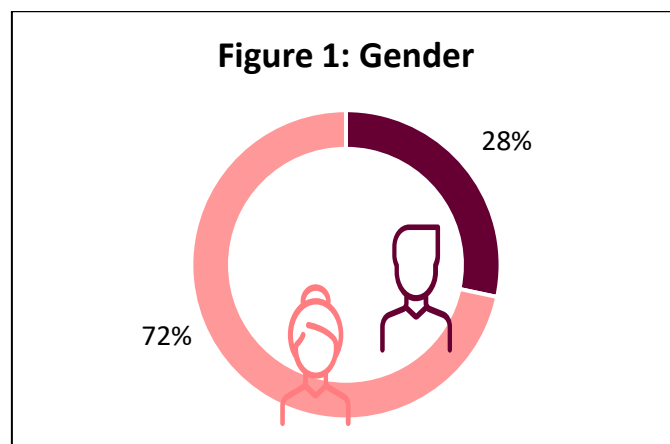
The most important methodological choice researchers make is based on the distinction between qualitative and quantitative data. Qualitative data takes the form of descriptions based on language or images, while quantitative data takes the form of numbers. The study report comprises of various statistical tools and techniques which were used to derive a conclusive outcome. The data has been presented by using various graphical representations.

Data and interpretation:

In the survey conducted, responses were received from 367 individuals mainly from the city of Mumbai and Kolkata. Responses were taken from people who have bought

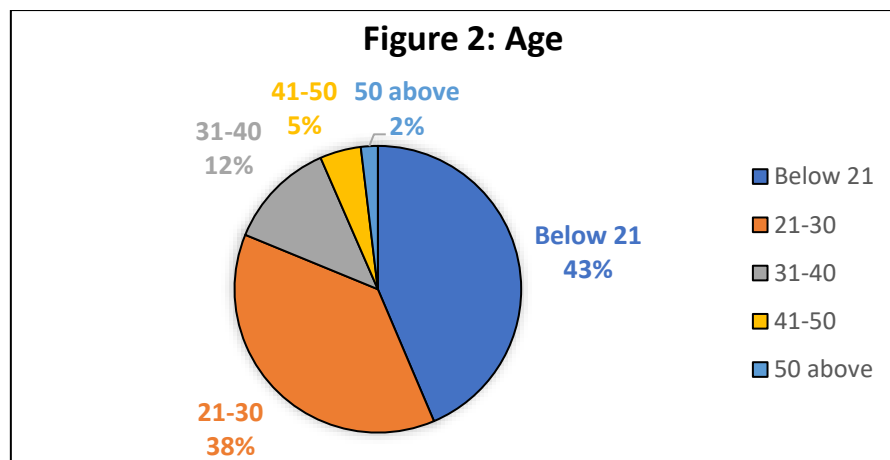
products online during the lockdown. The questionnaire method is useful to understand the customer behaviour and the change towards purchasing of goods through online platform. Total 12 questions were asked which comprised questions relating to the demographics such as the age, gender and occupation. It also covered information about their income levels. The questionnaire is useful in understanding the various preferences of Indian citizens such as whether they would prefer to shop online after COVID, their preferences relating to various online services such as price offered, delivery, after sales services and so on with the help of options such as highly satisfied, satisfied, neutral, unsatisfied and highly unsatisfied. From the study conducted, it can be inferred that the frequency of people shopping via e-commerce websites has increased along with their preferred brand for purchasing various items such as groceries, electronics, online meals, medical products and beauty products.

1. What is your gender?



There are 72%, i.e., 253 females and 28%, i.e., 104 males who have responded with the best of their knowledge to provide clarity in analysing and understanding the hike in e-commerce business in India.

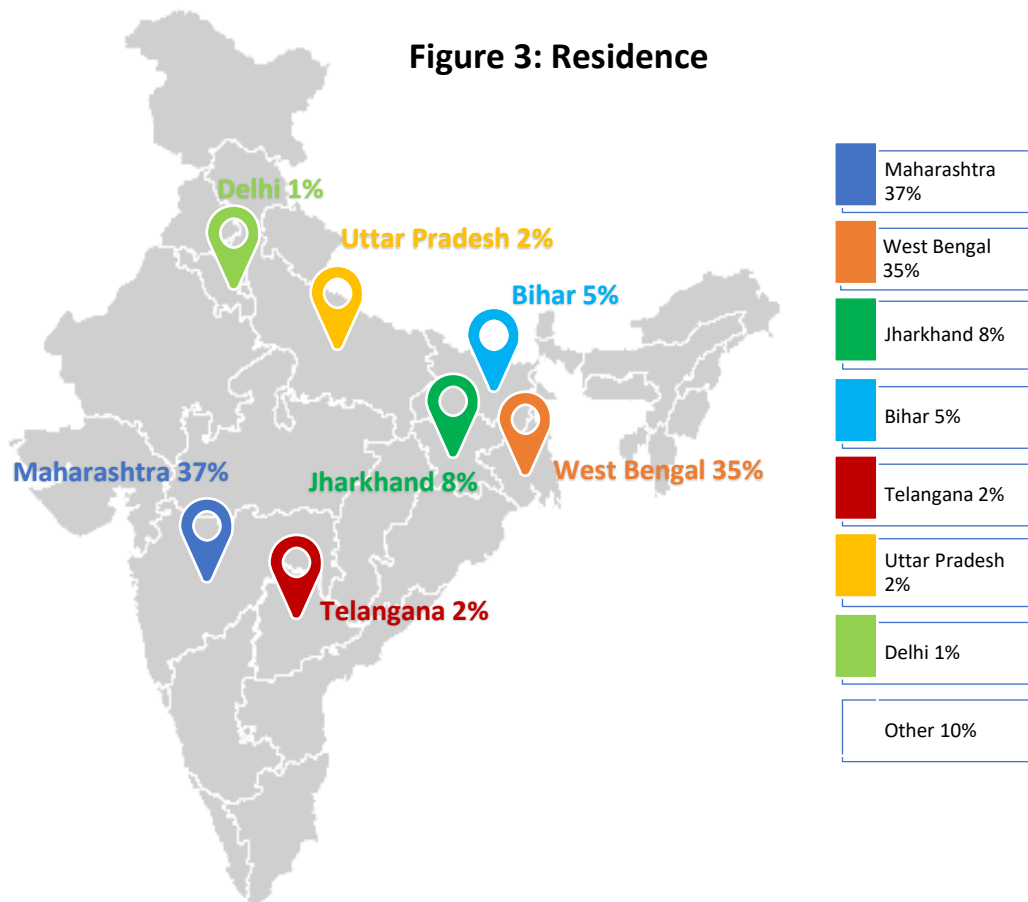
2. What is your age?



From the data in figure 2 it can be concluded that youngsters (43%) and the working class (38%) are more willing to shop online and utilize the benefit of shopping conveniently. This is because young generation is more inclined towards adopting the

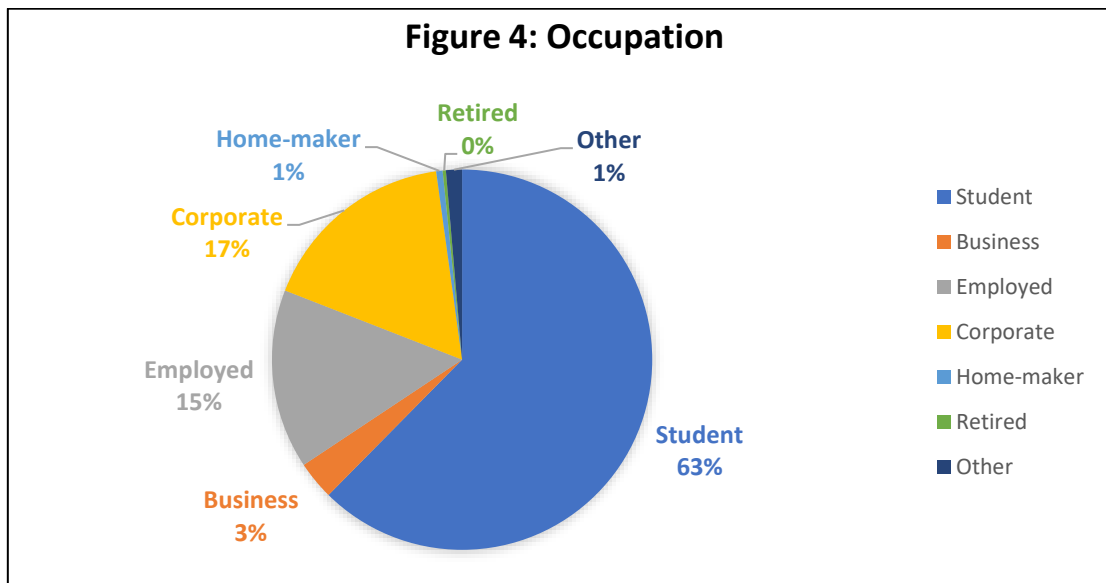
online shopping means rather than resorting to old traditional offline shopping methods. Working class people find it more fitting to shop from the comfort of their homes.

3. In which state are you currently residing in?



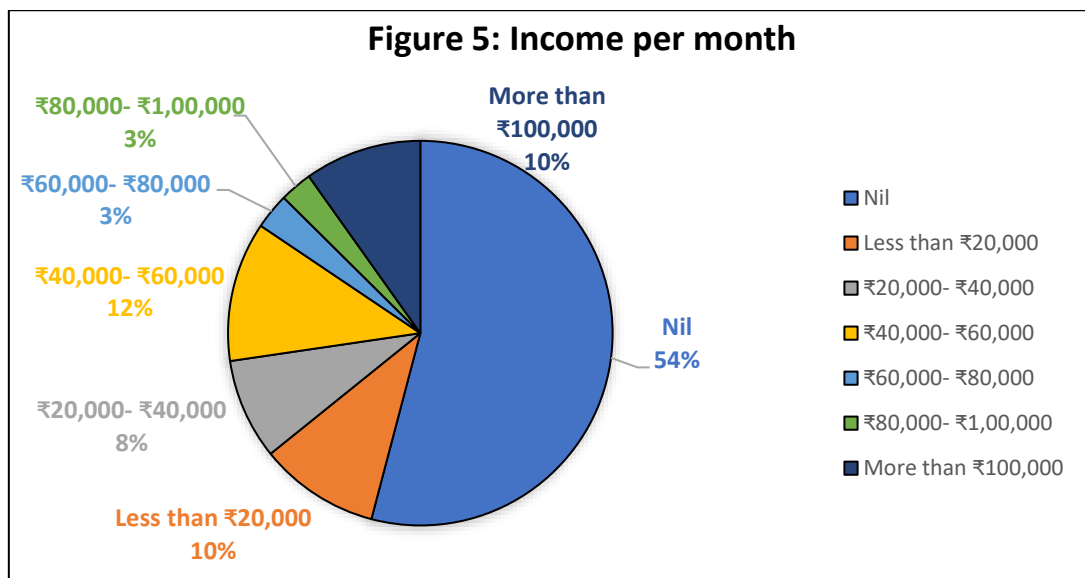
The map in figure 3 shows the percentage of citizens who have participated in the study and are utilizing the benefits of e-commerce all over India. The maximum users are from Maharashtra, 37% and West Bengal, 35%. Mumbai city is the business capital of India and businesses flourish the most in Maharashtra. Shift in the way of conducting business due to the pandemic has also been seen in this state. The number of delivery agents across e-commerce businesses have been estimated to have increased recently to lakhs.² The government of India has taken constructive steps in improving the infrastructure in West Bengal in the past and is currently planning to develop the IT structure as stated in the 2020-2021 budget.³ These measures are taken because the state has great potential to develop and play an important role in promoting the Digital India campaign.

4. What is your occupation?



The pie chart in figure 4 shows different occupations of the respondents where the maximum respondents are students with 229 participants (63%) and next being the corporates, 17% and the employed individuals, 15%. The ratios for students are high because the new generation is more reactive to the changes happening around them. The innovation of new technology is appreciated by them.

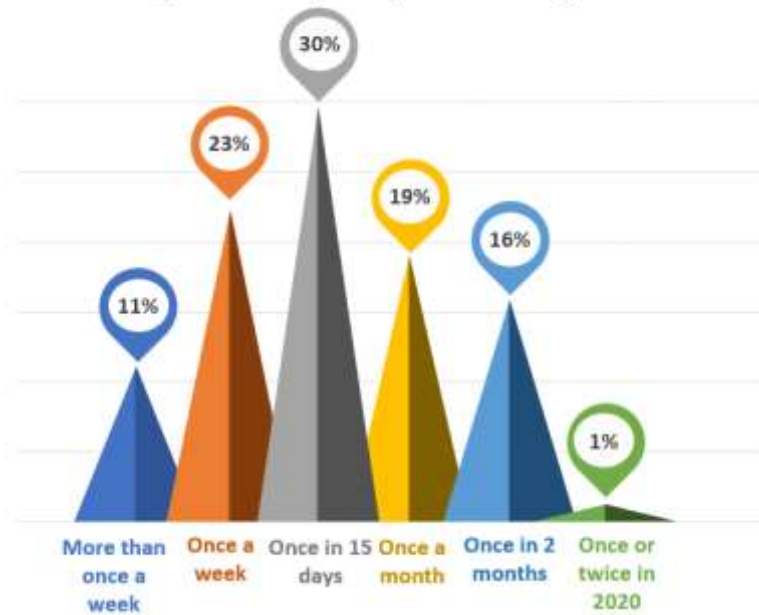
5. What is your income per month?



The pie chart in figure 5 shows the income level of the respondents. Maximum participants (54%) of the research study do not earn any income as they might be pursuing higher studies or might have been unemployed due to lay-offs during the pandemic. According to Statista Research Department, unemployment rate rose to 23.52% in April 2020 and 21.73% in May 2020 due to COVID-19 lockdown in India.⁴

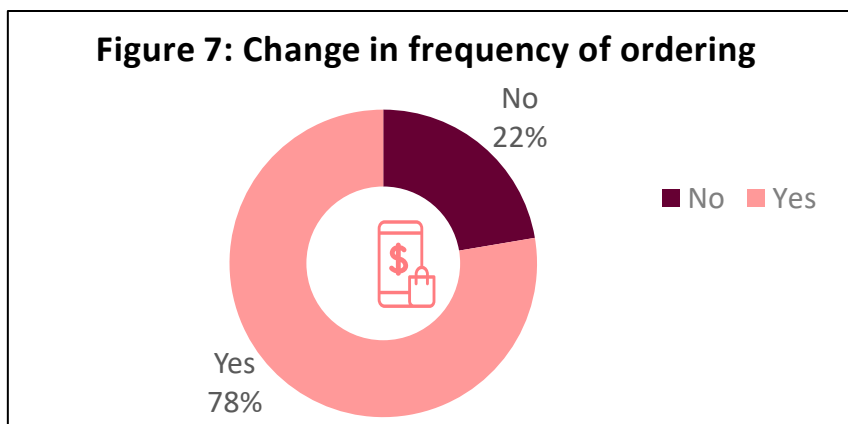
6. How often do you order products online (amidst the pandemic)?

Figure 6: Frequency of ordering



The graph in figure 6 shows the frequency at which the consumers are ordering goods through online platforms during the pandemic. 30% of the respondents prefer to order items every 15 days and 23% prefer to order items once every week. The individuals are able to plan their monthly requirements and order products in the lockdown by taking into consideration the delivery time of the goods which range from 3 to 10 days. It has made them better planners and good analysers of estimating the delivery time in their area.

7. Has the pandemic increased your frequency of purchasing products online?



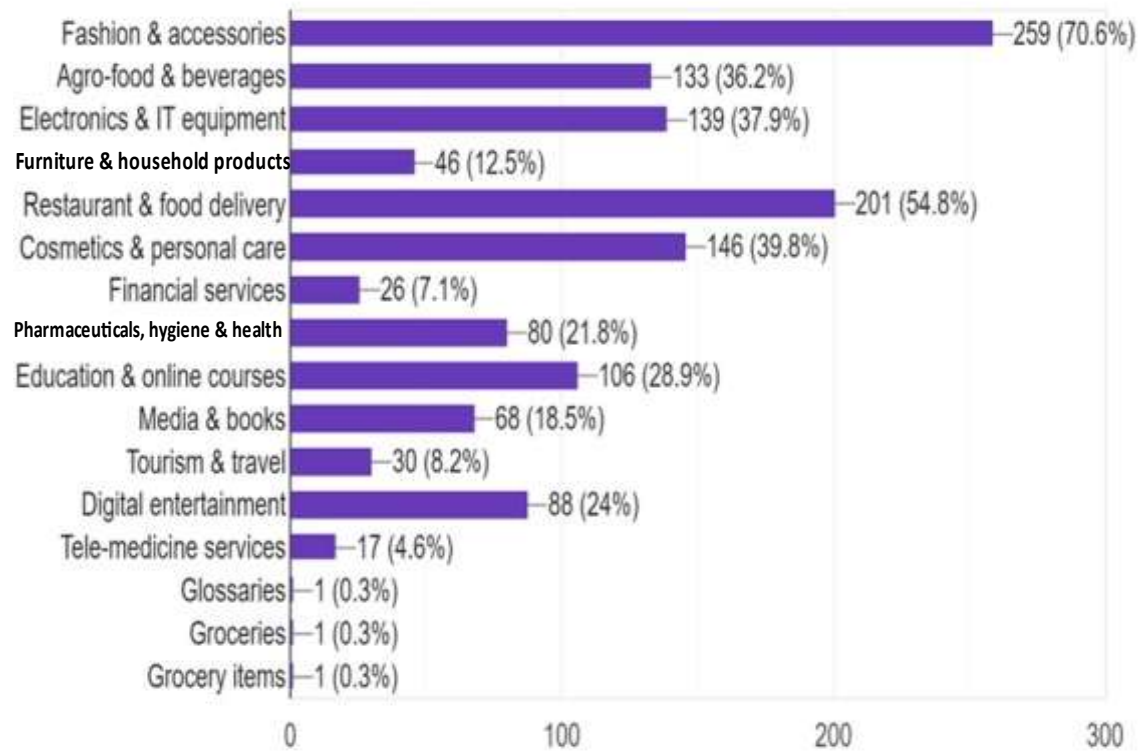
About 78% of the respondents of the survey have agreed to the statement that the frequency of their online purchases has increased due to the pandemic whereas 22% respondents disagree. Before pandemic, purchasing products online was a matter of convenience but amidst the pandemic it has become beyond necessity for many individuals. Necessary products such as groceries and medical items are purchased online due to the prevailing lockdown situation all over India to reducing the rising COVID-19 cases in the country.

Due to the advent of 4G speed internet connection in India in September 2016, many

businesses started operating online. Many individuals found the online mode of shopping advantageous as their products got delivered at their door steps which was very appealing. Thus, the 22% who disagree to the statement had started utilizing the online features before the pandemic and had become well versed with the services offered.

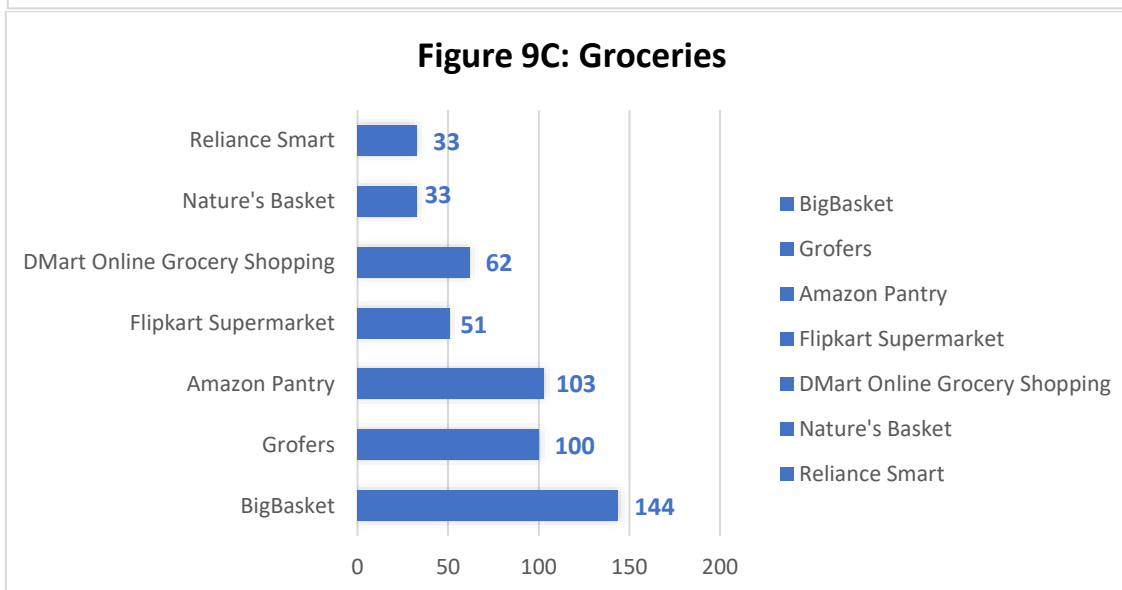
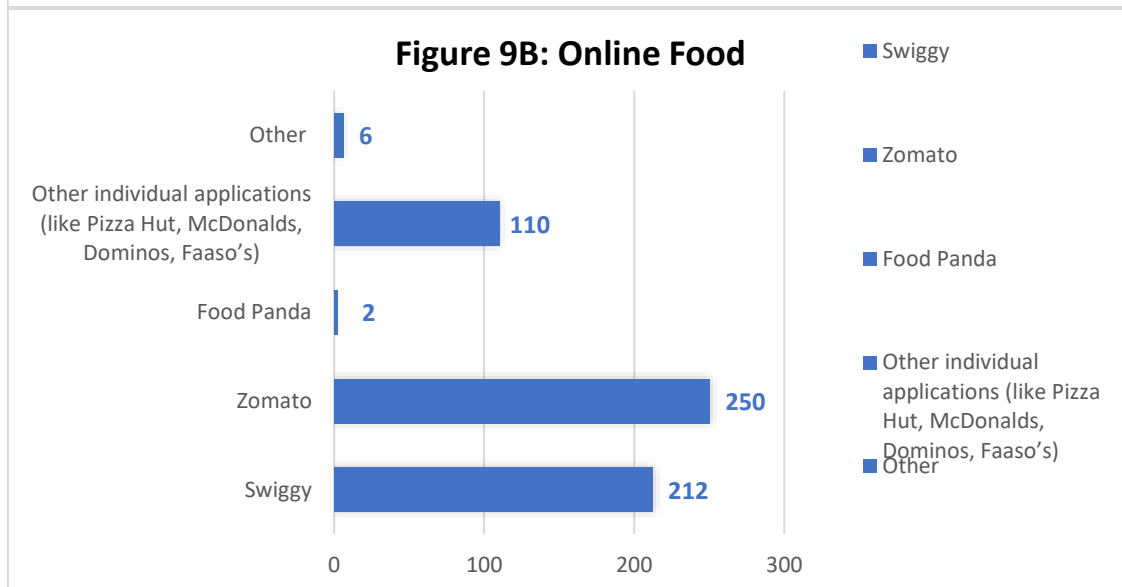
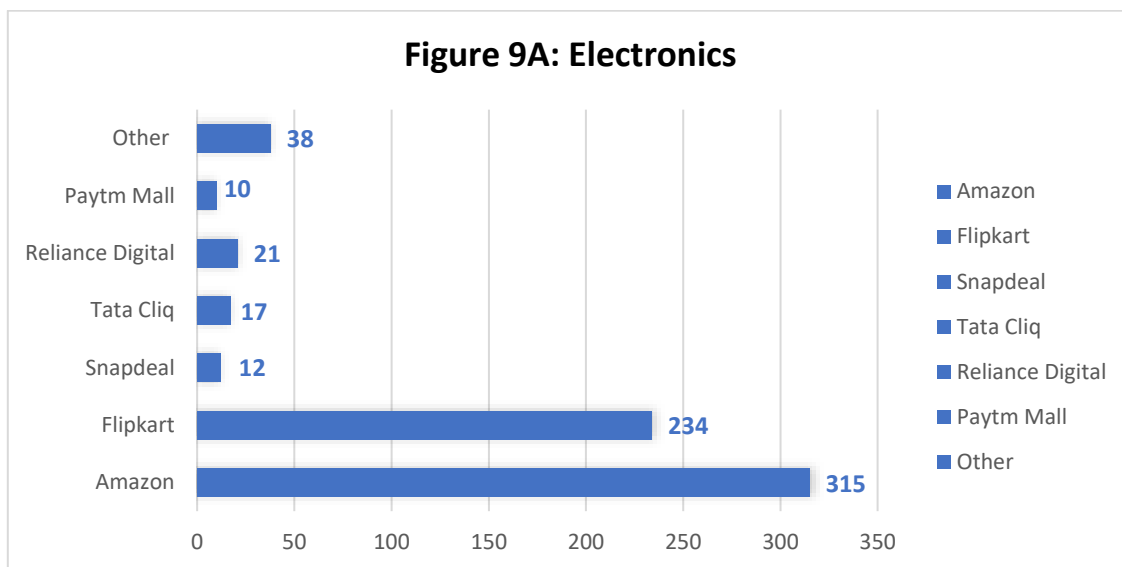
8. What are you most likely to buy online from the following?

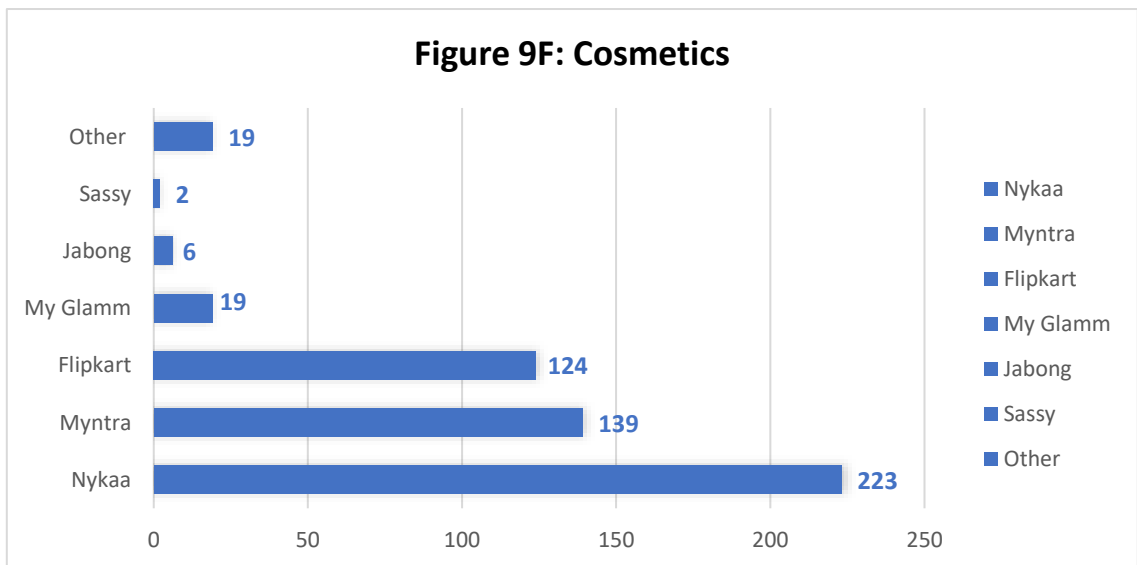
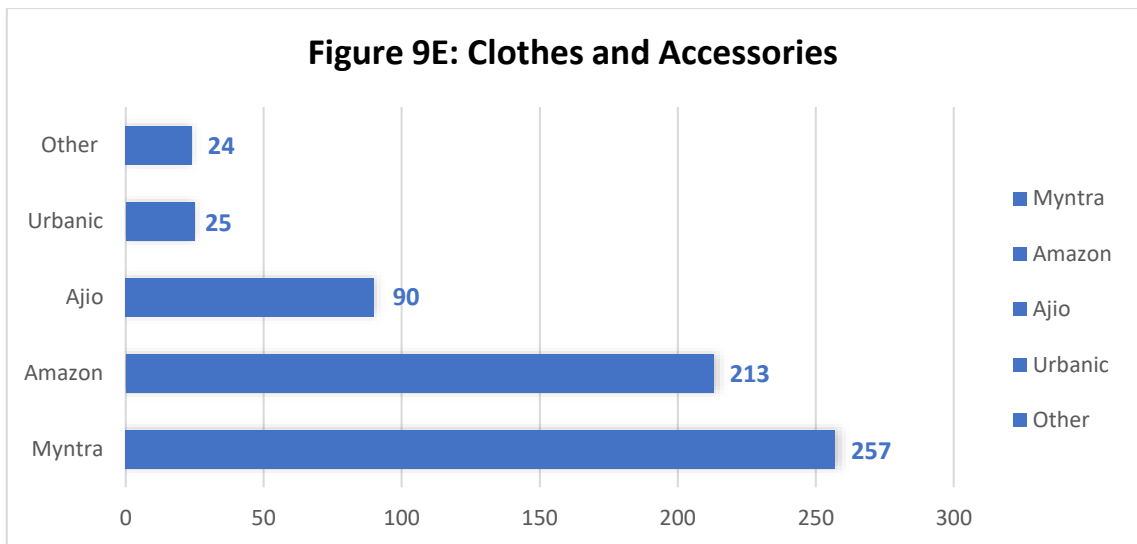
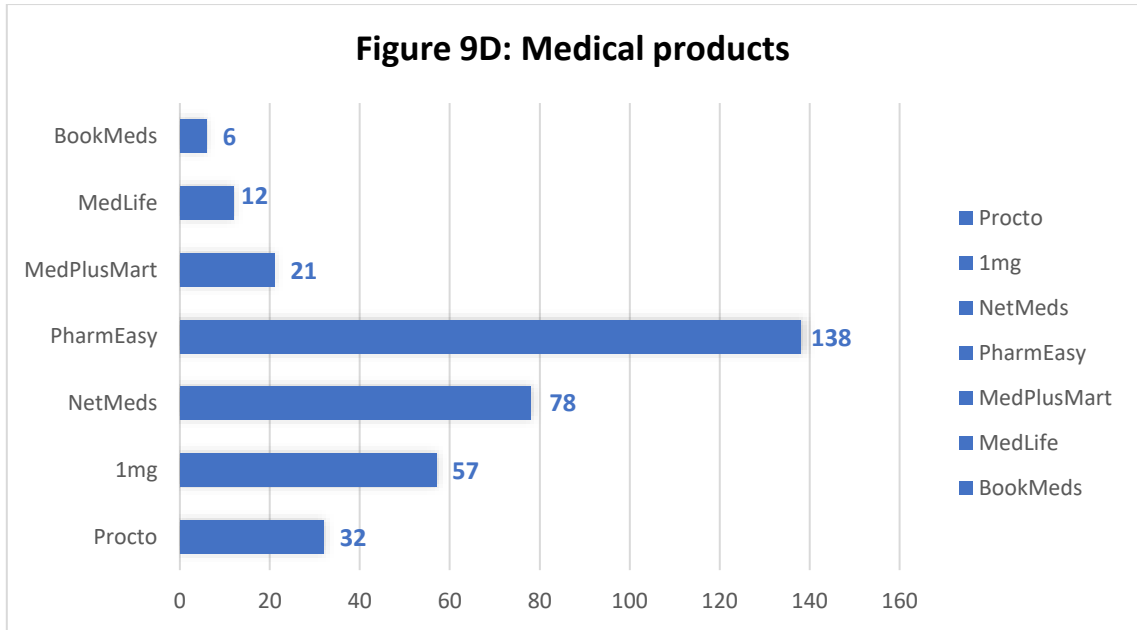
Figure 8: Items frequently bought online



From the graph in figure 8 it can be analysed that trade of fashion products and the delivery of food items is done mainly through online platforms. Fashion items are preferred by 70.6% individuals and online delivery of food is preferred by 54.8% individuals. Fashionable and branded clothes are available on various websites at cheaper rates without any compromise in the quality of the clothing, therefore, they are trending more. They are easily returnable and exchangeable with minimum to no questions asked. During the pandemic, dining at the restaurants was not an option for people so they resorted to the means of ordering food online and dining inside.

9. Which website is frequently used by you to buy products online?





The above question shows the preferences of the consumers in purchasing distinct categories of products online. For electronic products, the most popular brand preferred by consumers is Amazon (315) and Flipkart (234). Two brands namely, Zomato (250) and Swiggy (212) are widely favoured for their services of delivering food by placing online real-time orders. During the lockdown, people resorted to buying groceries online through BigBasket (144), Amazon Pantry (103) and Grofers (100). PharmEasy (138) also became a nationwide popular platform to supply medical and hygiene items. Clothing and accessories are bought through popular online platforms namely Myntra (257) and Amazon (213). In the category of cosmetics and beauty products, consumers are more inclined towards using Nykaa (223), Myntra (139) and Flipkart (124) for better quality products.

Reasons for shopping online?

ADVANTAGES OF SHOPPING ONLINE

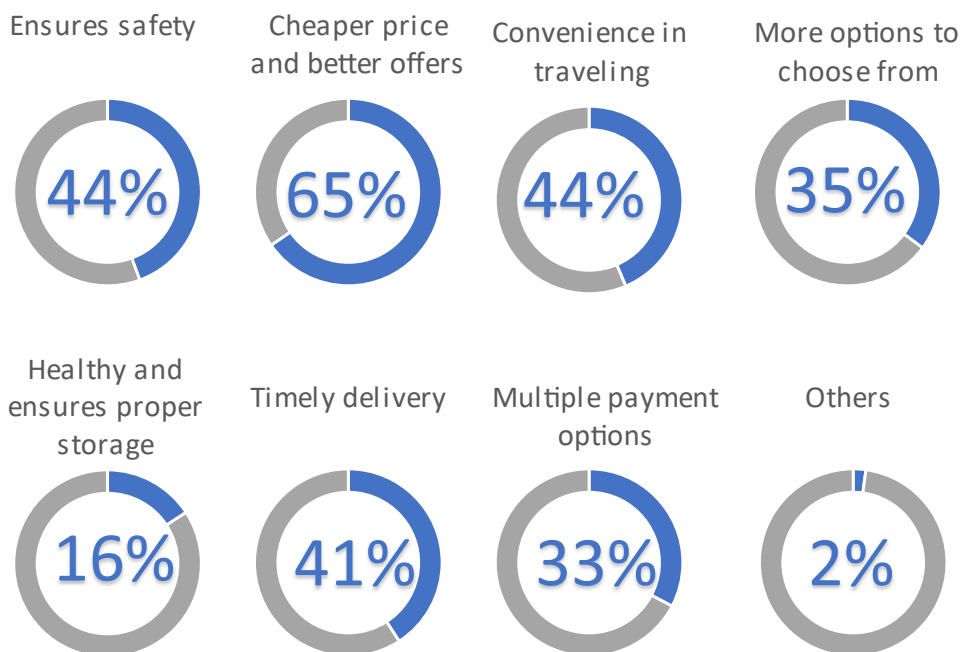


Figure 10

From the pie charts in figure 10 it can be analysed that 65% of the consumers mainly prefer e-commerce because they offer products at better prices which are lower than the offline market. 44% are more inclined to use online websites as they follow proper safety rules and regulations. Also, because it is more convenient for them as they do not have to go out looking for the products they like from one shop to the other and everything is available on your phone's screen. 41% of consumers resort to online shopping as they ensure timely delivery of products which is very important in the busy schedule of the young generation.

10. What are the reasons because of which you would want to avoid shopping online?

DISADVANTAGES OF SHOPPING ONLINE

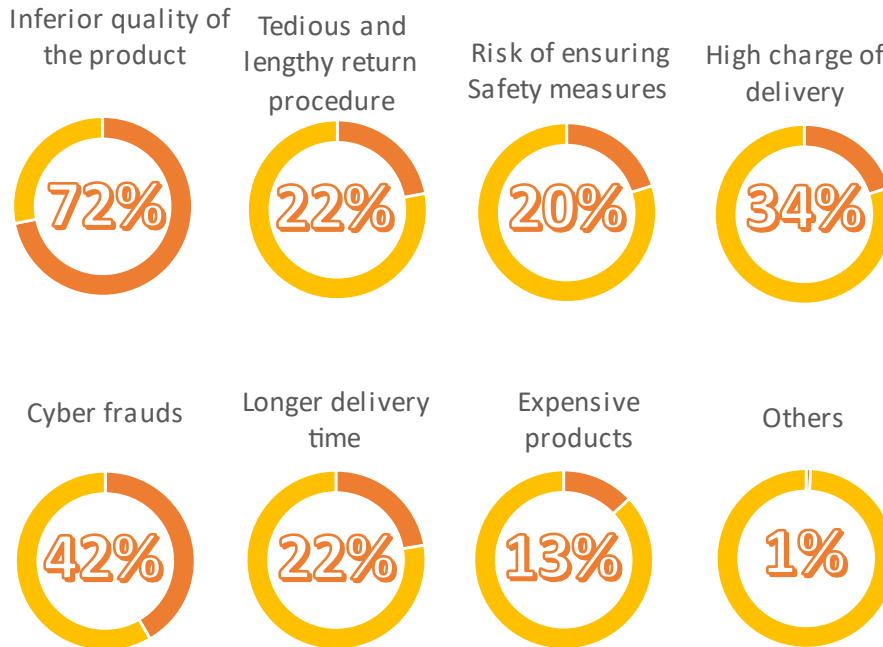
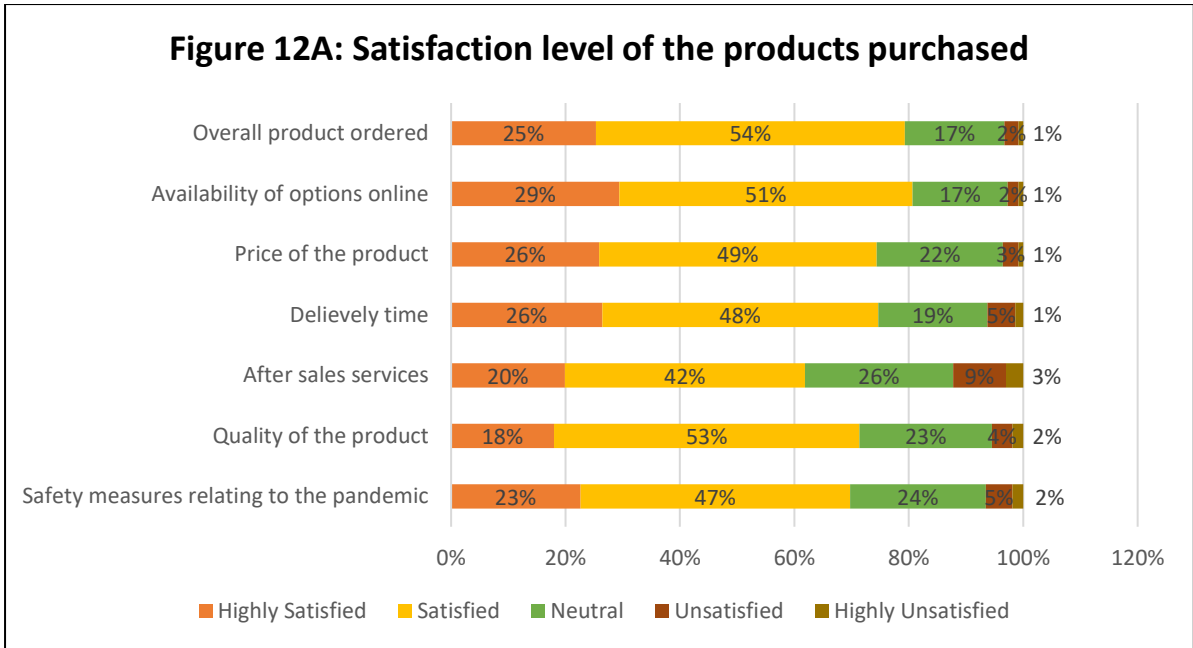


Figure 11

72% of the consumers are reluctant to use the online shopping means because of the fear of being stuck with inferior quality goods whereas 42% are afraid that they would be victims of cyber frauds. With increase in e-commerce activities, the rate of online frauds is also increasing. Hackers have come up with innovative ways to hack the accounts of various users. 34% people believe that the e-commerce companies are charging high delivery rates. Since they can easily get the required goods in their nearby stores, they refrain from buying goods online.

11. Satisfaction level

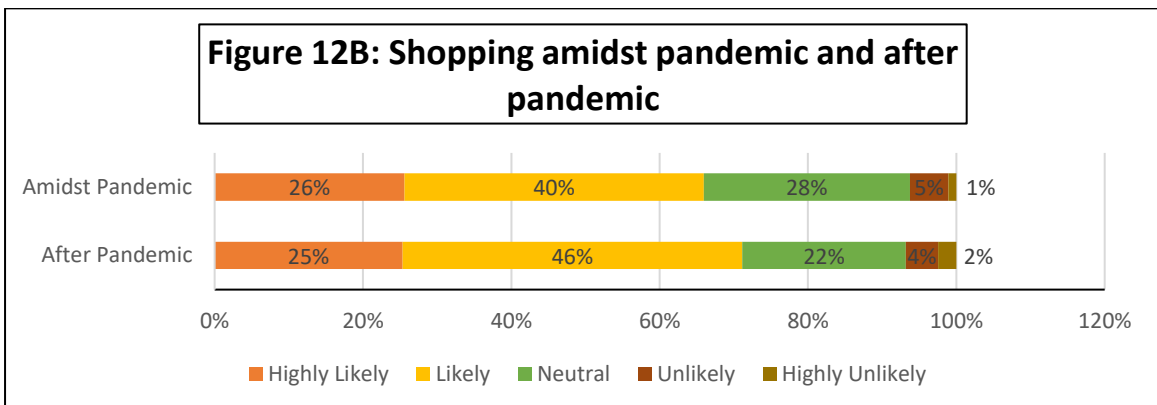
a) Rate the satisfaction level of the products purchased



The graph in figure 12A shows that 79% respondents are satisfied with the overall experience of purchasing goods online. 80% feel that the e-commerce companies offer them a satisfactory number of options to choose from to select the product best suitable to their needs. Three-fourth (75%) of the population believe the price range and various offers, such as EMI payment, discount on using credit card, etc; offered by the e-commerce companies are appropriate. Many individuals (74%) people feel contented with the delivery time taken by various brands to deliver the products. They believe them to deliver goods at a faster rate and are accurate in informing the customers about the delivery time and date. 62% are pleased with the after sales services offered by the company which includes exchange of goods, returning them, guarantee, warranty and so on. Satisfactory level of the consumers with regards to the quality of the goods and the safety measures taken in the light of COVID-19 is 71% and 70%, respectively.

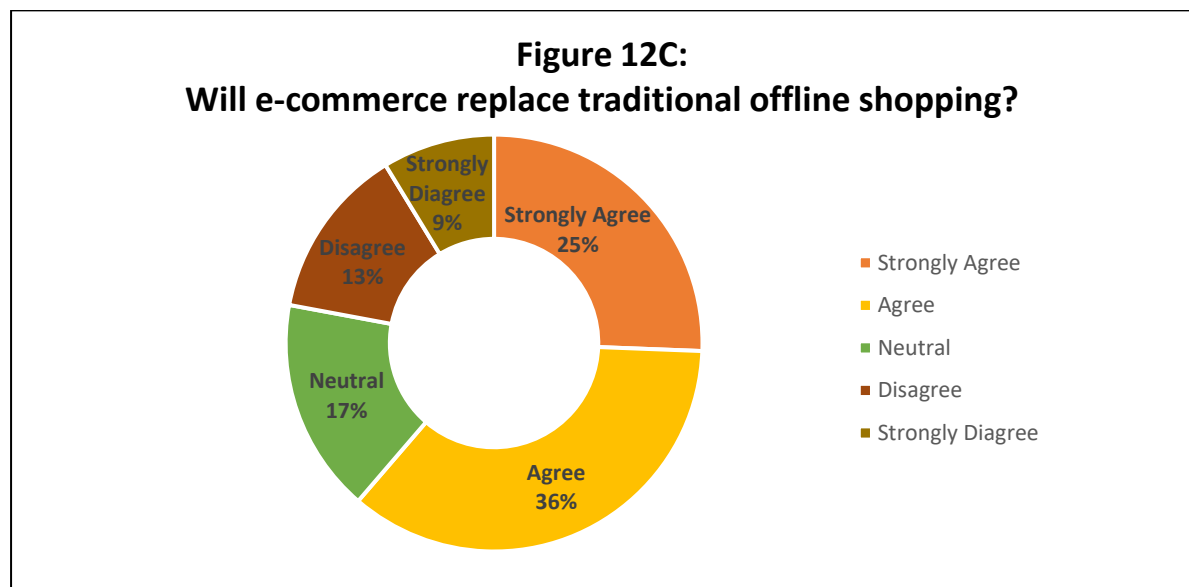
From the above graph it can be concluded that more than 60% consumers prefer shopping from e-commerce websites and have found various features of the online products to be satisfying whereas maximum 11% respondents have given a negative response. Thus, people are more incline to purchase products online.

How likely are you to shop online now amidst the pandemic and after the pandemic?



More than 65% of respondents prefer online shopping now and more than 70% plan to continue the same in the future after the widespread of the pandemic is brought under control. This, proves that the pandemic has changed the preferences of people and they are now finding e-commerce to be more convenient and reliable for good quality of products. Day-by-day people are buying more goods online. One minute on the internet amounts to 6,659 packages shipped on Amazon.⁵

b) Do you think E-commerce will replace traditional offline shopping?



The pie chart in figure 12C shows that 25% respondents strongly believe that the e-commerce will replace traditional offline shopping in the future, 36% agree to it, 13% disagree, 9% strongly disagree and the rest 17% are not sure yet. Looking at the higher positive responses, it can be comprehended that people believe there are high chances of all the businesses to operate online and offer various goods and services through online mode. Various reports are also estimating e-commerce to grow up to 200 billion US dollars in India in the next 6 years, that is, by 2027.⁶

Conclusion:

The internet economy has contributed up to 16% in India's GDP in 2020 which amounts to 537.4 billion US dollars.⁷ With the growth in e-commerce, it was important to conduct this study to know the preference of the consumers. It is beneficial for the companies selling goods online to know what needs to be improved. E-commerce has huge potential in India with the advancement of technology. E-commerce has helped many small-scale businessmen/women to operate remotely during these difficult times. The government of India has also encouraged through Digital India campaign which has help in increasing the e-commerce business.

The survey helps in analysing the hike in the e-commerce due to the pandemic. The preferences of consumers have clearly shifted and they are more inclined to order products through online platforms. Due to the lockdown, initiated to prevent the spread of the pandemic, consumers resorted to other means of purchasing basic necessities. This encouraged first time users of e-commerce to give it a try. Many businesses were also

forced to go online in order to ensure their survival. Online shopping seems to be replacing the tradition offline shops although it won't be able to eliminate their presence entirely.

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Perceived Returns to Education and Its Impact on Schooling Decisions*

Author: Anvi Agarwal and Shagnik Chakravarty

Class : SY Bachelor of Arts (Economics)

College : St. Xavier's College, Mumbai

Email: anvi.agarwal@xaviers.edu.in

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Abstract:

*In this paper, we empirically calculate the perceived returns to education by surveying students from low and high-income families in Mumbai and Kolkata. These results are interpreted using insights from theoretical models that link education with wages. This allows us to understand how differences between real and perceived returns may affect schooling decisions. Following that, we discuss the reasons behind formation of perceived returns. Risk perceptions towards education are compared using an *f*-test. To understand the influence of age on perceived returns, a *t*-test is conducted. Here, we find that perceived returns are universally low for early education. Lower-income students also underestimate returns to tertiary schooling. Variability in future expected wages is higher among high-income students. Among low-income students, the youngest have the highest perceived returns while the opposite is true among students from a high-income background.*

Keywords: Returns to education, Perceived returns to education, S-shaped model, Returns to education in India, Schooling decisions

JEL classification: I260, I220

Introduction:

For any individual, whether to continue education beyond a certain point is an important investment decision. Under Becker's (1993) human capital theory, an individual would only continue schooling if expected future benefits (i.e., higher wages) exceed costs. Expected future benefits, or the returns to education, is therefore, an important variable which influences schooling decisions. Calculating returns to education is complicated, and while estimates of real returns exist, these results are confined to academic papers that use advanced econometric techniques, thereby making it inaccessible to typical families. Thus, it is the returns *perceived* by students and their parents that end up influencing actual educational decisions, and these are usually formed under uncertainty and limited information. Inaccurate perceptions about returns to education can distort the demand for schooling, affect future labour market outcomes, and keep average educational attainments low (Sequeira et al., 2016).

In India, the need to consider this possibility is especially high as educational levels

are low even when measured real returns are high. As we see, the gross enrolment ratio (GER) at primary level is 99.2%, but it drops to 80% by 8th grade, and further to 56.2% and 23% for senior-secondary (10-12th grade) and tertiary education (MHRD, 2018). In comparison, tertiary education enrolment in the US and China are 87% and 39% respectively. Not only that, drop-out rates are above 20% at senior-secondary level even though the mean salary of Indian graduates is 66% higher than high-school pass-outs (NSSO, 2014). Of course, there are several plausible explanations for this such as poverty, credit constraints, accessibility, health, and discrimination. Yet, if underestimating the returns at any level is also a limiting factor for individuals, improving awareness about real returns may be the most cost-effective strategy in improving their educational attainment, and more generally, in raising the demand for schooling.

Review of Literature:

As a developing nation, India is one of the youngest countries in the world. With 38.1 million children out of school (UNESCO, 2016) and dropout rates of 15% and 11% for girls and boys respectively, the need to consider various reasons for dropping out of school is essential. Here, we find that physical accessibility is not a deterrent: Close to 95% of all children have a school within half a mile of their residence (PROBE Team and Centre for Development Economics, 1999).

Studies in developed countries like Slovenia (Stanovnik, 1997) and Ireland (Barrett et. al, 2002) have shown that increased demand for skilled labour results in a higher rate of return to schooling and education. Further, several studies show that students of first world countries with good education systems have a better perception of the increase in income with the attainment of different levels of education. A handful of studies for the United States including Smith and Powell (1990); Betts (1996); Dominitz and Manski (1996); Avery and Kane (2004) and Rouse (2004) have proven this.

In India, there is extensive literature on returns to education, but hardly any on the perceived returns and its impact. Chaudhri and Rao (1970) concluded that when the investment into education is taken into account, rates of return reduce with consecutive higher levels of education, thereby forming a concave returns graph. Although, when just the increase in income is considered for each year of schooling, the graph is more or less linear. For the sake of this paper, the most recent educational return numbers have been extracted from Singhari and Madheswaran (2016).

Evidence from field experiments suggests that perceived returns to education are typically lower than real returns in developing countries. Nguyen (2008) conducted a randomised controlled trial (RCT) in Madagascar where she observed that providing statistics about real returns to education raised the average attendance of students by 3.5%. In Jensen (2010), students at randomly selected schools in the urban Dominican Republic who were given information on higher returns completed on average 0.20–0.35 more years of school than students who were not. In India, the NSSO (71st round, 2014) data on drop-outs shows that the main reason cited for dropping out is “economic and domestic activities”. “Financial constraints” is ranked third in importance. Here, prioritising work over schooling may partly be a consequence of underestimating the returns to education.

This literature survey indicates that there exists a difference between perceived and real returns to education. This difference may explain why dropping out of school seems

rational to many Indians, though in reality, their decision creates an education-based-poverty trap. Although estimates of the real returns to education exist, the results are confined to academic papers that use advanced econometric techniques, thereby making it inaccessible to typical students and parents. Thus, it is the returns perceived by students and/or their parents that end up influencing actual schooling decisions, and these are likely to be based on imperfect and incomplete information. Thereby, having little reason to believe that the level of education chosen by parents is either individually or socially efficient. Underestimating the returns to education may therefore be lowering the demand for schooling even when measured real returns are high.

Research Questions:

1. What are the differences between real and perceived returns to education, and how might they impact schooling decisions?
2. What are the factors influencing the formation of perceived returns to education?
3. How do characteristics such as family income, age, parental education and gender influence one's perceptions of education?

Objectives:

- To find empirically the perceived returns to education among lower and higher income households in Mumbai and Kolkata
- To understand the implications of the difference between real and perceived returns on schooling decisions
- To discuss the factors behind the formation of (distorted) perceived returns
- To analyse how perceived returns may vary along with variables such as age, gender, parental education, family income, etc.

Hypothesis:

H₀ (1): There is no significant difference between real and perceived returns

H₀ (2): Family income does not affect perceived returns.

H₀ (3): Gender does not affect perceived returns.

H₀ (4): Age does not affect perceived returns.

H₀ (5): Parental education does not affect perceived returns.

Methodology:

The following are some conceptual standardizations across the paper:

Levels of educational attainment – In order to divide the various years of education into classes, we've used the brackets followed by the Indian education system and the variable 'n' and 't' are used efficiently display the levels and the time period (in years) to complete the specific levels of education respectively. The values of the same are given as follows-

- Illiterate ($n = 0$) – Haven't attended any educational institute, zero years of education.
- Primary school ($n = 1, t = 5$) – Till 5th grade, with 7 years of schooling (2 years of kindergarten + 5 years from grade 1 to 5).

- Middle/Upper primary school ($n = 2, t = 3$) - Till 8th grade, with 10 years of schooling
- Secondary school ($n = 3, t = 2$) - Till 10th grade, with 12 years of schooling.
- Senior/Higher secondary school ($n = 4, t = 2$) - Till 12th grade, with 14 years of schooling.
- College ($n = 5, t = 4$) – Till bachelors’ degree graduation. Since the duration of courses varies from 3-5 years (with 3- and 4-year courses more prevalent and common), the study has taken the duration to achieve this level of education as 4 years. Another important point here is that for ease of regarding the year of the degree, the first year is frequently regarded as the 13th grade, second year as 14th and so on

Defining low- and high-income families: The specific ranges for low- and high-income groups were defined retrospectively from the survey data (see Table 1).

Table 1: Defining low and high income categories

Monthly Family Income			
Location		Min	Max
Mumbai	Low Income	5,000	35,000
	High Income	60,000	6,00,000
Kolkata	Low Income	2,000	30,000
	High Income	50,000	5,00,000

Source: Survey data

Since it is difficult for respondents to think in terms of educational returns, our survey recorded answers in rupees for future expected income. Using this data, we calculate perceived returns for various educational levels and annualize them using the Compound Annual Growth Rate method.

- Returns to education in grade brackets – One unique value for each level, which is interpreted as the percentage increase in income when a person passes an additional educational level.

$$Returns_n = \frac{Income_n - Income_{n-1}}{Income_{n-1}} \times 100\% ; n = 1,2,3,4,5$$

- Returns annualized (CAGR) – The rate of return to education per year, compounded annually.

$$Returns_n^{annual\%} = \left(\frac{Income_n}{Income_{n-1}}\right)^{1/t} - 1 ; n = 1,2,3,4,5$$

Where t = time period (in years) of education for level 'n'

Returns at level n ($Returns_n^{Annual\%}$) would be interpreted as each year of additional schooling after level ‘n-1’ and before level ‘n’ would increase a person’s income by $Return_n\%$, provided the individual completes level ‘n’ of education.

Primary Data Sampling:

Target population: Students from low- and high-income families, currently studying in 8th to 16th grade.

Target Area: Urban and sub-urban parts of Mumbai and Kolkata.

Survey instrument: Questionnaire

Survey Methods: Telephonic interview with participants from low-income families. Online survey via Google forms for participants from higher-income families.

Collection of samples: Randomisation method was used to recruit participants from low-income families. Convenience and snowballing methods were used to get participants from higher-income backgrounds.

Conducting the survey: The telephonic interviews, as well as the online questionnaire survey, was conducted between 1st to 10th October 2020. One of the researchers volunteered at an NGO named ‘Youth Empowerment Foundation’ that helps the underprivileged communities around the country. The contact details of participants from low-income backgrounds were extracted from the NGO’s database after securing the required permissions. The participants from well-off backgrounds were sampled with the researchers’ contacts.

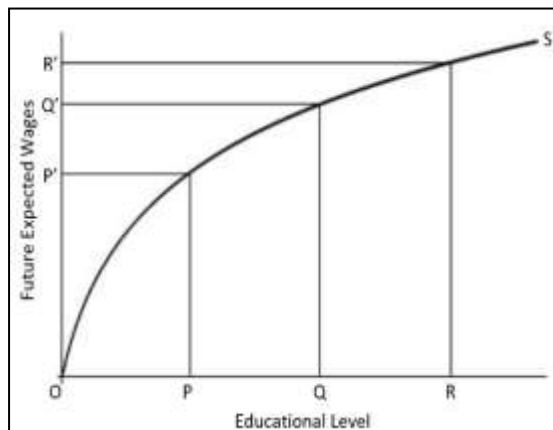
The questionnaire is attached as Appendix 1. The participants were told not to take inflation into account when thinking of future expected wages. Hence, all income figures are in the current rupee value.

Analysis:

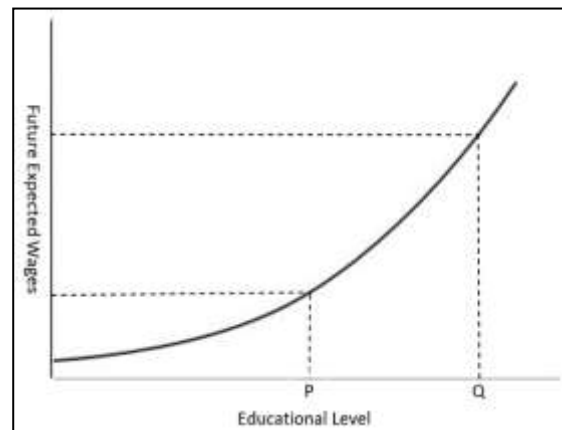
Linking Education with Wages:

There are three main models for linking educational level with future expected wages: (a) Diminishing returns; (b) S-shaped curve; and (c) Exponential curve.

Figure 1.1: Diminishing returns to Education Figure 1.2: Exponential Returns to Education

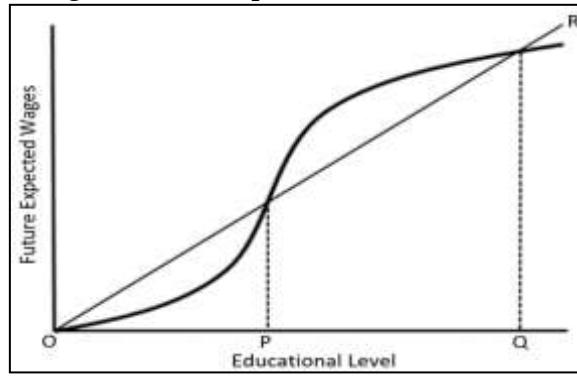


Source: Author’s construction



Source: Author’s construction

Figure 1.3: S-shaped returns to Education



Source: Author's construction

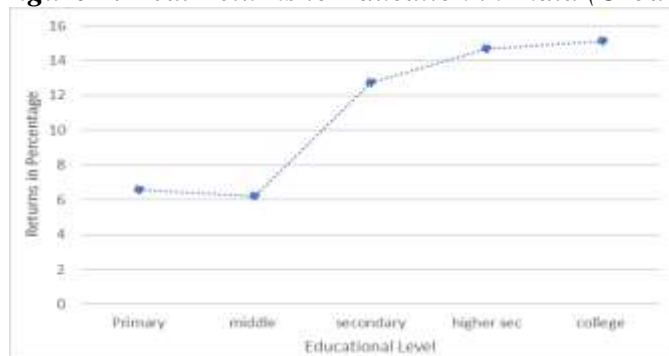
These models represent different conceptions of returns to education. In Fig 1.1 is true, then education exhibits diminishing returns i.e., returns are highest at earliest levels and reduce with an increase in qualification. There are good reasons behind this: the cost of primary schooling is low compared to higher levels; it is often a requirement for access to higher education; and the productivity differential between illiterate persons and primary graduates is significant (Psacharopoulos, 1994). Evidence from field experiments supports this view (Psacharopoulo and Patrinos, 2004).

However, if Fig 1.2 is true, then returns to early education are the lowest and wages rise rapidly with an increase in educational attainment. This model is premised on research that shows that tertiary/higher-education wage premiums have been increasing over time and are highest in comparison to other educational levels (Azam, 2009; Montenegro and Patrinos, 2014).

Finally, as in Fig 1.3, education may also yield S-shaped returns. Under this model, returns for early education are low; they rise sharply at higher levels before reducing again. Notably, it differs from the exponential model since the highest increase in wages is experienced after secondary or senior-secondary schooling, and not after tertiary education. This model is likely true in regions where there is a shortage of high-skilled jobs (Banerjee and Duflo, 2011). Here, a lack of demand for high-skilled labour reduces the value of tertiary education. This role of demand in determining the returns to education has been documented extensively in the literature (Foster and Rosenzweig, 1996; World Bank, 2000).

Comparing Real and Perceived Returns:

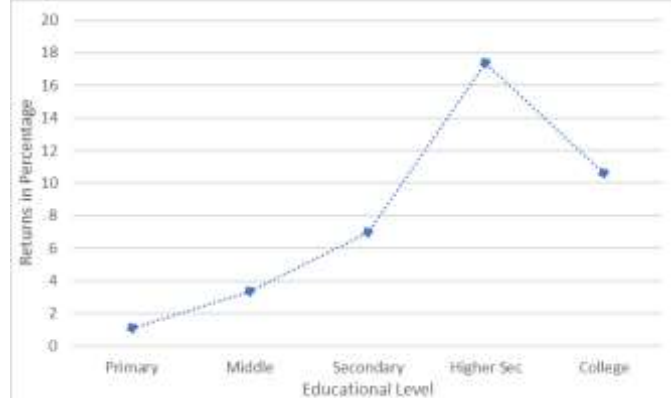
Figure 2: Real Returns to Education in India (Urban)



Source: Author's construction based on data from Agarwal (2011)

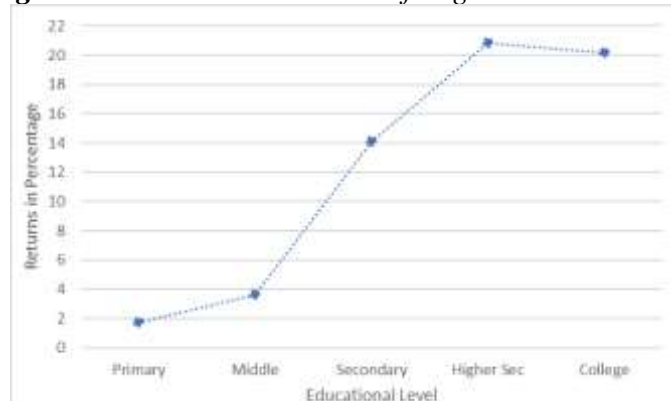
In Figure 2, we find that the real returns to education in India (urban) are increasing with every level of education (except middle-school, but only marginally). This is indicative of the exponential model (Fig 1.2) since wages are rising at an increasing rate with respect to educational qualification. Between middle and secondary level returns, there is a difference of 6.5% which suggests a sharp rise in returns after middle school. Here, as in our empirical results, the rate of return is annualised. The interpretation is: Each year of additional schooling after middle-school and before secondary completion would increase wages by 12.7% for an individual who completes secondary education.

Figure 3.1: Perceived Returns of Low-Income Students



Source: Survey results

Figure 3.2: Perceived Returns of High-Income Students



Source: Survey results

Fig 3.1 and 3.2 represent the perceived returns for students of low-income and high-income households respectively. Our results in Fig 3.1 show that for students of low-income households, returns for higher-secondary level are perceived to be highest (17.4%). Following that, there is a sharp decline in perceived returns for college education (10.6%). This is suggestive of the S-shaped model since returns are initially low, then rise rapidly at higher levels before falling again. For high-income students in Fig 3.2, perceived returns for higher-secondary and college levels are highest and roughly the same (20.9% and 20.1% respectively). Thus, their expectations resemble the exponential model since returns are greatest at highest levels of education.

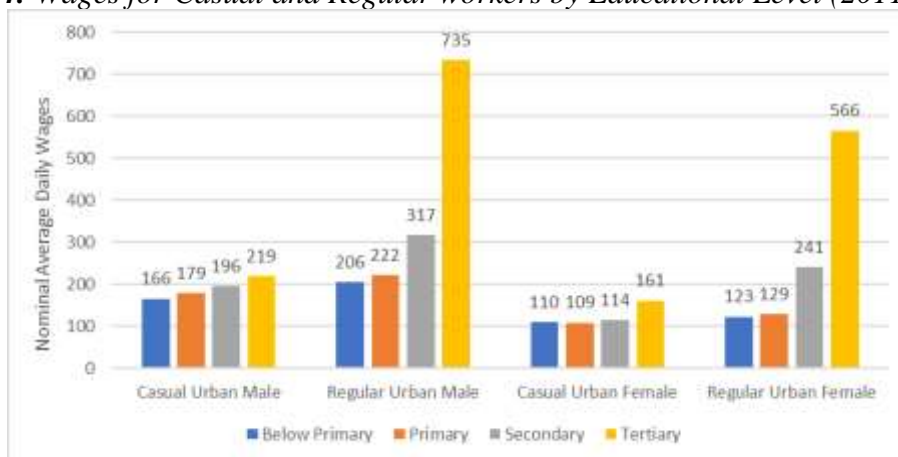
Implications of Differences between Real and Perceived Returns

Upon comparing our empirical results with real returns, some differences stand out. First, as seen in Table 9 of Appendix 2, both samples have significantly underestimated returns to early education. At primary level, estimated real returns are 5.6 percent whereas our low-income and high-income samples have reported 1.1 and 1.7 percent respectively. In fact, these figures are likely an overestimation owing to the effect of outliers on our small sample size ($n=211$). 75 percent of low-income and 74 percent of high-income respondents reported the same future expected wages for illiterate and primary levels i.e., their perceived returns to primary education were zero (negative if foregone work experience is considered). This is in stark contrast to the diminishing returns model.

One factor behind this could be the low quality of primary education in India. Duraisamy (2002) argues that qualitative factors such as high pupil-teacher ratios, poorly qualified teachers, low financing of public schools, high teacher-absentee rates, etc. may be driving down returns to primary education. In fact, Singhari and Madheswaran (2016) show that returns to primary schooling have been declining in India since the 1990s. A report by Pratham (2012) found that only 46.5% students in Class V could read Class I textbooks in Indian government schools. This infrastructural lack of focus on the quality of early education may be why perceived returns were found to be so low viz-a-viz higher education. Here, knowledge about the increasing automation of low-skilled jobs may also be a factor.

Second, the samples peak at different qualifications. This is most evident at college level where the difference between perceived returns for the two samples is 9.5 percent. High-income students thus value tertiary education much more highly than low-income students. In part, this reflects the changing attitudes between job security and specialisation. Many of our low-income respondents suggested that they wanted to apply for government jobs after 12th graduation. In India, completing higher secondary (10+2) makes one eligible for most government jobs (railways, defence, admin staff, etc.). Given the payment standards and wage security, government jobs are extremely lucrative when compared to private-sector jobs, especially for lower-income classes. This is supported by a recent study conducted across 10 Indian cities which showed that demand for government jobs among 18- to 30-year-olds had increased during the Covid-19 pandemic, with 82.3 percent of respondents preparing to apply for government jobs (Mint, 2020). This drives up the perceived returns for higher-secondary as a host of jobs become available upon graduation. Aside from job security, the nature of employment matters too. Low-income groups are overrepresented in the casual workforce while high-income individuals are more likely to be regular workers (ILO, 2018). As we see in Figure 4, differences in educational qualification matter more for regular workers. For both genders, the wage premium for casual workers is flat i.e., educational returns are very low. Among regular workers, however, the wage premium for tertiary education is large. The ratio of the wage-rate of the highest-educated to illiterates is only 1.3 for casual workers compared to 3.5 for regular workers.

Figure 4: Wages for Casual and Regular workers by Educational Level (2011-12 INR)



Source: Author's construction based on NSSO estimates

Given this data, we see that there is no incentive for a student to opt for higher education if s/he expects to join the casual labour force. On the other hand, individuals who expect to join the regular workforce have a strong incentive to acquire higher education. This may be why perceived returns for tertiary education fall for the low-income sample while remaining high for the high-income group. Interestingly, when asked to estimate wages for current thirty-year-olds, the perceived returns for college-level were calculated to be 12.7 and 15.8 percent for low-income and high-income samples respectively (see Table 10 of Appendix 2), compared to 10.6 and 20.1 percent for themselves. The low-income students thus believed that others would benefit more from tertiary education than themselves, while high-income students believed the opposite.

Finally, belief in the S-shaped or exponential model of returns to education implies that it makes sense for families to choose ‘winners’ and ‘losers’ among their children. In our sample, both income-groups undervalue early education while generally overvaluing higher levels of schooling. Under these beliefs, poor families who can only afford to educate their children till primary or middle-school levels will receive low returns while richer families who educate their children beyond secondary levels will face significantly higher returns. As a result, poor families are motivated to ‘choose’ a child who is most likely to reach higher levels of education and invest all their resources on him/her. Over time, this can lead to an increase in drop-out rates and greater inequality both within and among families (Schultz, 2004). Akresh et. al (2010) found that in Burkina Faso, teenagers were more likely to be enrolled in school if they scored high on a test, but *less* likely to be enrolled if their sibling had scored high. This kind of ‘winner-picking’ in education indicates that perceived returns play an important role in determining real schooling decisions.

Family Income and Perceived Returns:

Table 2: t-Test results for low-income versus high-income perceived returns (for oneself)

	Lower Income, own	Higher Income, own
Mean	20.80857105	33.96469226
Variance	524.5951972	1408.807486
Observations	495	555
Hypothesized Mean Difference	0	
df	931	
t Stat	-6.93563796	
P(T<=t) one-tail	3.78017E-12	
t Critical one-tail	1.646491968	
P(T<=t) two-tail	7.56034E-12	
t Critical two-tail	1.962515333	

Source: Author’s analysis of survey data

Since t-stat lies outside the region of acceptance, we reject $H_0(2)$: Family income does not affect perceived returns. At $\alpha=0.05$, perceived returns of the high-income sample are significantly greater than the lower-income sample. Upon disaggregating the data, we find that for primary and middle levels, we are unable to reject $H_0(2)$, but for secondary, higher secondary, and college levels, perceived returns for both samples are significantly different. Thus, family income seems to impact perceptions toward higher levels education more distinctly, while perceived returns for early education appear to be universally low.

Interestingly, looking at the t-Test results in Appendix 2, Tables 11 and 12, we find that the lower-income sample believes that they will lower educational returns than the population average, while the higher-income sample believes that they will face better educational returns than the population average³. These results are consistent across every educational level. This may be due to self-perceptions about one’s ability to ‘convert’ education into higher wages, and is discussed in detail soon.

Parental Educational Level and Perceived Returns:

Table 3: t-Test results summarised for parental educational levels

Parental Educational Level (Both x-and y-axis)	Illiterate	Primary	Middle	Secondary	Higher Secondary	College and Above
Illiterate (I)	*	*	*	*	*	*
Primary (P)	P>I	*	*	*	*	*
Middle (M)	I>M	P>M	*	*	*	*
Secondary (S)	S>I	S>P	S>M	*	*	*
Higher Secondary (HS)	HS>I	HS>P	HS>M	Fail to Reject	*	*
College and Above (C)	C>I	C>P	C>M	C>S	C>HS	*

Source: Author’s analysis of survey data

³ Although we fail to reject H_0 for the higher-income sample (Appendix 2, Table 9), the mean of perceived returns for ‘own’ is greater at every educational level compared to ‘population average’. Also, when a t-Test is conducted on expected wages rather than perceived returns of the high-income sample, we find that wages for ‘own’ are significantly greater than ‘population average’ at $\alpha=0.05$. These suggest that the high-income sample believes that they will face higher educational returns than the population average.

In Table 3, we find that in general, children of parents with higher levels of education reported higher perceived returns. The only outlier is middle-school (M) which shows the opposite trend. Similarly, as seen in Figure 9 of Appendix 2, we find that for students of parents with lower levels of education (illiterate, primary and middle), expected wages for ‘population average’ is higher than ‘oneself’, while this trend is reversed for students of parents with higher levels of educational attainment (secondary, higher secondary, college and above). Simply put, students of parents with high educational attainment believe that will fare better than the population average, and vice versa. Some potential reasons for this are discussed below.

How May Family Income and Parental Education Be Affecting Perceived Returns?

In this section, we consider the influence of family income and parental education together since they are highly correlated both in our sample and in the population (ILO Wage Report, 2014). One reason why perceived returns are positively correlated with high-family income/greater-parental-education may be the complementarity between ‘ability’ and education (Harmon et al., 2003). Here, ability refers to the efficiency with which one can ‘convert’ education into higher wages. Ability depends on non-quantifiable factors such as soft-skills, and here, students of high family income/greater parental education have a distinct advantage. For instance, consider the English language fluency. Chakraborty and Bakshi (2016) found that in India, a 10% lower probability of learning English in primary schools leads to a decline in weekly wages by 8%. Students from higher-family-income/greater-parental-education are more likely to be fluent in English (among other soft-skills), and may thus be more confident about getting higher paid jobs that require competency in soft-skills. In fact, a major reason why students of low-income/lower-parental-education families think that they will fare worse than the population average (and vice-versa) may be their self-perceptions about their ‘ability’ i.e., their soft-skills (Appendix 2: Figure 7, Tables 11 and 12). In other words, their belief that they don’t possess the adequate tools to ‘convert’ education into higher wages may be lowering their perceived returns to education.

Other reasons may be that students from high-family-income/greater-parental-education grow up in a better learning environment and have access to higher quality education. The difference between the quality of private and public education in India is well documented (Pratham, 2012), and its impact on perceived returns have been discussed above. Brand and Xie (2010) have noted the effect of neighbourhood and peer influences on risk perceptions on education. The extent to which one’s neighbourhood (including one’s immediate friend-circle) values education may, in fact, affect perceived returns. A student from a privileged background is also likely to have better contacts and information about employment, and therefore has a better chance of securing a high-paying job in the formal sector (Krishnan, 1996; Siphambe, 2000). Knowledge of these qualitative differences may be affecting our sample’s perceived returns, especially for tertiary education.

Finally, under financial market imperfections, differences in family backgrounds entail different marginal costs in attaining education. This affects children of poorer families adversely as they face higher costs, especially at the college level (Checchi, 2006). This may be either due to debt financing or due to nepotism in labour markets which reduce educational returns for the less privileged. Agnarsson and Carlin (2002) find that 13% of

the marginal return to additional schooling in Sweden is due to family background. Lam and Schoeni (1993) show that returns to schooling drop by about one-third when parental schooling is controlled for in Brazil. Thus, beliefs about higher costs to education and nepotism in the labour market (both of which may be justified) may be driving down the perceived returns to education for students from less privileged families.

Analysis of Variance:

Most papers in the literature have neglected the role of risk perceptions in schooling decisions. For poor families, risk perception may deter investment in education even when expected returns are high. Thus, a poor student may decide to not go to college if s/he is extremely unsure of their future earnings. Since we find that perceived returns for the lower-income sample falls sharply for tertiary education, it is imperative to ask whether risk perceptions toward education are significantly different among both sampled groups. Here, we use a right-tailed F-test to compare the variances of both samples.

Variable 1: Higher-income sample’s perceived returns for college

Variable 2: Lower-income sample’s perceived returns for college

$\alpha = 0.05$

$H_0: \sigma^2_1 = \sigma^2_2$

$H_a: \sigma^2_1 > \sigma^2_2$

Table 4: *f-test between the lower and higher income sample’s perceived returns*

	<i>Variable 1</i>	<i>Variable 2</i>
Mean	73.36916351	35.54191
Variance	1823.274859	510.5985
Observations	111	99
df	110	98
F	3.570858058	
P(F<=f) one-tail	2.98481E-10	
F Critical one-tail	1.385930401	

Source: Author’s analysis of survey data

$F > F_{critical}$, so we reject H_0 .

Thus, our evidence suggests that that the variance for high-income sample’s perceived returns for college is higher. This is in contradiction to studies (Nguyen, 2008; Attanassio and Kaufmann, 2008) which show that risk perceptions (as understood through variance in future expected earnings) toward education are much higher among low-income groups. According to our data, variability in future earnings does *not* explain low perceived returns for college among lower-income students. Here, financial constraints, lack of high-skilled jobs, quality of education, etc. may play a greater role in determining perceived returns.

Gender and Perceived Returns:

Table 5: *t*-test for the expected future income - males v/s females

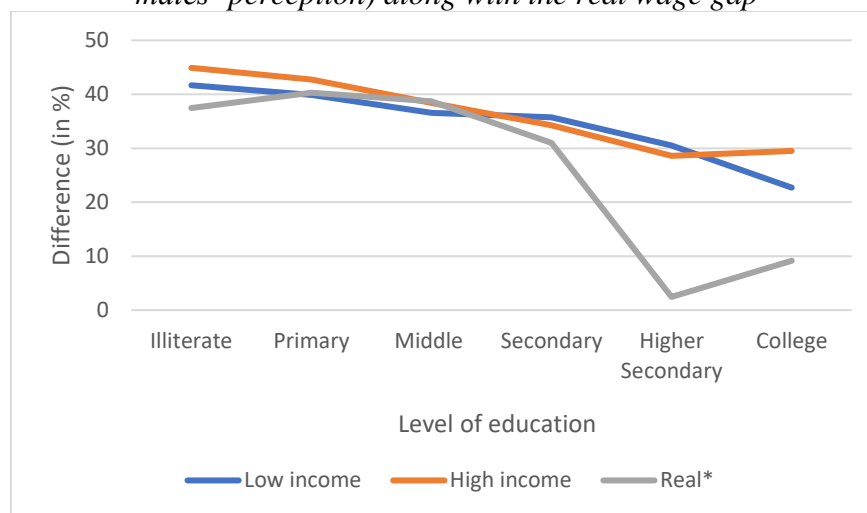
	Whole sample, Male	Whole sample, Female
Mean	39171.09145	28620.9622
t Stat	7.619024693	
t Critical two-tail	1.96187278	

Source: Author’s analysis of survey data

The t-test in Table 5 shows that there is a significant difference between the genders’ perception of future wages. Tables 14 and 15 in Appendix 2 show that this difference holds at both income levels. Across both income groups, males also reported a consistently higher future expected wage than females at all levels of education (See Appendix 2, Figure 8and9). Putting this into perspective, Figure 5 plots this gap in their expectation as a ratio of expectation of males. It is calculated as follows:

$$\text{Gap in expectation} = \frac{(\text{Males' perception} - \text{Females' perception})}{\text{Males' perception}} \times 100\%$$

Figure 5: *Difference in perception of one’s future wages (males v/s females, as a % of males’ perception) along with the real wage gap*



Source: Author’s Construction based on survey results; Source*: IGIDR

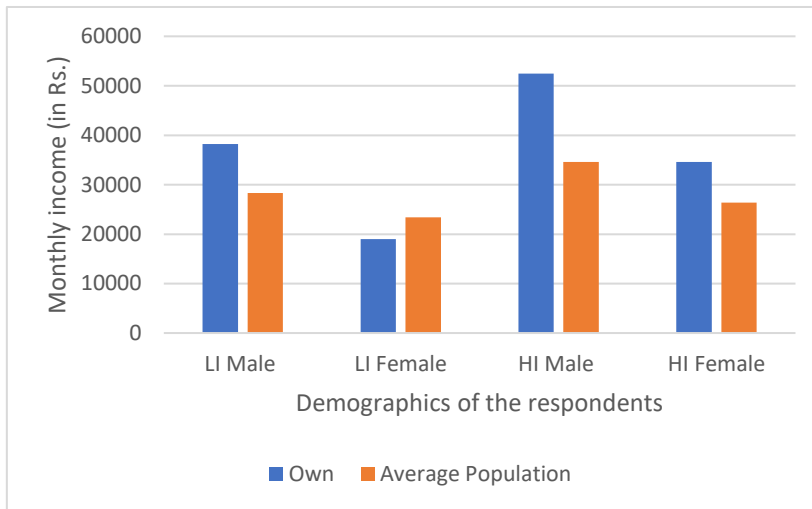
The gap in expectation of future wages follows a decreasing linear trend. Here, a variety of social factors such as a belief in patriarchy (rather, belief that employers in the labour market are patriarchal) to women having an ingrained sense of lower self-worth may explain why women expect lower wages than men across the educational spectrum. Since we asked respondents to report expected wages at 30, women likely took motherhood into consideration. Other factors constant, ‘motherhood penalty’ accounts for up to 50% of the wage gap between genders (Waldfogel, 1998). Belief in the ‘motherhood penalty’ may be why women have lower expectations about future wages. Interestingly, the variables follow a similar pattern till secondary level. Following that, real wage-gap falls steeply for higher-secondary and college while perceived differences remain roughly the same (Figure 5). Thus, in our sample, the difference in perception of future wages between males and females is greater than in reality for higher educational levels. This may be one of the factors behind low tertiary educational attainment among females.

Table 6: T-test results between expected income of oneself v/s the population at all levels of education

	Male	Female
Lower Income	Oneself > Pop Avg	Oneself < Pop Avg
Higher Income	Oneself > Pop Avg	Oneself > Pop Avg

Source: Author’s analysis of survey data

Figure 6: Predicted monthly wages – oneself v/s others



Source: Author’s Construction based on survey results

Table 6 shows that the LI female sample’s perceived future wages were significantly lower than the population average at every level of education. However, all other groups’ perceived wages are higher than the population average. This indicates that the positive effect of belonging to higher income families on perceived wages is more significant than the negative effect of gender. This may be because jobs relating to domestic help, largely occupied by women, are paid lesser than traditional jobs occupied by men with the same academic attainment (Nandal, 2005). For LI females with high levels of educational qualification, the supply of secure and well-paid jobs remains low, which either makes them opt out of the labour force or settle as an underemployed and underpaid worker (Das and Mehta, 2012). Formal sector jobs are very competitive and require connections, and here, low-income families (especially women) are likely to be at a disadvantage.

Age and Perceived Returns:

Table 7: Optimism level of the sample by t-tests

Demographics	Optimism level about the job market		
	High	→	Low
Lower income background	8-10 th	>	11-13 th = 14-16 th
Higher income background	14-16 th	>	8-10 th > 11-13 th
Combined	14-16 th	=	8-10 th > 11-13 th

Source: Author’s analysis of survey data

Table 8: Gross Enrollment Rates (GER) in India for 2015-16

Level	Primary	Middle	Secondary	Senior secondary	College
GER	99.20%	92.80%	83.90%	55.80%	20.80%

Source: MHRD, 2018

Table 7 indicates that the students currently pursuing senior secondary education and their first year in degree college have less incentive to complete their education compared to the ones in their final 3 years of degree college and secondary school. There is a sense of uncertainty about the future in senior secondary school since the shift in educational institutes depends on entrances and board exam scores, which might make an individual pessimistic about the future. Additionally, infamously tough entrances and the coaching ‘shadow education’ industry built around it puts students under considerable pressure (Bray, 2003). A study by Smith and Wertlieb (2005) shows that the academic and social expectation of first-year college students do not align with their expectations, thereby making it a little tough for them to adjust and cope.

The Gross Enrolment Rates (Table 8) support the findings from Table 7. As students transition from senior secondary to college, there is a steep fall of 35% in enrolment rates. There are various reasons that students prefer to not continue their education. ‘Education Quality Upgradation and Inclusion Programme’ report by the HRD ministry states “empirical evidence points towards the persistence of economic, social, locational, and regional disparities in access to higher education. The higher education system and institutions have to recognise and adapt to meet the demand from diverse communities of students”. The sample data collected also shows the additional factor of optimism of income that may make them lose interest in pursuing their further education.

Policy Review:

Having analysed how perceived and real returns vary along characteristic variables, it may now be instructive to discuss various methods of intervention that can make perceptions about education more attuned to reality. Here are three possible methods:

1. **Role Models** (Nguyen, 2008) – Role models serve as a direct ‘witness’ of educational success to students and parents. By appealing to their common background, this method can raise perceived returns through a direct emotional connection with the target group.
2. **Financial recognition** (Sequeira et.al, 2014) – Rewarding educational achievement with fellowships/scholarships makes schooling profitable in the short run. It reduces uncertainty about the future, thereby incentivising educational investment.
3. **Flyers and awareness campaigns** – Providing information about real schooling outcomes is a cost-effective way to change perceptions. Likely effective in situations with great information uncertainty.

Role models can be effective among lower-income families. Since the models share similar backgrounds with the students, it is easier to relate to them and build a level of trust. Financial recognition will likely be more effective in raising perceptions of students pursuing higher education since it is difficult to discern talent during early education. This would effective especially be for low-income students since apart from the reassurance of education being a good investment, it would also support poorer families that require

immediate financial gains. Flyers and campaigns are the most cost-effective and can be used with any target group.

Conclusion:

In this paper, we empirically calculate the perceived returns to education in India and discuss how perceptions vary along characteristic variables. Perceived returns to primary education are found to be low universally. Low-income families underestimate returns at college level. There is low optimism about future expected wages in the 11th-13th grade age bracket, and there is a significant difference in educational perceptions between males and females. Low-income females perceive their income to be lower than population average. Volatility in perceived returns to college education is higher for students hailing from well-to-do families, which is contradictory to most findings in other developing nations. Based on our results, we also recommend various interventions to attune perceptions about education with reality.

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Appendix 1

The Questionnaire

Section 1: Demographic questions

- 1 (a). Age
- 1 (b). Sex
- 1 (c). What standard are you studying in? (Note for college students: if you're in the First year, enter '13'. Second year students enter '14' and so on)
- 1 (d). Family income (monthly) _____
- 1 (e). What is the educational level of your parents?

Section 2: Expected income when you are 30

The next 5 questions all relate to the same hypothetical scenario mentioned below.

Question: Suppose you were to complete **x-level of education**, stop attending school, and immediately start working afterward. Think about what kinds of jobs you might get. How much do you think you will earn when you are 30 years old? Enter answer as **monthly** salary.

In the questions below, different values for the ‘**x level of education**’ are mentioned.

Answer in today's money value. **Do not** take inflation into account.

- 2 (a). x = No educational qualification i.e., never attended school (illiterate)
- 2 (b). x = primary school education (5th grade)
- 2 (c). x = middle school education (8th grade)

- 2 (d). x=secondary school education (10th grade)
- 2 (e). x=senior secondary school education (12th grade)
- 2 (f). x= college education (bachelor’s degree)

Section 3: Guessing income of current 30-year-olds

In this section, we are asking you to guess the average **monthly** salary of people who are currently 30 years old who have completed **x level of education**. This is different from the previous section in that we are asking you to guess the average salary of others (not just about the people you know personally, but people across the country), not yourself. Once again, think about the kind of jobs they will be qualified for in each scenario, and then write down the average monthly salary that a current 30-year-old with that level of education receives.

There are no wrong answers. Just write down what you think an average 30-year-old receives.

Please enter only numeric values. The answer should be the **monthly** salary.

- 3 (a). x = No educational qualification i.e. never attended school (illiterate)
- 3 (b). x = primary school education (5th grade)
- 3 (c). x=middle school education (8th grade)
- 3 (d). x=secondary school education (10th grade)
- 3 (e). x=senior secondary school education (12th grade)
- 3 (f). x= college education (bachelor’s degree)

Appendix 2

Table 9: Comparing Real and Perceived Returns

Educational Level	Real Returns	Low-Income Sample	High-Income Sample
Primary	5.6	1.1	1.7
Middle	6.2	3.3	3.6
Secondary	11.4	7.0	14.0
Higher Secondary	12.2	17.4	20.9
College	15.9	10.6	20.1

Table 10: Perceived Returns for Current 30-year-olds

Educational Level	Low-Income Sample	High-Income Sample
Primary	3.0	2.0
Middle	3.1	5.2
Secondary	4.8	10.1
Higher Sec	11.3	13.7
College	12.7	15.8

Table 11: t-Test results for low-income versus high-income perceived returns (for oneself)

	<i>LI own</i>	<i>HI own</i>
Mean	20.80857105	33.96469226
Variance	524.5951972	1408.807486
Observations	495	555
Hypothesized Mean Difference	0	
df	931	
t Stat	-6.93563796	
P(T<=t) one-tail	3.78017E-12	
t Critical one-tail	1.646491968	
P(T<=t) two-tail	7.56034E-12	
t Critical two-tail	1.962515333	

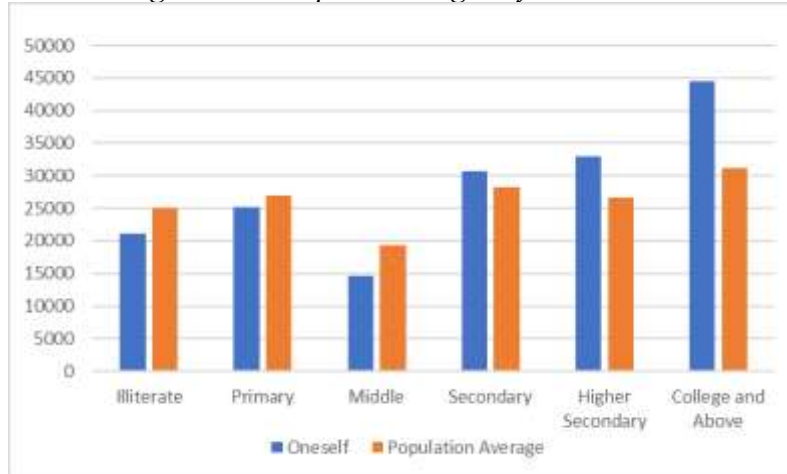
Table 12: t-Test results for perceived returns of low-income (oneself) versus low-income (population average)

	<i>LI own</i>	<i>LI popln.</i>
Mean	20.80857105	22.96670436
Variance	524.5951972	624.9863933
Observations	495	495
Pearson Correlation	0.57304348	
Hypothesized Mean Difference	0	
df	494	
t Stat	-2.161765286	
P(T<=t) one-tail	0.015557908	
t Critical one-tail	1.647944008	
P(T<=t) two-tail	0.031115815	
t Critical two-tail	1.96477774	

Table 13: t-Test results for perceived returns of high-income (oneself) versus high-income (population average)

	<i>HI popln</i>	<i>HI own</i>
Mean	31.65503121	33.96469226
Variance	1067.913776	1408.807486
Observations	555	555
Pearson Correlation	0.645155459	
Hypothesized Mean Difference	0	
df	554	
t Stat	-1.819749854	
P(T<=t) one-tail	0.034668323	
t Critical one-tail	1.647608746	
P(T<=t) two-tail	0.069336646	
t Critical two-tail	1.964255274	

Figure 7: Average Future Expected Wages by Parent's Education Level



Source: Author's Construction based on survey results

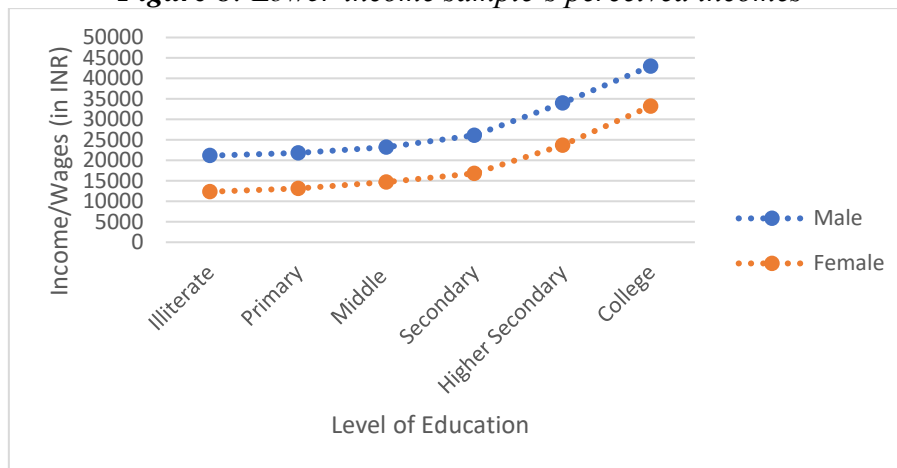
Table 14: t-test for the expected future income – HI males v/s HI females

	HI Male	HI Female
Mean	52495.09804	34682.91782
t Stat	7.724186413	
t Critical two-tail	1.964424727	

Table 15: t-test for the expected future income – LI males v/s LI females

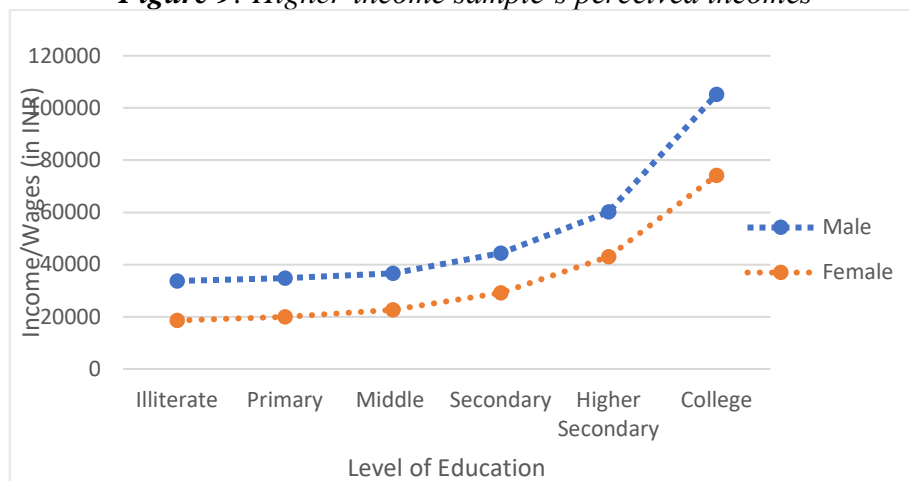
	LI Male	LI Female
Mean	28211.02151	18968.46847
t Stat	8.698949335	
t Critical two-tail	1.964475628	

Figure 8: Lower-income sample's perceived incomes



Source: Author's Construction based on survey results

Figure 9: Higher-income sample's perceived incomes



Source: Author's Construction based on survey results

Analysis of the Relationship Between an Individual's Happiness and Their Income*

Author: Soumya Jain (TY) and Pramiti Rawat (SY)

Class : BBA- Integrated BBA-MBA Programme

College : Institute of Management, Nirma University

Ph. No.: +91 7227018106

Email Id: soumyajain_18@nirmauni.ac.in

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Abstract:

The relationship between happiness and income is complex. Recently, having more income has been associated with greater happiness. However, there are many factors which come into play while determining what makes us happy. This study is designed to unravel the causal relationships among those socio-economic, cultural, demographic and psychological factors that affect happiness and income. DEMATEL analysis is used in the study to map the impact relationship between the various factors.

It was discovered that income is not the cause of an individual's happiness. An individual's lifestyle, personality, health and well-being, social capital and other variables affect the absolute as well as relative income of a person. A hierarchical structure based on influencing power of selected variables was also developed. This study highlights that a person's happiness is not depended on his income but on various other qualitative and quantitative factors.

Keywords: Happiness, Income, DEMATEL, subjective well-being, interdependence

Introduction:

'Will more money truly make us happier?' is a debatable question. A lot of research has been done in this area by experts from the field of economics, psychology, and philosophy. Research has reflected that income and happiness are positively correlated but only up to a certain extent (Graham 2005). Money's added value to life satisfaction becomes smaller as income increase. But there are many other factors such as social capital, education etc. that affect happiness.

Happiness refers to the economic and social well-being of an individual. It is quite subjective in nature and difficult to quantify. Many individuals believe that happiness lies in materialistic wealth. While others find happiness in small pleasures, challenging activities, etc. Income refers to the monetary rewards that a person gets in return for goods sold, or services provided. As a person's income increases, he can afford more goods and services. This enhances his well-being, but will it really make the person happy is indeterminate. This is because the happiness a person can derive from money becomes static once basic needs are met. Then a lot of non-financial factors come into play and affect the happiness. This research paper attempts to study the relation between happiness and

various income and non-income factors that affect happiness. It also analyzes the extent to which these factors affect each other.

Scope of Research:

The relationship between an individual's happiness and their income is a topic for one of the most enduring debates for human well-being researchers. The pursuit of happiness has been incorporated in the works of philosophers and economists ranging from Aristotle to Jeremy Bentham, John Stuart Mills, and Adam Smith. The definition of happiness ranges from 'welfare' to hedonistic 'pleasure' or 'satisfaction' and 'enjoying life' and 'feeling good'. Research indicates a link between happiness and income (Mahadea, 2013). However, the orthodox framework focused purely on income leading to them missing the key elements of welfare (Graham, 2005). Consequently in 1974, Richard Easterlin formulated the Easterlin paradox which advocated using measures of subjective well-being to judge the quality of life (Helliwell, 2015). The pattern of change in material aspirations over the life cycle explains some of the paradoxical relationships between subjective well-being and income (Easterlin, 2001). Thus, happiness economics represents a new direction for research in well-being. It relies on more expansive notions of utility and welfare, including interdependent utility functions, procedural utility, and the interaction between rational and non-rational influences in determining economic behavior (Graham, 2005).

Based on the extensive literature review the following variables were chosen and identified under four heads of demographic, psychological, socio-economic, and cultural variables along with Happiness and Income for this study.

Demographic: Age, Educational Qualifications, Mobility, Place of Residence, Health and Well-being.

Psychological: Personality Traits, Social Capital, Job Satisfaction, Parenting Practices, Relative Income.

Socio-economic: Wealth and Affluence, Occupation, Lifestyle Choices, Societal Status, Discrimination.

Cultural: Ethnicity, Beliefs, Rituals and Traditions, Forms of Social Organization, Social Security

Objective of Research:

This study aims to analyze the relationship between an individual's income and their happiness by taking various economic, psychological, socio-economical, demographic and cultural variables into consideration. The selected variables include, relative income, social capital, social security, lifestyle choices, educational level, and parenting practices. Stutzer and Frey (2012) claim that people form aspirations about their income based on social comparisons and due to processes of previous income. An individual's well-being is also significantly impacted by their environment of economic and social security. Happiness also depends on personal relationships i.e. social capital. Research also indicates that people with more capabilities and freedom tend to earn more income and are happier than those with fewer skills (Stutzer & Frey, 2012). Another important aspect of an individual's subjective well being is the effect/influence of parenting practices. This is because, interactions in a family; among parents and children play a crucial role in the development of an individual (Bahrami, 2017). According to Mahadea (2013), Life satisfaction involves more than just income. Happiness can be bought in other

‘currencies’, like religion, education, friendships, and family relationships.

Research Methodology:

The methodology used to analyze the inter-relationship between the selected variables is DEMATEL. Decision Making Trial and Evaluation Laboratory (DEMATEL) method was developed in 1971 by Geneva Research Centre, Battelle Memorial Institute (KOCA & MATHIYAZHAGAN, 2020). This method analyzes the causal relationship between various factors using a structural modelling system. By combining the centrality and causality of system variables, the most basic purpose is to select the system's key factors. The status and role of factors in the system are indicated by centrality. Causality represents the cause or effect between the factors (Du, Li, & Sun, 2019). It also helps in developing the impact relationship diagram of the factors involved.

The steps involved in the DEMATEL analysis include (Ou, Liu, & Chin, 2012):

1. Calculating the initial average matrix from the data obtained through the questionnaire.
2. Normalizing the direct relationship matrix.
3. Establishing the total relation matrix
4. Develop the influential relationship map.
5. Building the cause-effect diagram.

The paper extends the traditional DEMATEL method to deal with quantitative and qualitative factors that affect happiness and income. It will help in identifying interdependent relationship between factors in complex system. It will help in recognizing the casual and dependency relation among the factors involved as there are multiple factors that affect happiness in addition to income.

In this study, twenty factors that affect income and happiness were identified under the heads- socio-economic factors, demographic factors, psychological factors and cultural factors. The factors were identified on the basis of extensive literature review. Once the factors were identified, it was imperative to identify pairwise relationship between the factors. For this a fuzzy direct relationship matrix was developed. Linguistic expressions by means of fuzzy scale were used for identifying the relationship between factors. For this reason, a four-scale scale was designed with no influence (0), low influence (1), high influence (2), a very high influence (3) (Amiri et. al. 2011). The set of numbers denote the degree in which the criterion i affects the criterion j . For collection of the primary data, sixteen respondents in the age group twenty to fifty years were asked to complete the direct relationship matrix questionnaire. The questionnaire was self-administered by the participants. After collecting the responses, DEMATEL was performed.

The first step in the DEMATEL method is to obtain an average matrix (A) as shown in Table 1. Next, the average matrix is normalized to get the initial direct-relation matrix ($M = k.A$). According to Table 2, $k=40.3375$ in this study. The initial direct-relation matrix (M) is then converted to the total impact matrix (T) where $T = M \times (I - M)^{-1}$. On obtaining the total impact matrix, the average value of matrix T are calculated as shown in Table 3. This average value is the threshold value (α). In this study, $\alpha=0.13795$. The final step of the DEMATEL Method is determining the causal relationship. Here, the values of the rows are summed (R_i) and the values of the columns are summed (C_j) in order to obtain $R_i + C_j$ and $R_i - C_j$ as given in Table 4. The values of ($R_i + C_j$) are represented on the horizontal axis and

are defined as prominence. They indicate the total degree to which an element exerts influence on and is influenced by other elements. The values of (Ri-Cj) are represented on the vertical axis and are defined as a relation. They indicate the difference in the degree to which an element is affected and affects other elements. The values obtained for the same in this study are given in Figure 1. After obtaining all the matrices and the causal diagram, the results were analyzed.

Table 1: Average Matrix (A)

(i) \ (j)	Age	Educational Qualifications	Mobility	Place of Residence	Health and Well Being	Personality	Social Capital	Job Satisfaction	Parenting Practices	Relative Income	Wealth and Affluence	Occupation	Lifestyle	Societal Status	Discrimination	Ethnicity	Beliefs	Rituals and Traditions	Forms of Social Organization	Social Security	Happiness	Income
Age	0	0.8125	1.25	0.25	1.5	0.8125	0.75	0.75	1.25	0.6875	1	0.9375	1.3125	0.9375	0.625	0.333333333	0.5	0.625	0.75	1	0.875	0.75
Educational Qualifications	2	0	1.4375	1.5625	1	1.125	1.125	1.1875	2.0625	1.4375	2.0625	1.5625	1.6875	1.5	1.0625	0.9375	1.125	0.9375	0.75	1.0625	1.25	1.9375
Mobility	2	1.25	0	1.8125	2	1.25	1.1875	1.3125	0.8125	1.1875	1.5	1.875	1.8125	1.5	1.0625	1.0625	1.0625	0.875	1.1875	1.0625	1.3125	2.1875
Place of Residence	1	1.6	2.3125	0	0.9375	0.8125	1.125	0.875	0.8125	1.75	2.125	2.1875	2.1875	1.5625	1.25	1.4375	0.9375	1.1875	1.625	1.625	1.3125	2.5625
Health and Well Being	2.26667	0.866666667	1.625	1.8125	0	1.5	1.975	2	1.875	1.6875	2.125	1.9375	2.375	1.375	1.375	0.8125	0.625	0.875	1.25	1.5	2.6875	2
Personality	2	2.333333333	1.375	1.875	1.875	0	1.625	1.375	2.125	1.3125	1.5625	1.6875	2	1.875	1.6875	0.9375	1.6875	1.1875	1.4375	1.1875	2.4375	1.75
Social Capital	1.86667	1.866666667	1.5625	1.5625	1.8125	2.125	0	1.25	1.5625	1.5	1.75	1.375	1.625	1.875	1.4375	1.375	1.125	0.8125	1.75	1.625	1.8125	1.6875
Job Satisfaction	1.66667	2.066666667	1.25	1.3125	2.3125	2.0625	1.6875	0	1.3125	1.75	1.3125	1.6875	1.5	1	1.375	0.625	1	0.4375	1.0625	1.375	2.3125	2.0625
Parenting Practices	1.93333	1.666666667	1.0625	1.625	1.625	2	1.125	1.25	0	1	1.375	1.5625	1.625	1.125	1.0625	1.25	1.875	1.6875	1.3125	0.9375	1.8125	1.375
Relative Income	1.53333	2.066666667	1.375	1.25	1.6875	1.375	1.4375	2	0.9375	0	1.625	1.875	1.8125	1.3125	1.1875	0.875	0.5625	0.4375	1.0625	1.1875	1.5	1.6875
Wealth and Affluence	1.8	2.133333333	1.125	1.4375	1.6875	1.3125	1.3125	1.4375	1.0625	1.6875	0	1.875	1.8125	1.5	1.3125	0.6875	0.3125	0.625	1.125	1.3125	1.3125	2.25
Occupation	1.66667	2.533333333	1.75	1.8125	1.875	1.9375	1.625	1.8125	1.3125	1.8	1.6875	0	1.6875	1.5	1.375	1.0625	0.875	0.75	0.875	1.375	1.4375	2.0625
Lifestyle	2.13333	2.266666667	2.125	2.1875	2.5	2.25	1.75	1.5625	2.0625	2.25	2.375	2.1875	0	2.1875	1.1875	1.25	1.3125	1.3125	1.6875	1.375	1.9375	2.4375
Societal Status	1.86667	2	1.375	2	1.5	2.125	2.25	0.9375	1.0625	2	2.3125	1.75	1.8125	0	1.875	1.5625	1.25	1.125	1.5	1.5	1.5	2.1875
Discrimination	0.6	1.357142857	0.75	1.375	1	0.875	1.375	0.8125	0.75	1.1875	1.5	1.4375	1.125	1.6875	0	2	2.0625	1.4375	1.625	1.1875	1.0625	1.4375
Ethnicity	0.6	0.733333333	0.75	1.25	0.5	0.625	0.5625	0.5625	0.6875	0.375	0.5625	0.5625	0.5	1.0625	0.9375	0	1.2	1.3125	0.875	0.6875	0.6875	0.6875
Beliefs	1.46667	1.8	1.1875	1.4375	0.625	1.0625	1.125	0.6875	1.8125	0.625	0.75	0.875	1.25	1.5	1.4375	2	0	2.0625	1.5625	1.0625	1.1875	0.75
Rituals and Traditions	1.53333	1.333333333	0.8125	1.875	0.6875	1.0625	1.0625	0.4375	2.0625	0.5625	0.6875	0.5	1.125	1.1875	1.375	2.25	2.5625	0	1.875	0.75	0.8125	0.625
Forms of Social Organization	1.66667	1.4	1.1875	2.25	0.875	1.625	1.8125	0.75	1.3125	1.5	1.8125	1.375	1.875	1.875	1.3125	1.625	1.375	1.5625	0	1.25	1.3125	1.125
Social Security	1.66667	1.6	1.25	2.3125	1.5825	1.3125	1.9375	1.125	1.25	1.5	1.8125	1.6875	1.5625	1.8125	1.5	0.875	0.6875	0.933333333	1.5	0	1.5625	1.4375
Happiness	1.26667	2	1.5	2	2.6875	2.3125	1.875	2.5	2.125	2	1.625	1.9375	2.375	1.9375	2.0625	0.6875	1.625	1.25	1.5	1.8125	0	2.125
Income	1.86667	2.6	1.6875	1.5625	2	1.9375	1.3125	2.0625	0.875	1.5625	1.8125	2.3125	1.9375	1.125	1.25	0.875	0.4375	0.3125	0.75	1	1.3125	0

Table 2: Initial Direct Relation Matrix (M)

(i) \ (j)	Age	Educational Qualifications	Mobility	Place of Residence	Health and Well Being	Personality	Social Capital	Job Satisfaction	Parenting Practices	Relative Income	Wealth and Affluence	Occupation	Lifestyle	Societal Status	Discrimination	Ethnicity	Beliefs	Rituals and Traditions	Forms of Social Organization	Social Security	Happiness	Income	
Age	0	0.020142547	0.030988534	0.006197707	0.037186241	0.020142547	0.018593121	0.018593121	0.030988534	0.017043694	0.024790827	0.023241401	0.032537961	0.023241401	0.015494267	0.000263609	0.012395414	0.015494267	0.018593121	0.024790827	0.021691974	0.018593121	0.018593121
Educational Qualifications	0.04958	0	0.035636814	0.038785668	0.024790827	0.027889681	0.027889681	0.029439108	0.051131081	0.035636814	0.051131081	0.038785668	0.041834521	0.037186241	0.026340254	0.023241401	0.027889681	0.023241401	0.018593121	0.026340254	0.030988534	0.048032228	0.048032228
Mobility	0.04958	0.030988534	0	0.044933375	0.049581655	0.030988534	0.029439108	0.032537961	0.020142547	0.029439108	0.037186241	0.046482801	0.044933375	0.037186241	0.026340254	0.026340254	0.026340254	0.021691974	0.029439108	0.026340254	0.032537961	0.054229935	0.054229935
Place of Residence	0.02479	0.039665324	0.057328788	0	0.023241401	0.020142547	0.027889681	0.021691974	0.020142547	0.043383948	0.052680508	0.054229935	0.054229935	0.038785668	0.030988534	0.035636814	0.023241401	0.029439108	0.040285095	0.040285095	0.032537961	0.063526495	0.063526495
Health and Well Being	0.05619	0.021485384	0.040285095	0.044933375	0	0.037186241	0.034087388	0.049581655	0.046482801	0.041834521	0.052680508	0.048032228	0.058878215	0.034087388	0.034087388	0.020142547	0.015494267	0.021691974	0.030988534	0.037186241	0.066625349	0.049581655	0.049581655
Personality	0.04958	0.057845264	0.034087388	0.046482801	0.046482801	0	0.040285095	0.034087388	0.052680508	0.032537961	0.038735668	0.041834521	0.049581655	0.046482801	0.041834521	0.023241401	0.041834521	0.029439108	0.035636814	0.029439108	0.060427642	0.043383948	0.043383948
Social Capital	0.04628	0.046276211	0.038735668	0.038785668	0.044933375	0.052680508	0	0.030988534	0.038735668	0.037186241	0.043383948	0.034087388	0.040285095	0.046482801	0.035636814	0.034087388	0.027889681	0.020142547	0.043383948	0.040285095	0.044933375	0.041834521	0.041834521
Job Satisfaction	0.04132	0.051234577	0.030988534	0.032537961	0.057328788	0.051131081	0.041834521	0	0.032537961	0.043383948	0.032537961	0.041834521	0.037186241	0.024790827	0.034087388	0.015494267	0.024790827	0.010845987	0.026340254	0.034087388	0.05328788	0.051131081	0.051131081
Parenting Practices	0.04793	0.041318046	0.026340254	0.040285095	0.040285095	0.049581655	0.027889681	0.030988534	0	0.024790827	0.034087388	0.038735668	0.040285095	0.027889681	0.026340254	0.030988534	0.046482801	0.041834521	0.032537961	0.023241401	0.044933375	0.034087388	0.034087388
Relative Income	0.03801	0.051234577	0.034087388	0.030988534	0.041834521	0.034087388	0.035636814	0.049581655	0.023241401	0	0.040285095	0.046482801	0.044933375	0.032537961	0.029439108	0.021691974	0.01394484	0.010845987	0.026340254	0.029439108	0.057186241	0.041834521	0.041834521
Wealth and Affluence	0.04462	0.052887098	0.027889681	0.035636814	0.041834521	0.032537961	0.032537961	0.035636814	0.026340254	0.041834521	0	0.046482801	0.044933375	0.037186241	0.032537961	0.017043694	0.007747134	0.015494267	0.027889681	0.032537961	0.032537961	0.055779362	0.055779362
Occupation	0.04132	0.062803429	0.043383948	0.044933375	0.046482801	0.048032228	0.040285095	0.044933375	0.032537961	0.034707158	0.041834521	0	0.041834521	0.037186241	0.034087388	0.026340254	0.021691974	0.018593121	0.021691974	0.034087388	0.035636814	0.051131081	0.051131081
Lifestyle	0.05289	0.056192542	0.052680508	0.054229935	0.061977068	0.05779362	0.043383948	0.038735668	0.051131081	0.055779362	0.058878215	0.054229935	0	0.054229935	0.029439108	0.030988534	0.032537961	0.032537961	0.041834521	0.034087388	0.048032228	0.060427642	0.060427642
Societal Status	0.04628	0.049581655	0.034087388	0.049581655	0.037186241	0.052680508	0.05779362	0.023241401	0.026340254	0.049581655	0.057328788	0.043383948	0.044933375	0	0.046482801	0.038735668	0.030988534	0.027889681	0.037186241	0.037186241	0.057186241	0.037186241	0.054229935
Discrimination	0.01487	0.033644694	0.018593121	0.034087388	0.024790827	0.021691974	0.034087388	0.020142547	0.018593121	0.029439108	0.037186241	0.035636814	0.027889681	0.041834521	0	0.049581655	0.051131081	0.035636814	0.040285095	0.029439108	0.026340254	0.035636814	0.035636814
Ethnicity	0.01487	0.01817994	0.018593121	0.030988534	0.012395414	0.015494267	0.01394484	0.01394484	0.017043694	0.00929656	0.01394484	0.01394484	0.012395414	0.026340254	0.023241401	0	0.029748993	0.032537961	0.021691974	0.017043694	0.017043694	0.017043694	0.017043694
Beliefs	0.03636	0.044623489	0.029439108	0.035636814	0.015494267	0.026340254	0.027889681	0.017043694	0.044933375	0.015494267	0.018593121	0.021691974	0.030988534	0.037186241	0.035636814	0.049581655	0	0.051131081	0.038735668	0.026340254	0.029439108	0.018593121	0.018593121
Rituals and Traditions	0.03801	0.033054437	0.020142547	0.046482801	0.017043694	0.026340254	0.026340254	0.010845987	0.051131081	0.01394484	0.017043694	0.012395414	0.027889681	0.029439108	0.034087388	0.055779362	0.063526495	0	0.046482801	0.018593121	0.020142547	0.015494267	0.015494267
Forms of Social Organization	0.04132	0.034707158	0.029439108	0.05779362	0.021691974	0.040285095	0.044933375	0.018593121	0.032537961	0.037186241	0.044933375	0.034087388	0.046482801	0.046482801	0.032537961	0.040285095	0.034087388	0.038735668	0	0.030988534	0.032537961	0.027889681	0.027889681
Social Security	0.04132	0.039665324	0.030988534	0.057328788	0.038735668	0.032537961	0.048032228	0.027889681	0.030988534	0.037186241	0.044933375	0.041834521	0.038735668	0.044933375	0.037186241	0.021691974	0.017043694	0.023138106	0.037186241	0	0.038735668	0.035636814	0.035636814
Happiness	0.0314	0.049581655	0.037186241	0.049581655	0.066625349	0.057328788	0.046482801	0.061977068	0.052680508	0.049581655	0.040285095	0.048032228	0.058878215	0.048032228	0.051131081	0.017043694	0.040285095	0.030988534	0.037186241	0.044933375	0	0.052680508	0.052680508
Income	0.04628	0.064456151	0.041834521	0.038785668	0.049581655	0.048032228	0.032537961	0.051131081	0.021691974	0.038735668	0.044933375	0.057328788	0.048032228	0.027889681	0.030988534	0.021691974	0.010845987	0.007747134	0.018593121	0.024790827	0.032537961	0	0

Table 3: Total Impact Matrix (T)

(i) \ (j)	Age	Educational Qualifications	Mobility	Place of Residence	Health and Well Being	Personality	Social Capital	Job Satisfaction	Parenting Practices	Relative Income	Wealth and Affluence	Occupation	Lifestyle	Societal Status	Discrimination	Ethnicity	Beliefs	Rituals and Traditions	Forms of Social Organization	Social Security	Happiness	Income
Age	0.07389	0.096420012	0.091951339	0.079093176	0.105985286	0.087372935	0.080830011	0.075635269	0.091891298	0.079706515	0.096210113	0.094396276	0.106313088	0.088999973	0.073660474	0.058285646	0.061938436	0.0603296	0.074602369	0.079474338	0.088772545	0.094171018
Educational Qualifications	0.16217	0.12106733	0.13382137	0.149634881	0.13356066	0.132363929	0.124385243	0.119803682	0.14475434	0.132471711	0.161270697	0.149674822	0.157116656	0.139254586	0.116776007	0.10112231	0.104408917	0.093150572	0.106377445	0.112218643	0.134424091	0.164699373
Mobility	0.16488	0.153659599	0.100373964	0.15846859	0.159240857	0.137705132	0.12851224	0.125253002	0.118279421	0.129573014	0.151589417	0.159826661	0.163267794	0.142027333	0.119203163	0.105788004	0.104199242	0.092979012	0.118599781	0.114722537	0.138904309	0.173627211
Place of Residence	0.14893	0.17018894	0.16085061	0.1236454	0.141404919	0.134333323	0.133577487	0.120864191	0.123568478	0.148881715	0.173213991	0.174341842	0.178843683	0.150556601	0.12939286	0.120258206	0.106476472	0.104777196	0.134178362	0.112895021	0.144307656	0.189998739
Health and Well Being	0.19651	0.16628661	0.155636128	0.177990867	0.132491256	0.162733	0.150232773	0.157841308	0.159587957	0.158720144	0.185236142	0.181109902	0.196646591	0.15728347	0.142503183	0.112672117	0.107961566	0.105038693	0.135529411	0.140169039	0.189074425	0.190297029
Personality	0.18853	0.203559732	0.153013243	0.181746822	0.179624366	0.129868265	0.159083	0.145313368	0.169877328	0.152717562	0.176259868	0.178306046	0.19386752	0.172717329	0.153160213	0.120164963	0.13680519	0.116465237	0.143476709	0.135765353	0.186543349	0.187823944
Social Capital	0.17737	0.184048128	0.150128689	0.168654918	0.169357251	0.172199607	0.113583091	0.135762438	0.14925796	0.150004047	0.172605227	0.16321883	0.174860933	0.165387937	0.140803037	0.124319122	0.1174239	0.102136975	0.144124035	0.139933342	0.164902019	0.177841652
Job Satisfaction	0.16672	0.182587901	0.138036819	0.156195068	0.176205125	0.165609477	0.148319978	0.10247308	0.138737951	0.150879947	0.156607159	0.164974031	0.16620053	0.139279012	0.134281994	0.101094086	0.109367836	0.088416948	0.122747369	0.129274497	0.171582046	0.180563879
Parenting Practices	0.16576	0.165760324	0.12755152	0.157059066	0.152043397	0.157047968	0.129016523	0.124876175	0.102268137	0.126350973	0.150042621	0.153790628	0.161161447	0.136085999	0.121730902	0.113237136	0.127204866	0.115307267	0.124409637	0.113508565	0.152693528	0.156281895
Relative Income	0.19366	0.172200342	0.132466493	0.144836818	0.152225891	0.140563641	0.134093725	0.141221395	0.120900319	0.106911575	0.154131392	0.159447	0.162560623	0.13719921	0.121602887	0.100103587	0.09204157	0.08181136	0.114789019	0.117241983	0.143247356	0.162125302
Wealth and Affluence	0.16686	0.174876703	0.127724271	0.150111492	0.152896667	0.139891782	0.132016855	0.129018458	0.124387271	0.141972678	0.116760651	0.160650666	0.163737311	0.142349182	0.125155507	0.096588885	0.086083383	0.086620978	0.11692979	0.120762513	0.139455139	0.175896304
Occupation	0.16995	0.196488273	0.152314104	0.170781159	0.168392727	0.164987557	0.149232117	0.146829483	0.14076147	0.145330167	0.168414414	0.127788082	0.173182933	0.15344088	0.136657788	0.113997107	0.108731423	0.097642561	0.120883763	0.131358721	0.15743877	0.184178944
Lifestyle	0.21101	0.222050628	0.186449677	0.209260526	0.21106481	0.199944357	0.177856038	0.165206074	0.183267816	0.19046725	0.213774864	0.208755231	0.16427438	0.196403853	0.156382114	0.139362642	0.139342052	0.129971816	0.162976231	0.154181232	0.192629168	0.223562072
Societal Status	0.18418	0.195352635	0.15221435	0.189474723	0.16662311	0.178318512	0.17248282	0.134242464	0.143379737	0.167592887	0.192601654	0.178916026	0.186257346	0.127630037	0.156550164	0.133930413	0.124892971	0.113415141	0.1440166	0.142135657	0.163652141	0.196899952
Discrimination	0.13874	0.14269629	0.106798118	0.136867782	0.121499981	0.116689628	0.122106462	0.101676438	0.106314206	0.117506913	0.137987524	0.135581132	0.133134655	0.135451512	0.084083495	0.121665229	0.120987991	0.100369118	0.120135516	0.107656764	0.12018394	0.14153091
Ethnicity	0.07648	0.08310651	0.070892142	0.091928206	0.070101773	0.071812739	0.06688138	0.06199551	0.069322573	0.062189212	0.074575139	0.074042903	0.075672448	0.082268498	0.072820486	0.04466777	0.072667094	0.071259319	0.070134862	0.06385138	0.072961628	0.080532398
Beliefs	0.13604	0.148607198	0.114142247	0.135307936	0.10993554	0.118033465	0.113277561	0.095436488	0.129283620	0.101201084	0.11737822	0.119053852	0.13275995	0.12834432	0.115734077	0.119992919	0.071975851	0.114031818	0.116823692	0.10213526	0.120150144	0.121996136
Rituals and Traditions	0.13179	0.13187046	0.100952583	0.139712301	0.105168876	0.112479842	0.106756394	0.084655309	0.138341603	0.094531184	0.110158344	0.104785603	0.124195642	0.116272942	0.109812942	0.122759786	0.128720009	0.062903526	0.12013562	0.090744395	0.106487125	0.112795458
Forms of Social Organization	0.16105	0.161840956	0.132290429	0.173664441	0.136096345	0.149971526	0.148872887	0.114062727	0.134044828	0.140034111	0.162744493	0.151650275	0.168604913	0.155645592	0.129079919	0.124007854	0.116679388	0.113534513	0.094926063	0.122465563	0.142136971	0.151124897
Social Security	0.16342	0.168795726	0.135964569	0.177049951	0.155090588	0.14534076	0.152015914	0.125741561	0.133945329	0.142028579	0.165881256	0.162079162	0.164519254	0.155951632	0.135078631	0.106668415	0.100833313	0.098033579	0.131761471	0.094521764	0.150673727	0.163893799
Happiness	0.18877	0.214076572	0.17013601	0.203458277	0.213579208	0.20004559	0.179627526	0.184922553	0.183481156	0.183425136	0.194555239	0.201061745	0.217607079	0.189166544	0.175218177	0.125663877	0.146125273	0.127960865	0.157854093	0.162881553	0.145965763	0.214304112
Income	0.16843	0.191607895	0.145828276	0.15838529	0.166084149	0.159347653	0.136583714	0.148308094	0.125387249	0.144070651	0.165353188	0.176638567	0.172616655	0.138996416	0.128208428	0.104226242	0.093424395	0.082772425	0.112429705	0.118053334	0.14550584	0.129641499

Table 4: Values of Ri, Cj, Ri+Cj, and Ri-Cj

Variables	Code	Ri	Cj	Ri+Cj	Ri-Cj
Age	AG	1.841153791	3.463238523	5.304392314	-1.622085
Educational Qualifications	EQ	2.892531454	3.64713552	6.539666973	-0.754604
Mobility	MO	2.960675887	2.93752595	5.898201837	0.02315
Place of Residence	PR	3.145798313	3.431327691	6.577126004	-0.285529
Health and Well Being	HW	3.45555411	3.279770377	6.735324487	0.175784
Personality	PE	3.563682763	3.176660908	6.740343671	0.387022
Social Capital	SC	3.357385537	2.957446013	6.31483155	0.39994
Job Satisfaction	JS	3.190143276	2.742344066	5.932487342	0.447799
Parenting Practices	PP	3.03316953	2.923042052	5.956211582	0.110127
Relative	RI	2.939399958	2.961489655	5.900889613	-0.02209
Wealth and Affluence	WA	2.965471042	3.397193593	6.362664636	-0.431723
Occupation	OC	3.274889537	3.37988928	6.654778818	-0.105
Lifestyle	LI	4.037582166	3.53538069	7.572962856	0.502201
Societal Status	SS	3.542681496	3.150685716	6.693367212	0.391996
Discrimination	DI	2.6496556	2.777676452	5.427332052	-0.128021
Ethnicity	ET	1.580164295	2.410369115	3.99053341	-0.830205
Beliefs	BE	2.581642162	2.379016102	4.960658264	0.202626
Rituals and Traditions	RT	2.448008434	2.158828699	4.606837133	0.28918
Forms of Social Organization	FSO	3.084528391	2.688046935	5.772575326	0.396481
Social Security	SOS	3.130988867	2.625581254	5.756570122	0.505408
Happiness	HA	3.979286191	3.168015956	7.147302147	0.81127
Income	IN	3.111797973	3.575526223	6.687324196	-0.463728

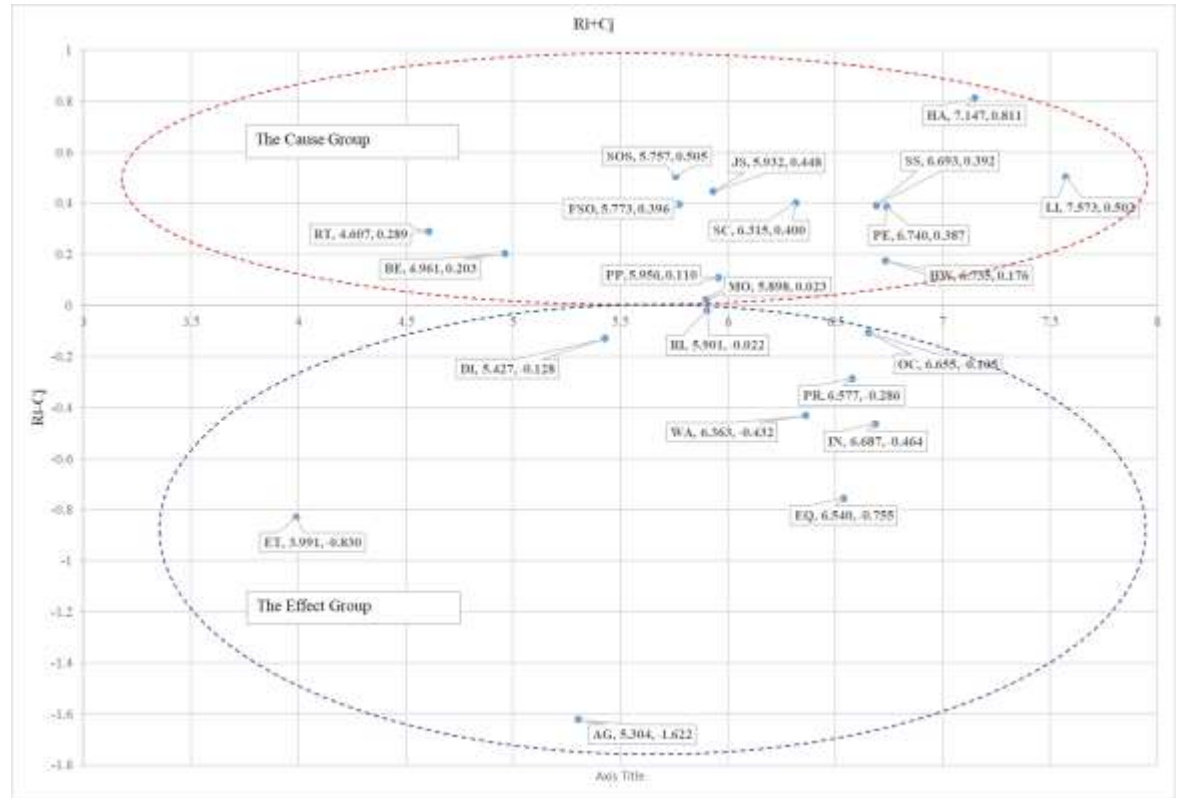


Figure 1: The Causal Diagram

Data Analysis:

On mapping of the impact relationship between the selected variables, following were the results obtained. According to Figure 2, the importance of the variables can be classified based on (R_i+C_j) . These variables can be further classified into two groups based on their (R_i-C_j) values ref. Table 4:

1. The Cause Group

This group includes the variables which greatly influence all the other selected variables. These variables have a positive (R_i-C_j) value and thus lead to the other variables.

a. Lifestyle (LI):

This variable can be seen to have the highest influencing power as well as a positive (R_i-C_j) value. This means that an individual's lifestyle plays the most significant role in determining the effect of and on other variables. Thus, lifestyle should be given more consideration while studying the happiness-income relationship.

b. Happiness (HA):

Happiness is the next higher influencing variable. Since it is a cause group variable, it demonstrates that happiness is not influenced by variables like income. This also refutes the commonly acknowledged claim that happiness is affected by an individual's income. Thus, it can be claimed that happiness matters to income and not vice versa.

c. Personality (PE):

An individual's personality influences all their economic and non-economic decisions according to this study. This variable, however, has a lower degree of influence on an individual's job satisfaction, wealth and affluence, occupation, etc. The data also indicates that an individual's personality should be given greater consideration while studying the causal relationship between factors leading to an individual's happiness and income.

d. Health and Well-Being (HW):

This variable has a high degree of influence on the selected variables. It leads to (causes) an individual's occupation, educational qualifications, etc. This also illustrates that in order for an individual to earn the necessary income and gain wealth and affluence, they need to have a high degree of health and well-being.

e. Societal Status (SS):

The standing that an individual holds in society influences the socio-economic, psychological, as well as cultural aspects of their lives. This

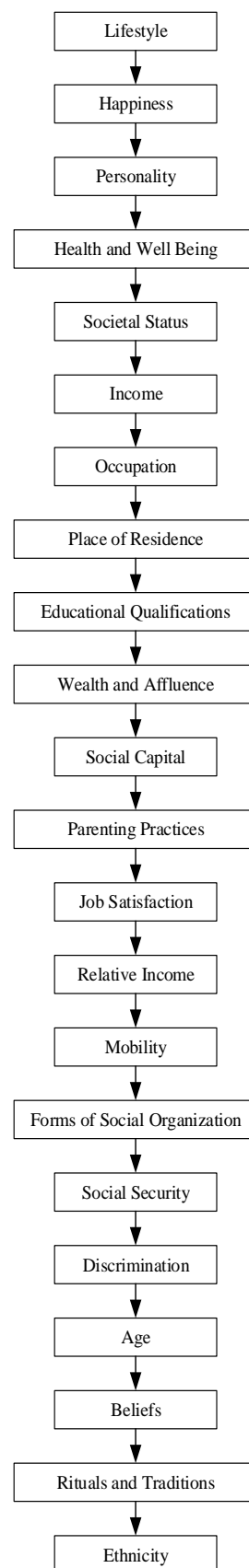


Figure 2: Influencing Power of Selected Variables

variable is ranked 5th in its influencing power and leads to the inference that it plays an important role in determining their occupation and even income.

f. Social Capital (SC):

An individual thrives not only by fulfilling their materialistic desires but also by maintaining interpersonal relationships. Thus, social capital moderately influences the other selected variables.

g. Parenting Practices (PP):

The influencing power of this variable is moderate. This suggests that parenting practices play a vital role in the development of an individual and even affect variables like relative income and educational qualifications.

h. Job Satisfaction (JS):

The level of contentment an employee feels with the work that they are doing will affect their income as well as their relative income. The study suggests that job satisfaction plays a moderate role in influencing the selected variables.

i. Mobility (MO):

According to this study, a person's ability to move across freely from one place to another (city, county, etc.) moderately influences factors like place of residence, occupation, income, etc.

j. Forms of Social Organization (FSO):

The pattern of relationships between individuals in a society/the social structure influences the effect group variables like discrimination, occupation, etc. However, the degree of influence is low. This suggests that this variable has a lower influential prominence.

k. Social Security (SOS):

The protection that society provides in terms of economic security and social welfare has a low influential prominence in the selected criteria. However, social security plays the most significant role ($R_i-C_j=0.5054$) in influencing the variables like place of residence, discrimination, etc.

l. Beliefs (BE):

An individual's religious beliefs, political beliefs, as well as their state of mind in which trust is placed significantly influences the effect group variables. However, this variable has a low influential prominence in the selected criteria.

m. Rituals and Traditions (RT):

The rituals and traditions followed have a low influential potential along with a moderate degree of influence on the effect group variables.

2. The Effect Group:

This group includes the variables which are influenced by the other selected variables. These variables have a negative (R_i-C_j) value and thus have a strong influenced degree.

a. Income (IN):

Income has a high degree of prominence making it a strong influencer. However, since its Ri-Cj value is negative, the variable will be moderately influenced by the cause group variables. Thus, this study suggests that an individual's income is affected by their happiness, lifestyle, etc.

b. Occupation (OC):

This variable has a high degree of prominence, but it has a significantly lower (Ri-Cj) value. Thus, this suggests that it is easily impacted by the other variables.

c. Place of Residence (PR):

This variable is moderately impacted by the cause group but has a high degree of prominence.

d. Educational Qualifications (EQ):

This variable is not easily affected by the others and has a moderate degree of prominence.

e. Wealth and Affluence (WA):

This variable is not easily affected by the others and has a moderate degree of prominence.

f. Relative Income (RI):

Relative Income has the lowest (Ri-Cj) value suggesting that it is easily impacted by the other variables. It has a moderate degree of prominence

g. Discrimination (DI):

This variable is moderately affected by the others and has a moderate degree of prominence.

h. Age (AG):

An individual's age has a low level of prominence and it also has the highest (Ri-Cj) value (-1.6228). This suggests that age has the most prominent impact from the selected variables.

i. Ethnicity (ET):

Ethnicity has the lowest prominence as compared to the selected criteria. It however has the second highest (Ri-Cj) value, suggesting that it is not easily affected by the other variables.

Conclusion:

According to Graham (2005), income matters to happiness. But is that relationship direct or not was explored in this research. The analysis demonstrated that income is not a cause of an individual's happiness. Rather, happiness as well as an individual's lifestyle, the parenting practices, and the other variables included in the cause group influence an individual's income. Thus, this also establishes that the relationship between happiness and income is not only depended on these two factors but also depended upon various other socio-economic, psychological, demographical, and cultural factors. Lifestyle of an individual has emerged one of the most prominent factors that affect the other variables in the study.

A major implication of this study is that more money doesn't make people happier. More money will initially lead euphoria but it won't last long and make an individual happier in long term. So an individual should try to find happiness through non-financial means. Further research can be done in identifying how this relationship between various factors can impact policy making. Policy makers can design policies that will lead to subjective well-being of the country as a whole. To conclude, happiness is a product of many financial and non-financial factors.

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Impact of Ban of Chinese Apps on the Market of Apps in India*

Author: Dhruvi A. Mehta

Guide: Dr. Muktha Manoj

Class : FY B.Com

College : Narsee Monjee College of Commerce and Economics

Email: dhruvi.mehta1210@gmail.com

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Abstract:

Ban of Chinese apps in India is important move of government for Indian app market. This ban was in response to China's border violence which became digital boycott campaign. The present study discovers ban impact on users' preferences for apps in Mumbai with sample respondents of 100. The present study also aims to determine the impact on Indian app startups and Indian apps market shares Post ban. The result of study shows that Indian app market had seen extreme growth in its users base and in number of app developers and startups in market.

Keywords: Ban of Chinese apps, User's Preferences, Indian app startups, app market share.

Introduction:

India after conflict with Chinese troops in Ladakh has spread the momentum to 'Boycott Chinese Apps' campaign. As Union Minister Shankar Prasad said these ban is a 'Digital Strike' against china. Also, the telecom and IT minister quoted that "We banned Chinese apps to protect data of countrymen; it was digital strike" Thus The ministry of Electronics and Information Technology of Government of India has ban many Chinese apps under section 69 A of Information Technology Act,2000. Such steps were taken to protect sovereignty and integrity of India. In the year 2020 First batch of 59 Chinese apps were ban in June that include popular apps such as TikTok, Shareit, WeChat and UC News. Another batch of 47 apps were ban in July such as CamScanner, UC browser and clone of some original apps. In September 118 more Chinese app were ban which include highly popular as PUBG Mobile Lite App. India's this significant decision is definitely going to harm Chinese app market but question is how it has impacted Indian app market?

Chinese apps has large number of users base from India. But after ban of these Chinese app their potential user base will look for its alternative. Thus there has been a good opportunity for alternative of these ban apps. As growth of any market depends on its users preferences. After ban users preferences of apps will affect that market. Thus here question is if not Chinese app than What other alternative app users will prefer?

Now Indian app market have an opportunity to grab user base by providing alternative of these ban apps and increase their revenue. Also our Honorable Prime Minister Narendra Modi have ask startups to build apps ecosystem by the challenge named as 'Aatma Nirbhar Bharat App Innovation Challenge' launched on July 4. It has given challenge to all Indian

start-up to provide alternative Indian app to the users and to be a self-reliant nation. But the question here is Does Indian app market will be able to increase its user base?

Scope of the study:

The present study aims at analyze the impact of ban of chinses apps on Indian app market. The study covers impact of ban on the changed users preferences with help of survey. It also focuses on impact of ban on Indian apps shares in market and impact on Indian app startups.

Limitations of the study:

The primary data collected for study of users preferences is limited to the Mumbai only. Primary data may get biased and may influence by the behavior and mood of the respondents of whom survey is conducted.

There are many other impacts which are not studied.

Objectives:

1. To discover the preferences of users for Indian apps after ban.
2. To Compare share of different apps in Indian app market pre ban and post ban.
3. To assess how Indian App market had introduced alternative app to the Chinese banned app.
4. To determine the impact on Indian technological startups and app developers in a market.

Research Methodology:

This study has a sample of 100 respondents from Mumbai city, which is selected at convenience to know their perceptions in Indian app market for Indian apps and ban. Data has been collected using primary and secondary method of data collection. Primary data was collected through the structured questionnaire though Google forms and the secondary data was collected from various journals, articles, newspapers, magazines and websites. The collected data were further analyzed by using simple statistical tool like percentage. For this study questionnaire was prepared to satisfy the objective of research paper.

Review of Literature:

Ms. Veena Shenoy and Dr. Sheetal Mahendher (August 2020): A Study on 'Virtual Strike: Ban of 59 Chinese Apps in India and Users and Non-Users Perceptions' In their study they highlighted users and non-users' perceptions of ban on 59 Chinese apps in India known as virtual strikes. They had used social media platform like Twitter to conduct research. Their Research results shows that virtual strike had an indirect but important impact on users and non-users. There have been many opinions shared about economy, security and it has observed that more tweets are for TikTok as it was most popular in India. Users are in favor and against it from entertainment views and these apps helps users to create attention in public and social platforms. This study is based on qualitative methods that considered social media twits, and not primary data.

Data Analysis and Interpretation:

I. Impact on Users Preferences After Ban in Indian App Market –

A. Age Profile of Respondents:

Table 1: Respondents Classification as per Age

Age of Respondent	Number of Respondent	Percentage
5 to 15	11	11%
16 to 30	46	46%
31 to 50	28	28%
51 and Above	15	15%
Total	100	100%

In order to get clarification of respondents they are bifurcated on the basis of their age. All the Respondents are of or above the age of 5 years. Here large number of respondents are between the age of 16 to 30 years of about 46%. Which shows that large number of respondents are teens and younger.

B. User’s Perception on Banning Chinese Apps in India:

In order to understand the banned apps user’s perception about banning these apps in India. Respondents were asked questions pertaining to their favoring of ban or not. Ban on Chinese apps is a great way to settle border tension with the Digital Boycotts. Even this step boost India’s vision to be self-reliant nation. But among these banned apps some apps such as Tiktok, PUBG were very popular in Indian market. Thus, there different perception of people on ban.

Table 2: Do you favor the ban of Chinese apps

Responses	Percentage
Yes	63%
No	19%
May be	18%

Findings: Respondents were asked to answer in yes, no or may be form to give their perception whether they favor ban or not. Most of the respondents favour the ban as 63% of people says yes. About 19% of people do not favour the ban as they have said No. It is quite expected because of banned apps popularity in India. There are respondents who neither favour ban or even not against the ban as 18% of respondents says May be.

C. Apps preference of people after ban:

As One of the major impact of ban is changing preferences of people for apps. The respondents were asked questions about their app preferences. After the ban of Chinese app

the users base of their app is shifted to other alternative apps. Thus here User's preferences will impact the other app to improve their market share.

Table 3: Which app do you prefer more now

Responses	Percentage
Indian Apps	74%
Other	26%

Findings: Respondents were asked which apps they are preferring after ban whether the Indian apps or other foreign apps as alternative of those banned apps. Most of the respondents says after ban they prefer more of Indian apps. About 74% of respondents prefer Indian apps which shows the Indian App market is now gaining users preferences in a market at large. This is positive response for growth of users in Indian app market. But there are around 26% of respondents prefer other foreign apps. As it may be because they might believe other foreign apps being more advanced or they are getting other foreign apps as perfect alternative of ban.

II. Comparison of Pre ban and Post ban Indian App Market -

Pre ban Indian App Market – The Pre ban Indian App Market were highly captured by the Chinese apps. India has been a significant market for some of these Chinese apps.

The highly popular Chinese social media app TikTok was having its large users base from India. India had been one of Tiktok's largest market. Tiktok had covered 44% of Indian market share with 1.65 billion downloads from India. Whereas the Indian social media app Chingari was having around 1000 downloads on Google Play Store.

Another popular Chinese app Indian app market was CamScanner. It was a document scanning app, which was the first Chinese app gained acceptance of Indian audiences. It has 100 million users in India.

SHAREit was Another popular Chinese app for transferring the files. Indian market for SHAREit was number one. In India there was 400 Million users for SHAREit. It was among top 5 file transfer app in India.

Post ban Indian App Market – After the ban of these popular Chinese app in India it has opened up the large market place for Indian App Startups and the other Indian apps. Indian app has an opportunity to grab the market space left by these Chinese apps.

The ban on TikTok has led to emergence of Indian apps looking to tap into millions of users currently seeking alternatives to showcase talent. Such apps are ShareChat, Moj and Chingari. These are Indian short-video making apps. These apps have successfully captured 40 per cent market share of TikTok. Josh is now leading in market with MAU (Monthly Active Users) of 70 to 75 million and DAU (Daily Active users) of 30 to 35 million. It is followed by Roposo with MAU and DAU at about 60 to 65 million and 12 to 15 million respectively. ShareChat has also witnessed exponential growth of users' base in market. Now it has over 150 million registered users and 60 million monthly active users across 15 Indian languages. There are 100+ million downloads for ShareChat on a Google Play Store. Similarly, it's Moj has witnessed the increase in number of its users as there are 100+ million downloads on Google Play Store. Chingari another Indian app in market has potential to replace tiktok. Also, Chingari has received rank 1 under category of social apps in the "Aatma Nirbhar Bharat App Innovation

Challenge” .

Kaagaz Scanner is one of those apps which acts as an Indian alternative to the now-banned CamScanner app and has recently achieved a milestone of one million downloads on the Google Play Store in less than 2 months. Kaagaz Scanner moved from 495 downloads in the week before the ban was imposed to 2,89,000 downloads in the next week of which 2,00,000 downloads were in three days alone. 10,000 new users are visiting the app every day and more than 10 million pages have been scanned using Kaagaz Scanner in the last two months.

As alternative of SHAREit Indian app such as Jio Switch and Share ALL has witness growth in its users base. Jio switch has received 10+ Million downloads and Share ALL the Indian version of the SHAREit app has 5+ Million downloads on Google Play Store. Ban have created an immediate opportunity for Indian developers to create a similar robust platform. There are a bunch of Indian apps similar to these Chinese apps, which will be aggressively test by Indian users now. The government's move to ban these Chinese apps presents an opportunity for Indian app developers to woo millions of young users and brands onto their platforms.

III. Growth in number of Indian technological Startups and app developers

For Indian technological startups, the government’s move to ban Chinese apps is the revolution they had been waiting for and it is the boost which was needed for growth of Indian app market. It also eliminates competition from major Chinese players in Indian app market.

This move will help boost the Indian digital ecosystem, and make the country more ‘Aatmanirbhar’, or self-sufficient, in line with vision of our Prime Minister Narendra Modi.

As after the ban of Chinese app there was an emergence of its alternative app in a market. Indian technological startups here grab this opportunity by developing MADE IN INDIA APP.

After ban of Chinese app our government try to give the one platforms to our indian developers to showcase their talents. this was done in the way of challenge which called as “Aatma Nirbhar Bharat App Innovation Challenge”. It was launched by our Prime Minister Narendra Modi on July 4 2020.

There was 6940 Indian technological entrepreneurs and the startups from across the country came ahead and enter into the Indian app market. The all startups and entrepreneurs were for nine different categories of applications such as Business, eLearning, Entertainment, Games, Health, News, Office and Work from home and other social apps. The winning app creator in each category had receive prize money for the innovation, which would also help them create a market for their product.

Thus, ban on Chinese app becomes challenge in front of Indian technological startups and technical entrepreneurs which has given a kick-start to the App Building Ecosystem in India. This challenge has proved that India has the talent base to build Apps for the future.

Conclusion:

The ban have changed the user’s preferences of apps as people are motivated to use

Indian apps. Also, The Indian app market has provided the best Indian alternative apps to the users of banned Chinese app. Indian app market have seen growth in it users base. But still it has a good competition from other foreign apps. The ban has boosted India's vision to be self-reliant nation and initiatives of vocal for local as there is increase in the number of Indian app startups and developers in market.

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Impact of Ban of Chinese Apps on Markets of Apps in India

Author: Bansil Madlani and Shree Joshi

Class : FY BMS

College : Narsee Monjee Collee of Commerce and Economics

Email: bansimadlani2003@gmail.com

Abstract:

The study was conducted in order to know Indian users' point of view on impact of Chinese apps ban on Indian markets. We have taken, primary data collected from Indians and secondary data collected from experts' articles as our source. We studied about various parameters of Indian market like employment, investments, time-usage, preferences, inclination of support of users to use Indian apps and thus the potential in these markets, incentives provided by government and certain start-ups, overall impact on Chinese and Indian markets and economy and we concluded our research paper based on the findings.

Keywords: Chinese apps Ban, Indian tech Start-ups, Primary data, Economical bang

Main Findings:

- The Chinese apps mostly used, are banned in India.
- Basic but necessary Indian apps have more potential
- Currently there is unemployment prevailing but there are many start-ups in the market, which helps India to become independent while give more employment and increasing GDP of the nation.
- The impact of ban on Indian markets as well as Chinese markets is immense. It has greatly affected both countries' economy.
- Shares price had reduced during that period, Gold was going up, market was running on deficit for Chinese markets.
- For Indian markets, it was considered as an opportunity despite being affected. So, the situation was under control and it hadn't created serious suffering for people of India. It can be said that "We are playing safe.
- Removing competition in Indian market could not be the sole reason for this ban
- Majority of Indians support the Ban of Chinese apps. But the proportion of people using apps for less time has been increased after the ban, it has a positive impact on lives of users, but reduces potential in these apps, though youngsters are the main respondent group, only a few, are using these apps for very high times.
- people are discontented in Indian-based-entertainment-apps and U.S.A. based competitor companies for these apps are leading in the competition for entertainment.

Introduction:

Every Chinese application was very popular among Indians, and why wouldn't it be? they had everything that the audiences desired, so what went wrong, what made the government ban these apps?

All the major Chinese applications were funded and regulated by the government of people's Republic of China, the government had full access to people's private data which not only was hazardous to the users but was a threat to our National Security too.

The concern grew with the growing border tensions, and ultimately resulted into a ban on June-29-2020 of 59 Chinese apps and 118 more apps on September-2-2020 under the section 69A of INFORMATION TECHNOLOGY ACT, thus due to the basic disruption of equilibrium of demand and supply of these apps, the Indian based technology market is ought to have some impact on it and a detailed study is conducted for the same.

Scope of Research:

Every aspect of study is clearly defined. In Indian history, Chinese app ban is one of the hardest decisions taken towards imports relating to India. Our findings and conclusions are based on the views of people (primary data analysis) and so can be referred by any individual looking for information based on secondary as well as primary data sources. The reasons, advantages, disadvantages, impact of Chinese app ban is covered smoothly for better understanding. Further, we have shown methods which were used during survey, statistical analysis was also done using experts' methodology and conclusions were drawn accordingly. Also abstract and introduction covered all basic information regarding this matter.

Objectives:

- To know the user's perspective on the impact on Indian market by analysing the respondents' answers
- To find the rationale behind respondents' selection of options by doing secondary research
- To know if respondents are aware regarding different parameters impacting Indian market.
- To study effects on investments, employment, start-ups, in this market.
- To know people's perspective on Indian government's efforts done for incentivising this market.
- To analyse the time-usage for the apps and potential in Indian market.
- To know if users support this ban.

Methodology Used:

Respondents – 103 Indians (including all age groups but most of them are students)

Because of the pandemic situation, an online survey was conducted and a questionnaire was circulated among respondents in order to know their view point on a particular matter. Secondary research and analysis was also done in order to make sure, our research analysis can substitute views of 130 crore Indians and we can get accurate conclusions. Also respondents from every state of India were free to be part of this survey.

Data-Gathering Process:

A questionnaire in form of google form was circulated to peer groups and they were asked to share their views. The form was open for a period of 2 days from 30th January, 2021 to 1st February 2021, 12:00am and we stopped accepting responses after reaching 100 responses. As researchers, our goal was to survey minimum 70 and maximum 100 people and

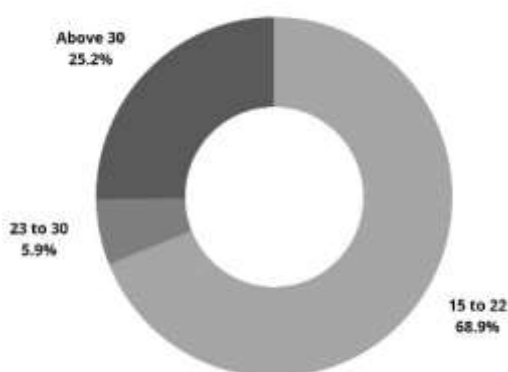
14 questions were asked.

Statistical Analysis/Measuring Instruments:

We have used google analysis tool as base for our research. Graphs, charts and figures are taken from google analysis and deep research was done to understand the charts and facts. The statistical analysis was also done on the basis of articles published by various experts. We have taken references of all the articles dated from June-29-2020 to September-5-2020. The secondary analysis is shown on that basis. We have referred newspaper articles and YouTube videos which includes various videos on Chinese app ban and its impact on Indians.

Data analysis:

The age group of the respondents :

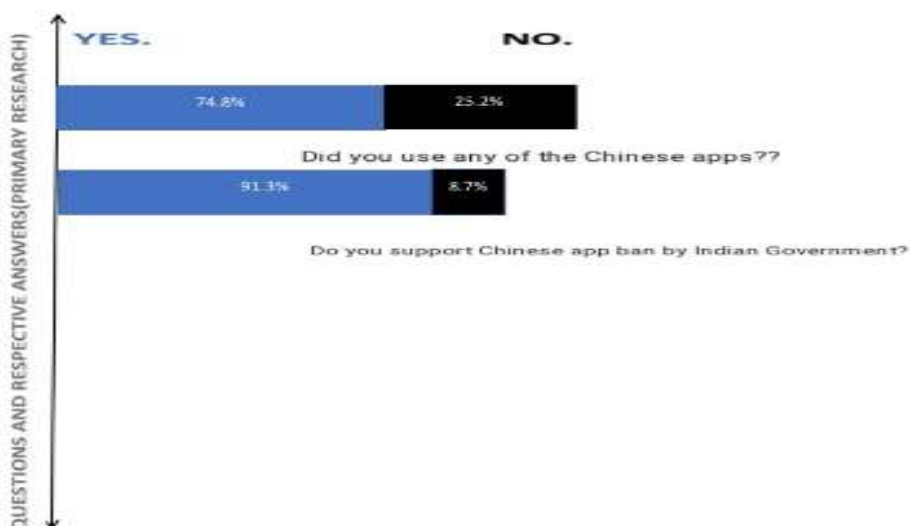


We have described people’s view and what experts say on each questions.

https://docs.google.com/forms/d/e/1FAIpQLSe-wjDKiDmb6a_AKr78NLeB8AJaH8I7YbDX3wBOuMFOXBxONg/viewform

We have analyzed the data according to the questions asked, which are as follows:

Q1. Did you use any of the Chinese apps??



With a clear bias of the ‘Yeses’ the Indian respondents have agreed that they used Chinese apps, prior to the first ban imposed by the Indian government on June-2020. Some of the many reasons for people’s such behavior could be the lack of proper substitutes or the heavy marketing campaigns run by these apps. Also while individual comparison of the responses it was found that majority of people saying ‘no’ belonged to the age group of 15 to 22 years, which is considered to be the ‘tech-savvy generation’, so it can be assumed that this option selection has resulted because of them finding the substitutes with ease, with the help of peer groups and various other sources with association to their curiosity to do so.

Nevertheless, it cannot be denied that these Chinese apps had a huge user base in India. In an article released in July-2020, titled, “**India a major market for Chinese apps on banned list**”, said that Indians accounted for TikTok’s 40% of users in the world and the Helo app, its sister app had 10.8 million Indian installs in June-2019 and as for Likee had 6.1 million.

New users from India, UCbrowser has 130 million out of 430 million users from India and for Cam-scanner Indians consist of 100 million users of its total users.



Q2 If yes, how many apps were banned from the ones you are already using?

This was not a compulsory question, there were 4 options, the one was of less than 5 apps banned group, here there were majority of respondents, so there were two possibilities which caused this:

1. Either they used less than 5 apps and they were all banned,
2. Or they used many apps and only less than 5 apps were banned, and the rest are still unbanned.

The later hypothesis isn’t possible because only a few Chinese apps like AliExpress, TurboVPN, and App Lock-DoMobile, etc. are currently unbanned in India. This logic can be applied to all the respondent groups.

Thus, **the Chinese apps used were mostly, all banned.**

More people have less apps banned and less people have more apps banned. The number of people using less than 5 apps banned is high, and number of people using more than 5 apps getting banned is comparatively lower than the former, the trend continues till the lowest

number of respondent group has more-than-20apps banned, this implies, be it any app, more-than-20apps weren't used or weren't popular amongst majority of the sample population. Thus it can be concluded that:

Even the apps which were not that popular among people did get banned, so removing competition in Indian market could not be the sole reason for this ban.

But Indian user market did get impacted by this ban as “in India, these apps together accounted for 5% of total installs from apple's app store and google play store.”

Q3. What is the average hours spent by you on apps per day before and after ban?

While comparing responses individually we see that;

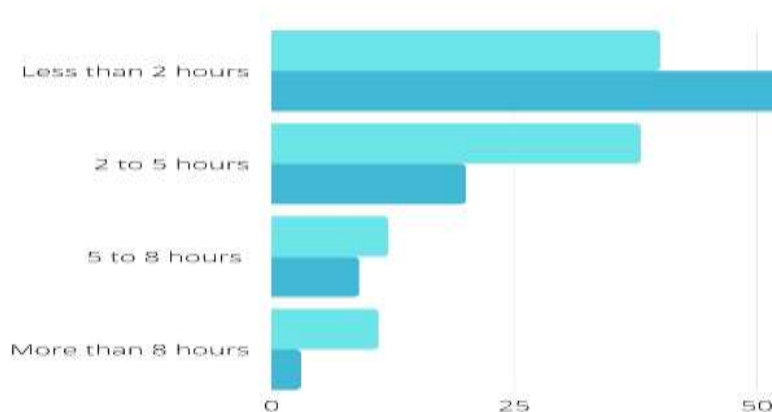
All the respondents either have their timespan for apps decreased or equal as before, it ***has not increased after the ban.***

The respondents using apps for ***more than 8hours were mainly from the age group of 15-20years***, and according to various articles people have been failing due to excessive mobile-app usage.

The important work by using these apps like scanning-documents, sharing formal-messages, checking news can be done in 2hours, thus graphically, we see a ***positive impact*** among people after the ban as:

1. The number of people spending less than 2hours on apps is more after the ban comparatively, out of the total constituency of people, ***the proportion of people using apps for less time has been increased after the ban***, comparatively to the prior situation, where the number of people using apps for less than 2hours was undeniably more, but it wasn't proportionately such steeply high.

2. Respondants for each time-options for more than 2hours declined after ban. Thus potential in Indian market seems to be declining.



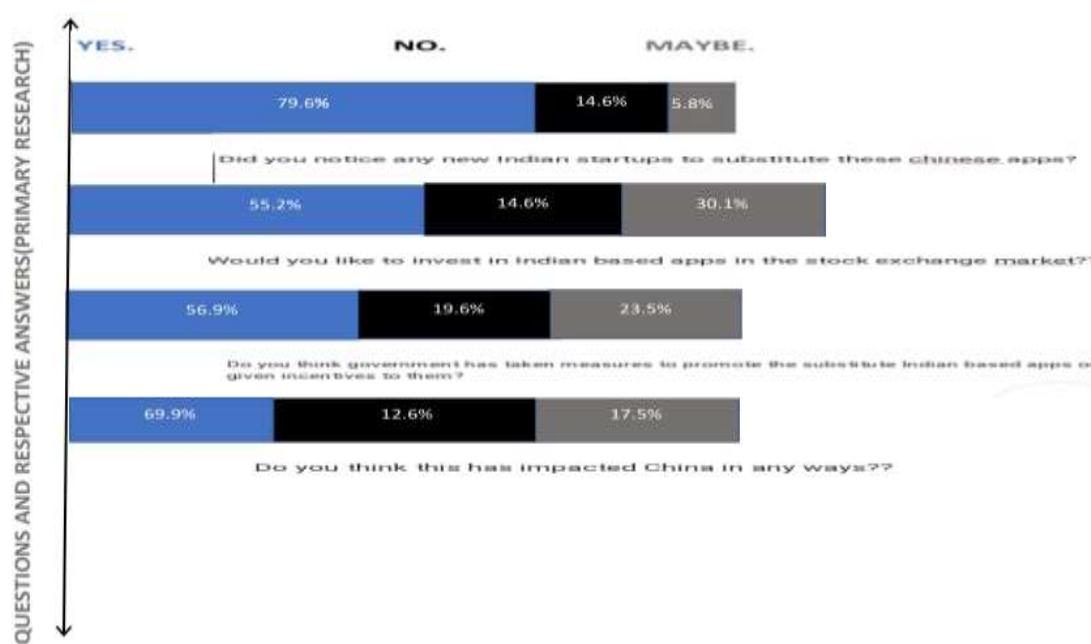
Q4. Do you support Chinese app ban by Indian Government?

Majority support this decision, it's reasonable as it ensures national integrity, small-scale/make-in-India enhancement, user privacy, higher FDIs, but not entirely, it also causes some unemployment, negative diplomatic-relations, fewer imports and exports to some countries, instability to investors maybe that's why few people have disagreed.

Also, majority of the people who disagreed were among the age group of 15-22 years ,again *maybe because of some particular entertainment preferences like PUB-G,TIKTOK, etc. it also says that they might be discontented by their substitutes.*

Q5.Do you think it will increase the employment rate in India?

Majority agreed indeed employment will rise with increase in substitute apps in India as the CEO of BOLOINDYA said that he would like to employ the employees who faced turnover and also many other startups like Chingari, etc., but many Indians working for these Chinese apps' branches have lost their jobs and not all can be employed, also other users who earned from it can also be impacted, maybe that's why some people remain neutral about it.



Q6.Did you notice any new Indian startups to substitute these Chinese apps?

Majority agree, maybe because various news sources promoted the Indian made substitutes of Chinese apps, some disagree as other countries have also substitute them, like Instagram-Reels, Google-Chrome, Adobe-Scanner, etc.

But *people about the substitute Indian based apps*

Q7.If yes, which are the startups which you noticed??

This was open ended question and people have certainly not been limited to the given options(BOLOINDYA,NASSCOM,IN-MOBI),they have noticed various other Indian-apps to carter to use of these Chinese-apps like:

- SHARE KARO
- MAUJ
- UPSEND
- FAUJI
- KAAGAZ SCANNER
- DOCUMENT SCANNER
- MITRON
- JIO SHARE
- MX-TAKATAK

Mainly these weren't for entertainment-purpose, meaning that Indian apps have **more potential in formal sector** than the entertainment based apps, implying that apps which help them get through their basic needs of day-to-day lives are mainly noticed, retained thus, preferred/used by them.

Q8. Would you like to invest in Indian based apps in stock exchange market??

They have to choose between Yes, No and Maybe. To which 55.3% of 103 individuals have responded positively. Here it is to be noted that the most respondents are students, under age of 20, and they are not well aware about stock market. There are 30.1% respondents who said, it is not a good decision to invest in new Indian apps companies which are coming up. And some people said they might invest in those start-ups.

But contradictory to it, secondary research showed that it is **difficult for Indians to invest in new app-based companies for now**. Slowly and steadily new start-ups are getting funds from various investors but the process is really slow which can affect Indian economy.

Q9. What According to you is reason behind the Chinese app ban?

There were 4 options given by us, as per our understanding, in questionnaire, which are Privacy issues, Boundary issues, Lockdown or COVID 19 and others. If they choose Others, they have to compulsorily write which one? Here, 39.8% respondents., 41 out of 103 mentioned that the Chinese app ban happened because of Boundary issues between India and China. Out of remaining, 38.8% respondents said that privacy issues is the reason, which means that the apps are not maintaining security of private data of users according to them. Also, some of the respondents expressed that lockdown or COVID 19 is reason behind the Chinese app ban. Only 2 people said that all of the above are reason behind this ban. In others we found out various new reasons such as Ladakh issues, Internal issues, Economic issues, the dominant nature of China, not loyal in political terms.

And at the same time, secondary research showed that **"Privacy and security threats were major reason behind this decision** backed by other reasons as well." And here lockdown or COVID-19 does not play any role at all. Also, Ladakh issues just helped to take this decision before it was expected but it was not the major reason behind this ban.

Q10. Do you think Indian government has taken measures to promote Indian substitutes or given incentives to them?

To which, 56.9% respondents replied positively. They believe that Indian government has taken utmost steps to promote Indian substitute apps. 19.6% denied to the above statement. And 23.5% expressed that Indian government might be doing enough to develop Indian apps, also here these respondents don't seem confident about the given question.

To add on, Secondary data search showed "Government launched many schemes to promote Indian apps. **With an objective to support and build a strong ecosystem for Indian apps**, MeitY in partnership with Atal innovation mission – NitiAayog launches Digital Indian AatmaNirabhar Bharat App innovation challenge Indian tech entrepreneurs and start-ups".

Q11. How else, according to you, are Indian markets impacted because of ban?

This was not a compulsory question and so only 27 have attempted this question. Also, this was an open-ended question and so various responses are found such as GDP will get impacted, eSports industry is highly affected and so on. But most respondents answered in positive way such as more scope of growth and Made in India will get promotion.

Whereas secondary data results measured that “Indian market and economy will be impacted in some or the other way because of Chinese app ban as it used to be the large transaction among both the countries. Also conclusion cannot be drawn regarding this in short term, *we need to be patient in order to get expected rise in Indian markets*”.

Q12. What do you think, because of ban, Is Chinese market impacted?

To which, 69.9% said that it has impacted china in some ways. Also, 12.6% respondents said that it has not affected china in anyways just because of banning few Chinese apps in a particular nation. And 17.5% people said that they are not sure whether this ban has affected china in any of the way.

Secondary references described “The reaction of china clearly shows that Chinese market is hugely affected because of Indian government’s decision to ban Chinese apps in India. *China urges India to withdraw Ban* on TikTok and other apps, as this decision violates WTO rules.” From, the above facts it is very clear that China is very strongly affected.

Q13. If yes, how are Chinese markets impacted, as per you?

It was an open ended and non-compulsory question(70 responses). Mostly everyone (63 responses i.e., 90% of 70 respondents) mentioned that china is affected economically and drastically as India was one of the main markets for imports from china. Others said that unemployment will increase in china and china is neither left with private data nor money.

And as mentioned, secondary analysis also showed that it can be assumed from the reaction given by china that the Chinese markets will need India as main market to survive as it is one of the largest exporting nations in the world. Otherwise, their existence will be in danger.

This is the data; we have collected using various sources and research. Analysis clearly shows that there is *huge difference in the data collected using primary and secondary methods*. We have taken both into consideration and analysed both the sides of coin before noting our findings.

Conclusion and Suggestion:

Chinese Ban has given Indian start-ups a new chance to develop in tech field. This ban has huge impact on Indian markets, both positively as well as negatively. We can let Chinese apps come in India with some terms and conditions *and agreement related to privacy* so that Indian users also gets satisfied and China also understands that it is not very easy to break sovereignty of India and have to work as per the strict terms and condition.

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Thalinomics: The Economics of a Plate of Food in India

Authors: Sneha Semaleesan and Sanya Khisty

Class : TY B.Com

College : R. A. Podar College of Commerce and Economics (Autonomous)

Ph. No.: +91 97021 03711

Email: snehasem04@gmail.com

Abstract:

India and Food: these two words go hand-in-hand. In a country that deeply associates its culture in and around food, accessibility about the same for common folks becomes a pivotal issue. Thalinomics (Portmanteau for Thali aka Plate + Economics) coined in our Desi (Homely) language, revolves around deducing what it takes to get one plate of food in India. Food is one of the most essential elements for survival and in an emerging economy like ours, the universal accessibility of the same becomes of grave importance, something which comes into light within the chosen topic. This research paper follows an analysis of the one thali of vegetarian food, which covers the complete nutrition requirements of one average Indian adult.

Introduction:

Thalinomics is a portmanteau and loved word for a rather deep analysis of how accessible food may or may not be for the public at large in India. Introduced to public-en-mass in the 2019-2020 Economic Survey, the sheer vastness and etymology leave the subject open for various interpretations, thus not leaving a clear demarcation of what needs to be considered over other things when we take a look at the economics of food in India. However, simply put, the word is an attempt to put a number over how much a meal costs in our country.

Introduced by Chief Economic Advisor Krishnamurthy Subramanian, the economic survey by the Government seems to be indicating increased sustainability in the prices despite rising inflation.

Scope of Research:

The scope of this research paper is to understand the economics behind per plate of food in India, and if the cost for the same is accessible for any common man, or if the disparity between the inflation of food prices versus the income capacity is increasing day by day. This paper has limited its scope in the topic through the lens of a vegetarian thali consumed by the Urban Indian Audience in 2020-21, as it gives a fair representation of complete dietary requirements and cost by the average working class Indian.

Objectives of Research:

The aim of this research paper is:

1. To understand whether there exists a cause-effect relationship between the inflation in the food industry and price of thali
2. To analyse the future prospect of the price of the thali

Methodology used:

This research paper is based on desk research. The researcher has used a combination of literature review and information in the public domain released by the Government of India.

Data Analysis:

Thalinomics essentially takes into account the dietary requirements of an Indian adult male heavy worker (based on NIN, 2011) wherein dietary allowances are made towards-cereals, pulses/ meat, vegetable, spices and edible oil. Considering the same and additional data collected, the National Statistical Office (NSO) creates the Thali Index. Thali costs include the cost of cooking one thali, which consists of:

1. Chapati (Indian Bread)
2. Sabzi (Cooked mixed Vegetables)
3. Rice
4. Dal (Lentil soup)

In this research paper, the researchers have focused on finding the correlation between inflationary prices and the cost of a thali and conduct a predictive- analysis of the same. However, to portray a clearer picture of the data, the following assumptions have been made.

Assumptions:

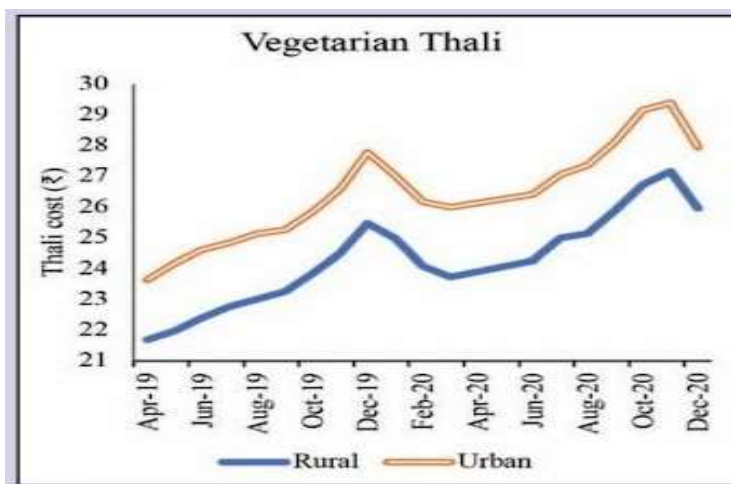
1. The analysis shall be conducted on data pertaining to the year 2020-21.
2. The Economic Survey covers both vegetarian as well as non-vegetarian thalis. However, the researchers have restricted themselves to vegetarian thalis only.
3. PDS is not taken into consideration just as it has not been in the Economic Survey of 2020-21.
4. The research is based on the data for urban areas.
5. Since indices have been used, the data has been compiled and portrayed on a yearly basis. Hence, data until December 2020 has only been included in this research paper,

Analysis:

Situation in 2020-21:

As per the Economic Survey of 2020-21, in the year 2020, India has witnessed the price of one thali increasing throughout June 2020 to November 2020. However, in December 2020, the country witnessed a sudden and steady decrease in the price of a thali. The cheapest thali in pre-covid Era has been in Jharkhand while the most expensive has been in Andaman and Nicobar Islands, owing to its geographical parameters.

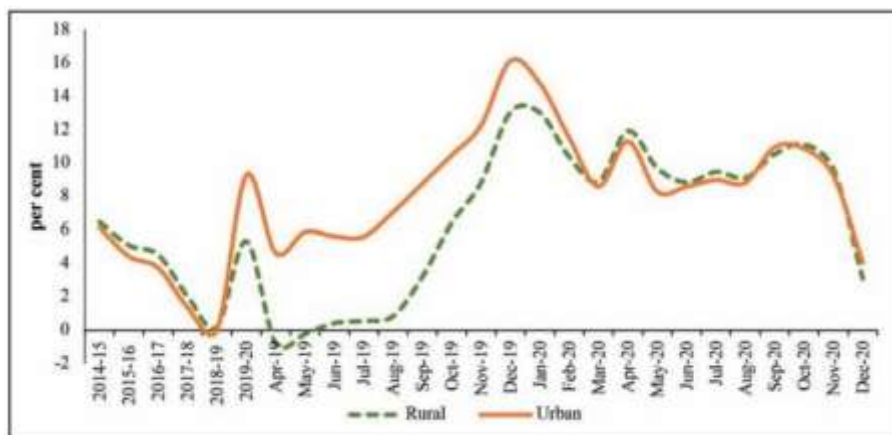
The same has been portrayed in the graph below.



Source: Economic Survey 2020-21

As shown in the graph above, the initial price of a thali in the year 2019, ranged from Rs. 21 to Rs. 27 before it reached the peak at Rs. 28. In the year 2020, the graph has steadily moved downward but with the pandemic striking in the month of March 2020, the prices shot up and almost touched the Rs. 30 mark by the end of November 2020. However, in December 2020, a sudden dip in the prices occurred.

A similar pattern can be observed in Consumer Price Index (CPI) with respect to food inflation wherein, after touching the peak in December 2019, the index is affected in the month of March due to the pandemic and has then majorly experienced upward sloping curves.



Source: NSO

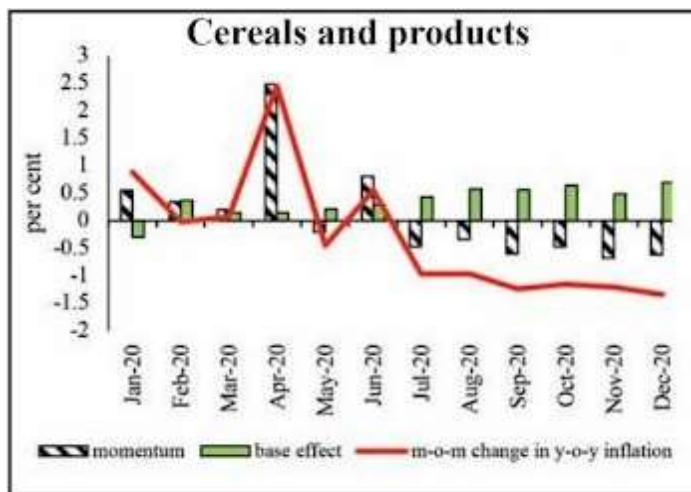
However, since the food industry consists of many industries within it and we are primarily focussing on the vegetarian thalis, further insights into certain industries have been provided.

Herein,

The primary focus shall be on two indicators:

1. Momentum: The “Momentum” indicates the rapid price changes in the said month.
2. m-o-m change in y-o-y inflation: Month-on-month change in year-on-year inflation portrays the change in monthly inflation which has resulted in the cumulative inflationary prices.

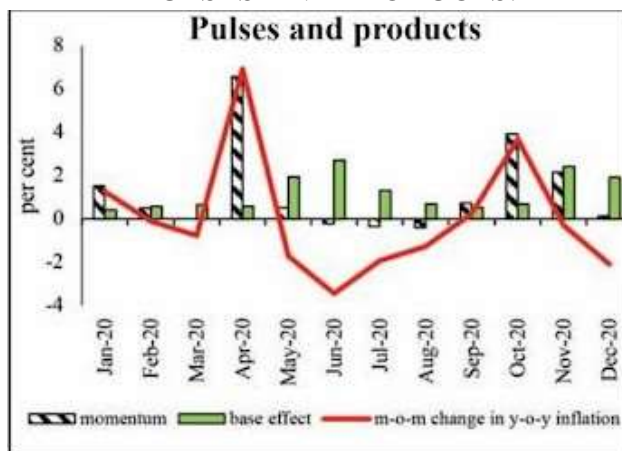
CEREALS AND PRODUCTS:



Source: Economic Survey 2020-21

In the cereals and products industry, the monthly inflation that has affected the overall yearly inflation has been majorly due to the momentum of change in prices as is visible. In the month of April 2020, the prices skyrocketed and then suddenly fell in the subsequent months highly affecting the inflationary index which eventually declined.

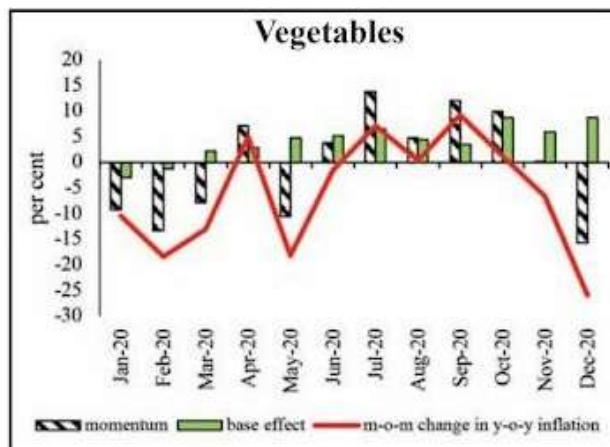
PULSES AND PRODUCTS:



Source: Economic Survey 2020-21

For pulses and products too the inflationary index was mimicking the momentum wherein the prices hit the peak in the month of April 2020 and then subsequently reduced. However, “Pulses and products” witnessed a rise in momentum in the months of October and November 2020 which was again followed by a drop in momentum.

VEGETABLES:



Source: Economic Survey 2020-21

Vegetables play a crucial role in the food market. Here too, the inflationary index was guided by the momentum of change in market prices. However, in the case of vegetables, the momentum has been at an all-time low only to increase to moderation in the months of July to October, 2020 and then again dipped.

Interpretation:

A clear parallel can be drawn between thali index and the constituent raw materials of the thali, i.e cereals, pulses and vegetables.

A cumulative percentage calculation of the three constituents and correlating it to the thali can prove that the price of the thali directly relates to the CPI inflation of its constituents.

For e.g, in May, 2020: cereals, pulses and vegetables had very low momentum as well as monthly inflation index. At the same time, the thali index also portrayed a low index.

Categorised by the constant increase in prices of all the constituents, the overall thali cost kept rising until after November 2020 wherein all constituents faced a massive fall in their indices. The same has been portrayed by the overall thaali index.

Predictive Analysis:

Observing the past pattern of the thali index, which has always stayed in moderation, it can be further predicted that the inflationary index of cereals, pulses and vegetables shall further go down or as happened in history, an increase in the index may be cancelled by a decrease in the other resulting in a pattern of thali index may drop down to the Rs. 23 to Rs. 26 range(similar to the trends of the past year).

Conclusion:

In conclusion we observe that the prices of cereals, pulses and vegetables directly affect the cost of the thali. The research paper (based on the Economic Survey 2020-21) tells us that despite increasing inflation elsewhere, the prices of food and cooking have remained largely

sustainable in India. Thalinomics is another attempt by the government to introduce new concepts in the Economic survey to ensure a wider range of costs and possibilities are covered for the benefit of the common man.

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Thalinomics: The Economics of a Plate of Food in India

Authors: Anjani Gupta and Pranjal Rathore

Class : FY B.Com

College : Hansraj College

Ph. No.: +91 7289899954

Email: anjanigupta306@gmail.com

Abstract:

The following research paper shows the importance of 'Thalinomics', the method of relating a common man with economics through a plate of food 'Thali'. Thalinomics in India is highly important as the many people in India fall below the poverty line. It is important to provide them with a healthy thali at reasonable prices. The research paper shows the steps taken by the government, the food trends prevailing, the economic surveys conducted and Thalinomics during the lockdown period when there was no source of income for more than half of Indian residents.

Introduction:

The word 'Thalinomics' is an attempt to relate economics with the life of a common person of India by using a plate of food or a 'thali' to measure the inflation or deflation in the price of a 'thali'. Thus, the term, 'Thalinomics'. It's an attempt to quantify what a common person pays for a thali in India.

Scope of Research:

In this segment of the Economic Survey 2019–20, thali prices are constructed for 25 States/UTs taking into account the prices for cereals (rice or wheat), sabzi (vegetables plus other ingredients), dal (pulses with other ingredients) as well as the cost of fuel that goes into making a meal in a household. Also, the prices of two different types of thalis are analysed - vegetarian and non-vegetarian thali.

A vegetarian thali comprises of a serving of cereals, sabzi and dal and the non-vegetarian thali comprises of cereals, sabzi and a non-vegetarian component. Also, due to the rich food diversity present in India, the country is divided into four regions for the analysis - North (Chandigarh, Delhi, Haryana, Himachal Pradesh, Jammu and Kashmir, Madhya Pradesh, Punjab, Uttar Pradesh), East (Assam, Bihar, Chhattisgarh, Jharkhand, Odisha, Tripura, West Bengal), West (Goa, Gujarat, Rajasthan, Maharashtra), and South (Karnataka, Kerala, Puducherry, Tamil Nadu, Andhra Pradesh, Telangana).

Aim of Research:

Thalinomics aims to put a number what a common man pays for a decent meal, or a Thali as it is known in common lingo, across the country.

Methodology Used:

What does this Thali price take into account?

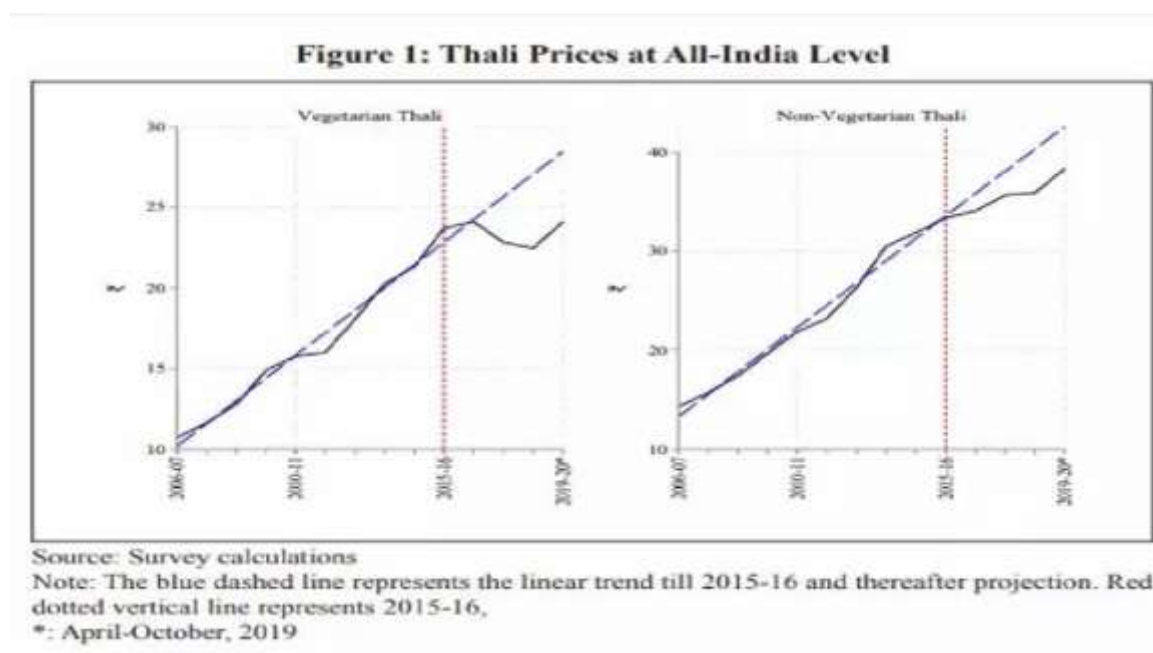
Just like the Consumer Price Index takes into account a basket of goods, a vegetarian Thali is a similar basket converted to a plate of food consisting of a serving of cereals, vegetables, and pulses.

A crucial point to note is that the prices of the ingredients are not the market prices from your local mandi or a supermarket, but much lower in comparison.

The prices considered are assumed to be from the insurance, subsidy, and trade transparency schemes launched from 2015 onwards, such as National Food Security Act, Pradhan Mantri Annadata Aay SanraksHan Abhiyan, Pradhan Mantri Krishi Sinchayee Yojana, National Food Security Mission, etc.

Here, the prices used are ₹1/-, ₹2/- and ₹3/- per kg for Nutri-cereals, wheat, and rice respectively. And under the NFSA, these prices are available for 81.35 crore persons or about 60% of the Indian population.

Comparing the Prices of a Thali over time



The blue dotted line is the trend line or the best fit line has been drawn from the data points from 2006 - 07 to 2015 - 16, and projected from the on. And the black line is the actual price of the Thali.

So, the price should have been about Rs. 28 and Rs. 42, but are actually Rs. 24 and Rs. 38, for the vegetarian and non - vegetarian thalis, respectively. This can also be seen as the difference between the blue and black lines on any given point on the x-axis.

Hence, on average, due to the policies undertaken after 2015, the price of thali has dropped by ₹3, on average. That might seem like a small amount, but let's bring in some context.

Let's say that a household consists of 5 members, and each has 2 thalis per day. That sums up to about ₹11,000 in a year. And that is 6.5% of an average worker's yearly wages

Data Interpretation:

➤ ENSURING AFFORDABLE FOOD FOR ALL INDIANS

Food is a basic necessity, and any dramatic increase in rise of staple food items will hit the poor people the most. In fact, food and beverage inflation makes up 45.9% of CPI-Combined index indicating its importance. The economic survey did a simple analysis to check the impact of inflation on common man and for this reason chose to analyse the cost incurred in putting together one complete, homemade meal – the Indian Thali.

It analysed the cost of the thali- both veg and non-veg – starting from the year 2005-2006 till 2019-2020. Upon analysis, Survey found 2 clear trends emerging-

From 2005-2006 Till 2015-2016, there was one trend of increasing prices of food. Between 2015-16 and 2019-2020, there has been another albeit lower trend in increase of prices.

The survey then found out the prices of a vegetarian Thali had it followed the trend obtained till 2015-16. It found that an average household comprising of five individuals would have had to spend Rs 10,887 more on average per year for eating minimum two healthy Thalis a day. In other words, after 2015-16, the average household saved Rs 10,887 per year on average from the moderation in Thali prices. Similarly, an average household that eats minimum two healthy non-vegetarian Thalis per day saved around Rs 11,787 annually on average during the same period.

➤ DEEPENING THE POCKETS OF POOR

We have all heard about the economic principle “the poorer you are, the more you spend on your food”. Thus, affordability of a square meal becomes very important for the common man.

The Survey, using the annual earnings of an average industrial worker also found out that affordability of vegetarian Thalis improved 29 per cent from 2006 -07 to 2019-20. This means that an average industrial worker can now afford to feed his family 2 square meals a day now 29% better, compared to 2006-'07.

An Average industrial worker who had to spend more than 70% of his salary on just feeding his family can now afford to do it at just 50% now, freeing up the rest of 50%. This is essential, as it gives more money in to the hands of the worker, which can be spent on medical, health and other necessary and emergency expenditures.

COVID-19: The Need for Thalinomics:

The Economic Survey 2020-21 looked at the cost of a plate of food in the country. This year's Thalinomics shows that thali prices for both vegetarian and non-vegetarian thalis declined significantly in January-March period, while rising sharply in April-November period in both rural and urban areas. Thali prices eventually eased in December. Amid the pandemic, thali prices exhibited significant variation among the states. The Economic Survey, however, said that the easing of CPI-C is expected to ease thali prices going forward.

In June to December in the past year, the most expensive vegetarian thali in rural areas was in Andaman and Nicobar Islands at Rs 38.7, while the cheapest was in Uttar Pradesh for Rs. 23.10. The most expensive non-vegetarian thali in the same period as in Arunachal Pradesh for Rs 48.50, while the cheapest was in Chandigarh for Rs 29.90.

When it comes to urban areas, the most expensive vegetarian thali in June-December period was in Andaman and Nicobar Islands at Rs 40, while the cheapest was in Madhya Pradesh for Rs 24. The most expensive non-vegetarian thali in the same period was in Mizoram for Rs 52.40, while the cheapest was in Haryana for Rs 28.

"Thali costs for the months of April and May are not compiled as sufficient price data was not available due to the lockdown situation of COVID-19 pandemic," stated the survey. The Economic Survey 2020-21 said, "Overall, headline CPI inflation remained high during the COVID-19 induced lockdown period and subsequently, due to the persistence of supply side disruptions. The rise in inflation was mostly driven by food inflation, which increased to 9.1 per cent during 2020-21 (Apr-Dec). Due to COVID-19 induced disruptions, an overall increase in the price momentum is witnessed, driving inflation since April 2020, whereas positive base effect has been a moderating factor. The difference in rural-urban CPI inflation, which was high in 2019, saw a decline from November 2019 that continued in 2020. Inflation ranged between 3.2 per cent to 11 per cent across States/UTs in 2020-21 (Jun-Dec) compared to (-) 0.3 per cent to 7.6 per cent in the same period last year. Thali prices for both vegetarian and non-vegetarian Thalies declined significantly in January-March 2020 before rising sharply during April to November in both rural and urban areas before easing in December 2020. The easing in CPI-C is expected to ease Thali prices going forward."

Conclusion:

Though economics affects the common lives of people in tangible ways, this fact often remains unnoticed. Food is not just an end in itself but also an essential ingredient in the growth of human capital and therefore important for national wealth creation. And what better way to make economics relate to the common person than something that he/she encounters every day? A plate of food.

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Indian Brand Recognition Practices leading to FDI

Name- Hemanshi Kotai

Class: M.com (Advance Accounting)

College: Narsee Monjee College of
Commerce and Economics

E-Mail: hemkots@gmail.com

Abstract:

India has become one of the most attractive emerging markets globally. Foreign corporations have helped the country in transforming its economic structure, bringing additional investors, and has attracted investments in innovative sectors. Thus, adding to higher productivity and promoting sustainable and inclusive development. Service Sector especially banking, financial and nonfinancial, Insurance, Outsourcing, Research and Development (RandD) of India has attracted maximum FDI followed by manufacturing sector. On an overall basis, efforts are been directed towards maintaining India's trajectory towards remaining the world's most attractive destinations for foreign investment.

Introduction:

Foreign Investment in various sectors bring international best practices and latest technologies leading to economic growth in the country and providing much needed impetus to manufacturing sector and job creation in India. In line with the policy to provide boost to the manufacturing sector and give impetus to the 'Make in India' initiative, the Government has permitted a manufacturer to sell its product through wholesale and/or retail, including through e commerce under automatic route.

To look after the interest of Indian SME sector, certain provisions have been provided for FDI in retail trading sector. For retail trading of single brand products, in respect of proposals involving foreign investment beyond 51%, sourcing of 30% of the value of goods purchased, has been mandated to be done from India, preferably from MSMEs, village and cottage industries, artisans and craftsmen, in all sectors.

With a view to benefit farmers, give impetus to food processing industry and create vast employment opportunities, 100% FDI under Government route for trading, including through e commerce, has been permitted in respect of food products manufactured and/or produced in India. Scope of Research- This study focuses on analysing India as a suitable destination for foreign investors. It highlights the favorable factors, which promote India to have superiority over others. It also does detailed analysis of various measures taken by India to attract foreign capital. And, understand where India stands globally with respect to its FDI policies.

Objectives:

1. To understand how FDI benefits domestic Industry of India.
2. To determine key factors that lead to the growth of foreign investments in the country.
3. To determine various strategies India adopts to brand itself as a suitable FDI destination.
4. To conduct detailed analysis of various sectors of the country

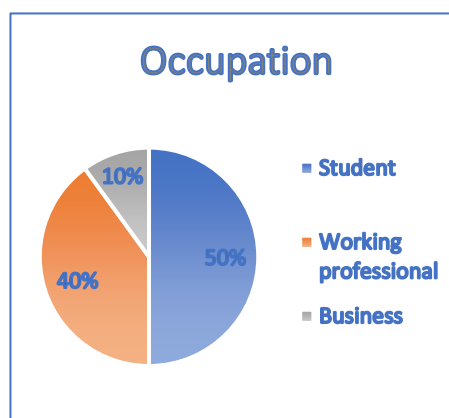
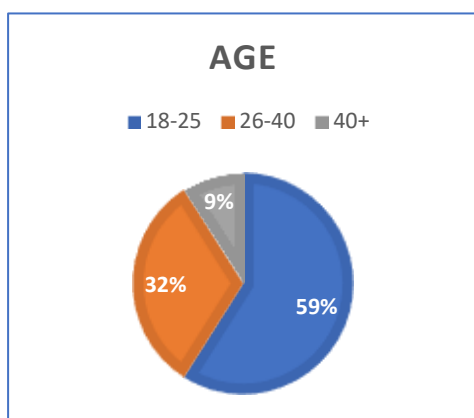
Methodology used:

1. Primary Data: Based on secondary research, a questionnaire was prepared to conduct survey on a sample of 70 individuals with varied backgrounds. Conclusions are drawn on the basis on 70 responses (assuming sample represents the population).
2. Secondary Data: An exploratory research was conducted to understand FDI in India and measures taken by the country such as its Policies, labour skills, etc. being the primary reasons for attracting investors.

Data Analysis and Interpretation:

This section describes the results and observations made based on primary research conducted on a sample of 70 respondents. The sample set is a diversified group of different age group having variety of experience in their field. The aim of this survey was to understand the perception of Indian population towards India as a suitable destination to invest foreign Capital and how they think is India branding itself and taking measures to ensure it becomes an investor-friendly place for foreign capital.

Findings:



We see that almost 85% of the survey respondents are youths, who nowadays are seeking active participation and are aware of the measures that a country takes for its development. So, we can assume that the sample set for this survey are opinionated individuals who have a decent background on FDI in India. In addition, more than half of them are working professionals who might be pursuing their jobs in the sectors that has huge percentage of foreign investments. Example –BFSI/Automobile/It Services.



A mixed opinion was observed when we asked the respondents to share their opinion whether India takes sufficient measures to be recognized amongst foreign investors. Looking at the percentage, India needs to create more awareness amongst its population on the measures it is taking to attract investors.

For the survey, a list of 5 factors were chosen to analyse the readiness of local industry and the conclusion from the responses was that for a local industry in the following rank, the country must possess these factors to make maximum utilization of its foreign investments: 1. Labour productivity 2. Management capabilities 3. Marketing Capabilities 4. Technology advancement 5. Quality and range of products.

India's General Legal Framework (Policies framed for FDI) and issuing business licenses to foreign firms are considered most critical factors.

India's stability in Utilities sector-generation and distribution (Electricity/ gas/ water/ waste management) is next important factor. India must have appropriate machinery and equipment's especially when it comes to FDI in manufacturing sector.

Lastly, in purview of almost 98% respondents, environment regulations play a critical role to control the effect of increase in production on nature.

A list of five problematic factors were asked in the survey, which could restrict investors from investing foreign capital in the country. The conclusions drawn rank these factors in the following order: 1. Inadequate Infrastructure and Policy Instability 2. Tax Regulations 3. Inflation 4. Poor work ethics. These are some of the reasons that needs attention by the Indian Government and make them their strength to attract foreign investors.

Currently, India has foreign investments in majority of its sectors. FDI brings several developments and growth opportunities for a country. We asked respondents to rank the benefits that a country receives with the help of foreign capital: 1. Most beneficial thing is Increase in employment as expansion of business in a sector generates need for man power 2. Secondly, more circulation of money brings development in the areas that have been laid back compared to others 3. Thirdly, investments brings economic development in the country 4. Technological advancements are brought in with newer techniques enabling the growth 5. Human resource development is another important factor that is benefited.

A country must have:

1. A proper Infrastructure to accommodate the expanding operations within the country.
2. It must have its FDI policies set right dealing appropriately with Entry and Exit strategy in the country.
3. India must reform and update its regulations and policies to sustain its brand in global standard and continue attracting foreign investment for development of the country.

As agreed by 70% of our respondents, that foreign capital in the country leads to increase in employment opportunities leading to increase in standard of living of the people. This causes increase in demand of products in the country with more liquidity in the economy. Thus, we conclude that FDI brings greater benefits than drawbacks for a developing nation like India.

With about 95% of our respondents agreeing that COVID-19 has greatly affected the

economy of all the countries. With this, there has been a great impact over the flow of capital cross border. India must strive to sustain its global brand in the minds of foreign investors for which it must take more efforts now to boost its economy growth.

COVID-19 has affected majority of the sectors in the country. India must devise measure in every sector to recover the loss. We asked our respondents that which sector, post COVID, will have greater opportunity to grow with the help of foreign investments and got the following responses: About 70% of the sample finds Health care sector to be most important.

Followed by Manufacturing and Financial Services sector almost having equal importance. Retail sector is been critically affected with the pandemic and needs close attention for recovery.

Automotive sector is been observed with some seen ups, down in the demand, and is highly dependent on the income level and employment stability.

Conclusion:

India has become one of the most attractive emerging markets globally. Foreign corporations have helped the country in transforming its economic structure, bringing additional investors, and has attracted investments in innovative sectors. Thus, adding to higher productivity and promoting sustainable and inclusive development. Service Sector especially banking, financial and nonfinancial, Insurance, Outsourcing, Research and Development (R and D) of India has attracted maximum FDI followed by manufacturing sector.

A basic question here is what makes India an attractive destination for FDI whether in services or manufacturing sector? There are different reasons according to industry specialists: 'Assembling in India's fundamentally determined by low work costs.

The 'Make in India' program was propelled on 25th September 2014 by Government of India (GOI) with a target of making India a worldwide centre for assembling, research and advancement. In a state of harmony with the worldwide patterns, administration part in India has additionally developed quickly during the most recent two decades. To sum up, the recent changes in FDI policy regime of 2017 by GOI has helped to remove multiple layers of bottlenecks faced by foreign investors. The investment processes are been rationalized and expedited. The Government has eased 87 FDI rules across 21 sectors in the last 3 years, opening traditionally conservative sectors like rail infrastructure and defense. India's agriculture sector has also received FDI worth 515.49 crore in 2016-17." The changes in the FDI policy regime exhibits the Government will continue to bring about liberalization of the FDI regime in India in the months to come.

On an overall basis, efforts are been directed towards maintaining India's trajectory towards remaining the world's most attractive destinations for foreign investment.

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Technical Feasibility and Financial Analysis on FMCG Sector with reference to selected companies

Author: Fanny Durgesh Gala

Class: MMS - Finance

College: Sheila Raheja School of Business
Management and Research

Email: fannygala09@gmail.com

Abstract:

FMCG product touches every aspects of human life. These products are frequently consumed by every sections of the society and a substantial portion of their income is spent on these goods. Apart from this, the sector is one among the important contributors of the Indian economy. This sector has shown an unprecedented growth over past few years, in fact it's registered growth during recession period also. The future for FMCG sector is extremely promising thanks to its inherent capacity and favourable changes within the environment. The study endeavours to analysis fundamental position of listed FMCG companies using ratios and technical analysis.

Keywords: FMCG Sector, Fundamental Analysis, Technical Analysis, Nestle India, Britannia Industries, Investments.

Introduction:

Fast-moving consumer goods (FMCG) sector is India's fourth largest sector with household and personal care accounting for 50% of FMCG sales in India. Growing awareness, easier access and changing lifestyles have been the key growth drivers for the sector. The study endeavours to analysis fundamental position of major FMCG companies using ratios. Fundamental analysis, the share price of a company is determined by all the fundamental factors. The purpose of study is Nestle India and Britannia Industries were chosen, to analysis was done using past five year computed date of EBTDA margin, PAT Margin, Return on Net worth/Equity, Return on Capital Employed, Debt to equity ratio and Interest Coverage ratio starting April 2016 to March 2020. This study helps to the investors to choose a safe investment and to identify the entry point and target price as per technical analysis.

This study provides a precise presentation of data and guidelines that will help a fresh investor as well as a venture investor to know vital aspects of investing. This study helps to the investors to choose a safe investment and to identify the growth opportunities in the future. FMCG industry is one of the major and important industries in the world. Large numbers of foreign investors are coming and investing in Indian FMCG sector due to its large potential growth in future.

Literature Review:

1. Hunjak and Cingula (2005) argued that neither technical nor fundamental analysis can be used on the Croatian stock market due to low trading volumes and high volatility.
2. Sharma A & Sharma R. B. (2011) made a comparison of financial performance in Textile Industries. The objectives of their study are to research the profitability, solvency position

and liquidity position of companies, to spot internet profit and EPS rate of growth performance of companies.

3. Bagchi and Khamrui(2012) evaluated the financial performance of the two leading FMCG companies, Britannia industries and Dabur India, over a period of 10 years(2000-2010) using various accounting ratios and statically tools.
4. Pal S. (2012): She studied on Comparative Study of financial Soundness of Indian Steel Companies under Globalization. The aims to make the linear relationship between liquidity, leverage, efficiency and profitability of the chosen companies.
5. R. Amsaveni and S. Gomathi(2013) found that through economic analysis the GNP, Interest rate, Exchange rate, FER, Agriculture production, Govt. Receipts and Expenses has a growth rate during the study period. The company analysis done with the help of ratio analysis indicates that Colgate and Hindustan Unilever Limited Companies are financially in satisfactory position during the study period.
6. Singh J.(2013) He presented on Analysis of monetary health of Asian Paints Ltd. the amount of his study covered five years from the year 2008-09 to 2012-13. The financial position of Asian Paints Ltd. is show better position during the amount of the study.
7. Ms. J. Hema and V. Ariram(2016) found that Indian FMCG industry has a high growth rate and its sales and net profit also shows increasing trend and the company analysis revealed that its financial performance through the financial ratio, which indicates that Hindustan Unilever Limited is financially in satisfactory position during the study period.
8. Pavithra K. & Kirubadevi Mrs. S. (2016): A study was undertaken on performance analysis of selected IT companies. The goals of their study are to look at the profitability and liquidity position of the chosen IT companies, to review the effect of profitability on liquidity and solvency of the businesses.
9. Abhilasha N. & Kumara N V Dr. M. (2017): A study was undertaken on financial evaluation of Indian automobile company. They covered five years from the year 2012 to 2016.

Scope of Research:

The Current Research provides different cues to pursue further research in the same area of knowledge. The research may investigate whether the firm size, analysts following or liquidity of the stocks affect momentum returns. Further Research can emphasize on constructing Long/Short strategy for identifying stocks with good and bad potential. Future Research may also compare and interpret the results of Momentum with Combined Investment Strategy. To add on, the results of this research can be used in other market such as Derivatives about the usage of Fundamental Analysis and Technical Analysis.

Objectives:

The following objectives are framed-

A.) Core Objectives:

To study the broad scenario of Indian FMCG sector with specific reference to the usage of Technical analysis and Fundamental analysis.

B.) Specific Objectives:

1. To analyze the ratio, to know the companies respective position in the market.
2. To find out significant difference between ratios' of selected companies.

3. To know the entry point and target stock prices of selected companies stocks through Technical analysis.
4. To select the best performing company among the selected two companies.

Research Methodology:

Research Design

In this study researcher has taken Exploratory & Descriptive Research Approach because this study based on secondary data. The data were collected from the annual report of Nestle India and Britannia Industries. The charts are taken for study from investing.com website.

Period of study

The researcher has taken last five years financial performance from April 2016 to March 2020 of Nestle India and Britannia Industries.

Sampling

Two listed companies namely Nestle India and Britannia Industries has been taken as sample.

Research Tools

Fundamental Analysis is done through ratio analysis and technical analysis is done through support and resistance level of stock chart.

Limitations:

The study consists of only five year's period from 2015-2016 to 2019-2020. The researcher has made collective analysis of financial statements of Nestle India and Britannia Industries. The study's depends upon quality of secondary source. The Secondary Data was taken from the annual reports of Nestle India and Britannia Industries. It may be possible that the secondary data which is collected by a researcher shown in annual reports may be misleading presentation which may doesn't show the real position of the companies.

Hypothesis set:

To achieve the objectives in an effective manner, the following hypothesis were framed:

H₀: There's no significant difference in Profitability ratio's between selected FMCG companies.

H₀₁: There's significant difference in Profitability ratio's between selected FMCG companies.

H₀: There's no significant difference in Return ratios between selected FMCG companies.

H₀₁: There's significant difference in Return ratio's between selected FMCG companies.

H₀: There's no significant difference in Debt-Equity Ratio between selected FMCG companies.

H₁: There's significant difference in Debt-Equity Ratio between selected FMCG companies.

H₀: Technical Analysis doesn't help the investor in making decisions and doesn't help investors to get stocks in discount.

H₀₁: Technical Analysis helps the investors in making decisions and help to urge stocks in discount.

Data Analysis and Interpretation:

Company Overview of Nestle India

Nestle India, is engaged in food business and is one of the largest players in the FMCG segment. It is a subsidiary of Nestle S.A. of Switzerland which owns 62.76% stake in the company, and is one of the world's largest food and beverage player.

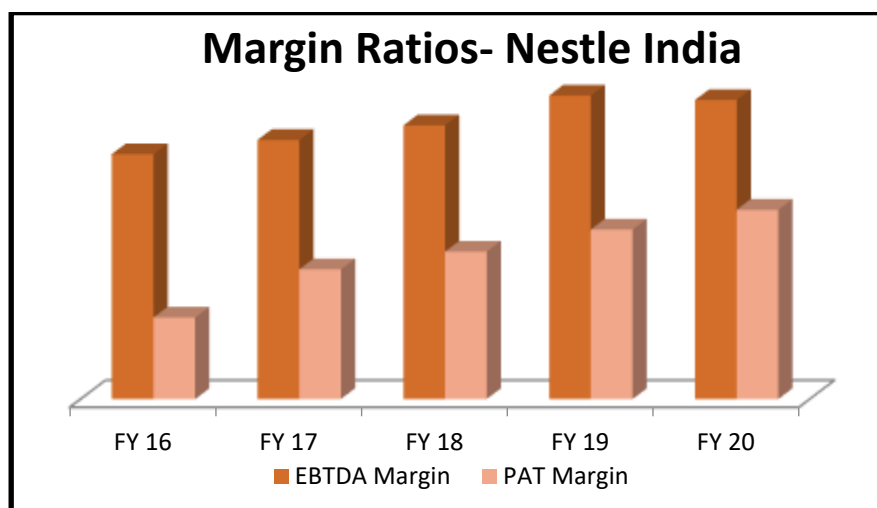
The company is engaged in food business and manufactures products under four categories: milk products and nutrition, beverages, cooked food and cooking aids, chocolates and confectionery. Few of its prominent brand share: Nescafe, Nestlè Everyday, Maggi, Kitkat, Milkybar, Milkmaid, Milo, Nestea, Munch, Barone, Polo, Nestle Milk and many more.

The company has presence across India with eight manufacturing facilities, 4 branch offices and a large number of co-packers, facilitating sales and marketing of its products. It also has a R&D centre in Manesar, which strengthens its position as the leader innutrition, health care and well-ness in the emerging markets. The company follows period of 1stJanuary to 31stDecember, as its financial year for the purpose of preparation of its financial statements.

Ratio Analysis of Nestle India

MARGIN RATIOS	FY 16	FY 17	FY 18	FY 19	FY 20
EBTDA Margin (%)	19.96	21.12	22.31	24.74	24.37
PAT Margin (%)	6.64	10.57	12.02	13.82	15.43

(Source: Nestle India- Annual Reports)



EBTDA Margin:

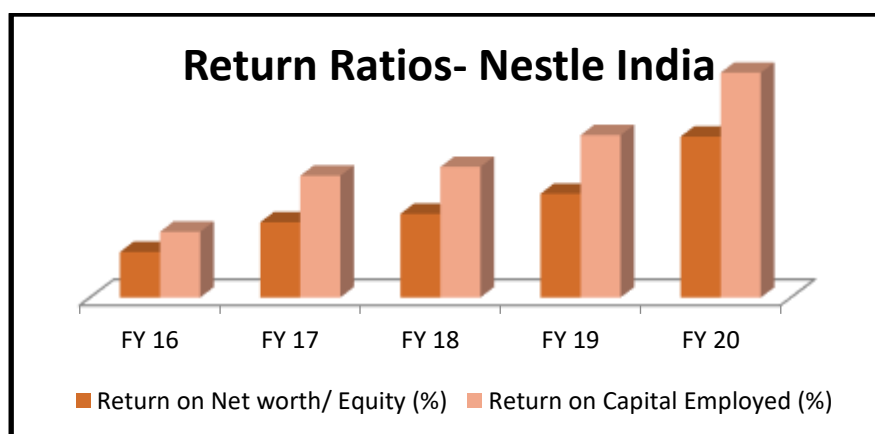
- In FY19, the EBITDA margin was 24.37%, a contraction of 37bps YoY.
- In 9M FY20, the EBITDA margin saw an improvement on the back of lower advertisement and other expenses, which was partially offset by the rise in input costs.

PAT Margin:

- In FY19, the PAT margin was 15.43%, an expansion of 161bps YoY
- During FY19 the statutory tax rate was 27.62% as compared to 34.85% in FY18, which led to an expansion in the PAT margin.

RETURN RATIOS	FY 16	FY 17	FY 18	FY 19	FY 20
Return on Net worth/ Equity (%)	19.92	32.83	36.56	45.30	70.27
Return on Capital Employed (%)	28.70	53.20	57.04	70.93	98.16

(Source: Nestle India- Annual Reports)



Return on Net Worth:

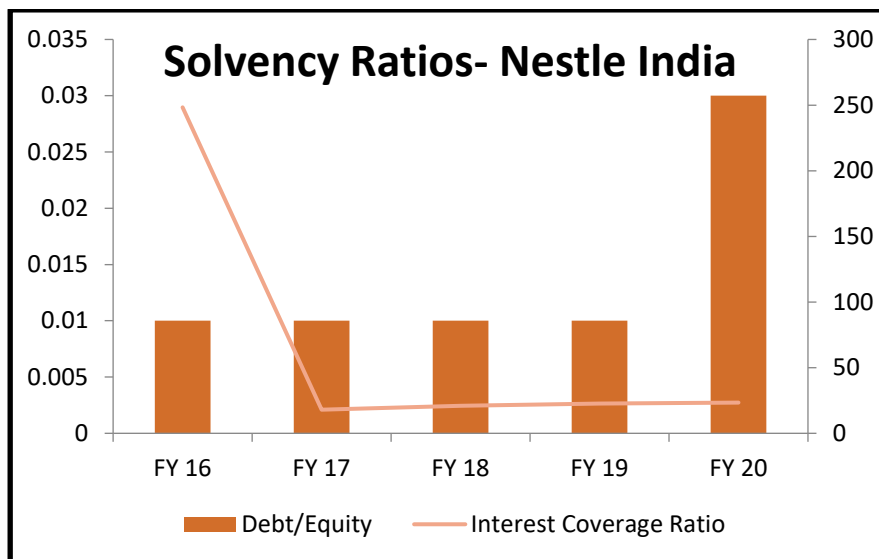
- In FY19, the ROE was 70.27% v/s 45.30% in FY18.
- In FY19, the company made a dividend payment (including dividend distribution tax) of ₹3556.26 crore out of its reserves and surplus which led to a decline in its net worth.
- Thus, the sudden spike in the ROE metric.

Return on Capital Employed:

- For FY19, ROCE was 98.16% v/s 70.93% in FY18. The metric saw an improvement on the back of sustained revenue growth and improving operating profitability.
- A higher dividends payment during FY19 had an impact on the capital employed of the company, which improved the metric.

SOLVENCY RATIOS	FY 16	FY 17	FY 18	FY 19	FY 20
Debt/Equity	0.01	0.01	0.01	0.01	0.03
Interest Coverage Ratio	400.53	429.40	21.01	22.70	23.32

(Source: Nestle India- Annual Reports)



Debt to Equity Ratio:

- The company has negligible debt since last five years.

Interest Coverage Ratio:

- The company is well poised to meet its interest liabilities.
- The major component of the interest cost includes interest on employee benefit plans.

Technical Analysis of Nestle India



(Source: in.tradingview.com website)

Nestle India has been in a structural bull run for the last three years. The stock had tested a low of ~₹13,000 in March 2020. However, it recovered the entire losses within a month and made a new high of ₹18,300.

Since then, the stock has been broadly consolidating in the range of ₹15,500-₹18,800. ₹17,500 is the immediate support below which the stock can move lower up-to ₹16,000. On the other hand, a move beyond ₹19,000 might see renewed momentum towards ₹22,000.

Company Overview of Britannia Industries:

Britannia Industries Limited, established in 1892, is one of India's oldest food-products companies and is part of the Wadia Group. It is one of the largest players in the biscuit Industries in India.

The Company operates in the Food segment. It derives majority of its revenues from the biscuits segment. The company has also diversified into other segments like bread, dairy products, cakes, snacks, milk shakes, croissants, wafers and rusk.

Few of its prominent brands like Tiger, Good-Day, and 50:50 have an estimated market share of 33% in the Indian biscuit Industries.

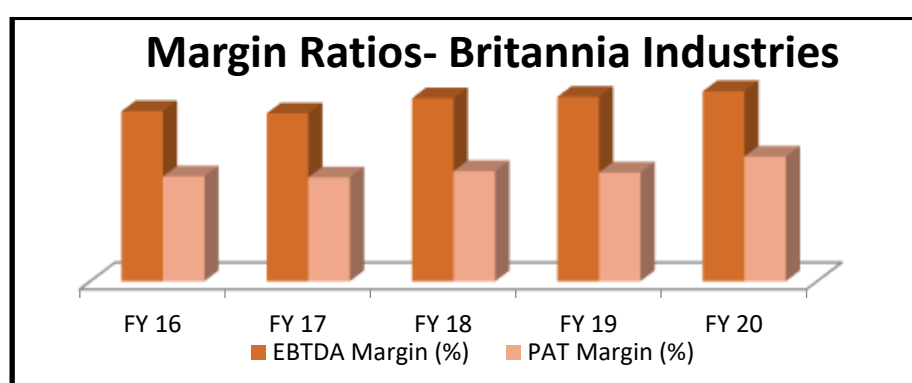
The business operates with 13 factories and 4 franchisees catering to more than 100 cities and towns of India. In addition to manufacturing from its own plant, the company has established relationship with several contract manufacturers across the country.

The company has incorporated a wholly owned subsidiary in Bangladesh under the name of Britannia Bangladesh Private Limited and has also set up a green field project in Nepal. Its products are also exported to over 60 countries including Middle East, North America, Europe, Africa and South East Asia.

Ratio Analysis of Britannia Industries

MARGIN RATIOS	FY 16	FY 17	FY 18	FY 19	FY 20
EBTDA Margin (%)	15.52	15.32	16.70	16.84	17.34
PAT Margin (%)	9.56	9.48	10.05	9.92	11.3

(Source: Britannia Industries- Annual Reports)



EBTDA Margin

- In Q4 FY20, the company reported an EBITDA margin of 15.84%, an expansion of 25bps. Focus on cost efficiencies, reduction in wastages and ability to leverage fixed

costs has helped the company to report an expansion in margin, despite the COVID-19 pandemic.

- Going forward, the company is focusing on new innovative products, which are margin accretive. The raw materials (majorly palm oil and milk) prices are expected to ease in the next few quarters.
- These along with premiumisation and cost efficiency programs, are expected to lead to margin expansion.

PAT Margin

- In Q4 FY20 the company reported PAT margin of 12.98%, an expansion of 246bps.
- The decline in tax expenses and efficient cost efficiency helped in margin expansion.
- Going forward, we expect the company to continue to report improved PAT margin on the back of premiumisation of product portfolio, cost efficiencies, expansion of manufacturing foot print, launches and re-launches, distribution expansion and gain in market share.

RETURN RATIOS	FY 16	FY 17	FY 18	FY 19	FY 20
Return on Net worth / Equity (%)	49.44	37.00	33.00	30.32	32.39
Return on Capital Employed (%)	67.83	51.92	47.48	44.36	37.12

(Source: Britannia Industries- Annual Reports)

Return on Net Worth

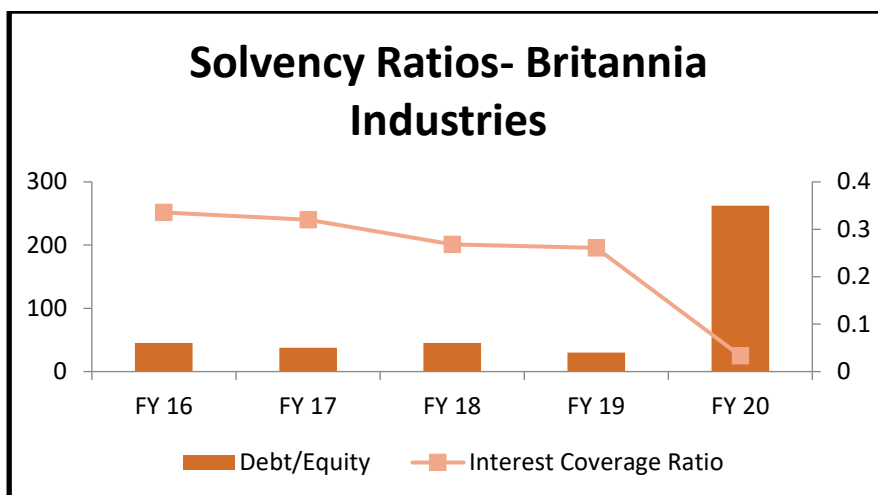
- The return on equity saw an improvement from 30.32% in FY19 to 32.39% in FY20. Growth in net income on account of reduction in tax rates, cost and operational efficiency and gain in market share helped it to report increased profit.
- Going forward, we expect the company to report steady earnings led by growth in packaged foods, premiumisation, mode rate competition, distribution expansion (especially in Central India), increasing rural mix and sharp focus on cost optimization.

Return on Assets

- The ROCE metric has been declining for the past five fiscals.
- EBIT increased by 8.02% YoY as compared to Capital employed which increased by 20.12% YoY, thus impacting the metric.
- Going forward, the company's focus to achieve cost optimisation, operational efficiency, reduction in wastage and premiumisation will help to improve the metric.

Solvency ratios	FY 16	FY 17	FY 18	FY 19	FY 20
Debt/Equity	0.06	0.05	0.06	0.04	0.35
Interest Coverage Ratio	251.61	240.27	201.05	195.60	24.98

(Source: Britannia Industries- Annual Reports)



Debt-Equity

- Debt to equity is viewed as a long-term solvency ratio. It is comparison between ‘external finance’ and the ‘internal finance’
- If ratio is greater than 1 not good, here company has stabilised debt-equity lower than 1. In FY 16 company has debt of Rs. 22798 in Lakhs from that company has reduced the debt and debt to equity went 0.08 that is good sign but in FY 20 company has increased debt by Rs. 41094 lakhs, to maintain liquidity crunch due to current situation.

Interest Coverage Ratio

- During FY20, the debt stood at Rs1537.59 crore, a surge of 885.51% YoY.
- The breakup of the same comprises of:
 - (i) Long term loan stood at Rs766.1 crore in FY20 as compared to Rs 61.9 crore in FY19. This was mainly due to issue of bonus debentures.
 - (ii) Short term loan stood at Rs769.8 crore in FY20 as compared to Rs94.1 crore in FY19. This was mainly on account to commercial paper borrowings for working capital requirements and to service liability towards a financial institution.

Technical Analysis of Britannia Industries



(Source: in.tradingview.com website)

Britannia Industries trading on the verge of breakout from the weekly resistance zone and breakout to take place above swing high of 3515. Further momentum in the stock to take place above swing high of 3585 and 3710 respectively. Technical parameters and volume looks quite strong as of now. Probable support on the downside comes at 3300-3320 zones.

Findings:

EBTDA Margin:

- The average EBTDA Margin ratio of Nestle India is 22.50. EBTDA is highest during the year 2018-19 that is 24.74 and lowest in the year 2015-16 that is 19.96. So, Average EBTDA of Nestle India is well during the research period.
- The average EBTDA Margin ratio of Britannia Industries is 16.3440 which is lowest than other selected company.

PAT Margin:

- The average Net Profit Margin ratio of Nestle India FMCGs is 11.6960. Net profit margin is highest during the year 2019-20 that is 15.43 and lowest in the year 2015-16 that is 6.64. So, Average net profit margin of Nestle India Industries is very well during the research period.
- The average Net Profit Margin ratio of Britannia Industries is 10.0620. The Net profit Margin of Britannia Industries was highest in FY 20 that is 11.30.

Return on Net worth/ Equity:

- The average RONW of Nestle India is 40.9760. Return on net worth of Nestle India is highest during the year 2019-20 that is 70.27 and lowest in the year 2015-16 that is 19.92. Average return on net worth of Nestle India is especially well during the research period.
- The average RONW of Britannia Industries is 36.43 Return on net worth of Britannia Industries is highest during the year 2015-16 that is 49.44 and lowest in the year 2018-19 that is 30.32. Average return on net worth of Britannia Industries is especially well during the research period.
- Compare to total average of return on net worth of Nestle India & more than Britannia Industries companies, perform well during the research period.

Return on Capital Employed:

- Ratio of return on capital employed of Nestle India is fluctuating trend during the research period 2015-16 to 2019-20. The average ROCE of Nestle India is 61.6060. In the FY 20, ROCE is 98.16 which is highest than other years and lowest in the year FY 16 which is 28.70.
- The average return on capital employed of Britannia Industries is 49.7420. ROCE of Britannia Industries is highest in the year 2015-16 which is 67.83 and lowest in the year 2019-20 which is 37.12

Debt – Equity:

- The average Debt to Equity of Nestle India is 0.014. Debt to equity of Nestle India is highest during the year 2019-20 that is 0.03. Average Debt to equity of Nestle India is especially well during the research period.

- The average Debt to Equity of Britannia Industries is 0.112. Debt to equity of Britannia Industries is highest during the year 2019-20 that is 0.35 and lowest in the year 2018-16 that is 0.04.
- Compare to total average of debt-equity ratio, Nestle India FMCGs company are lowest than other selected companies during the research period.

Interest Coverage Ratio:

- The average Interest Coverage Ratio of Nestle India is 179.392. Interest Coverage of Nestle India is highest during the year 2015-16 that is 400.53 and lowest in the years 2018-19 that is 21.01. Average Debt to equity of Nestle India is especially well during the research period.
- The average Debt to Equity of Britannia Industries is 182.7020. Debt to equity of Britannia Industries is highest during the year 2015-16 that is 251.61 and lowest in the year 2019-20 that is 24.95.
- Compare to total average of debt-equity ratio, Nestle India FMCGs company are lowest than other selected companies during the research period.
- Nestle India and Britannia Industries is fundamentally strong companies.

So, by doing analysis, researcher can conclude that Nestle India is better than Britannia Industries.

Conclusion:

Fundamental analysis can be valuable, but it should be approached with caution. If you are reading research written by a sell- side analyst, it is important to be familiar with the analyst behind the report. As per analysis, we can say that FMCG sector has tremendous growth rate with relevant other growing sectors. The company analysis done with the help of ratio analysis that Nestle India and Britannia Industries are financially in satisfactory position during the study period.

‘Food Product’ is the leading segment, accounting for 43% of the overall market, personal care 22% and fabric care 12% are other large segments. Fundamental analysis aims at finding the true worth of a security by analyzing macroeconomic, industry scenario and company financial position and so on. An investor can make safest as well as lucrative investment by analyzing the related variables and ensure for optimum return. Fundamental analysis suggests that no investor should buy or sell a share on the basis of the advices of market intermediaries or tips given by the stock dealers, websites, etc., the fundamental analysis calls upon the investor to make his buy or sell decisions based on the detailed analysis of the information available. Technical analysis helps investor to get know entry point and target price for selected company.

This study focuses on fundamental analysis and technical analysis using various tools which help in trading strategies for risk reduction and maximization of return.

Suggestions:

- The Companies should try to bring down their direct manufacturing expenses to increase the operating profit margin. This is only possible by increasing the scale of production

and applying the cost volume profit analysis formula. With increase in volume of production the cost will come down and profit will increase.

- The only solution to improve overall profitability is by controlling or reducing cost. Almost all the companies should reduce the material cost composition by proper inventory management. The company should plan proper logistic and reduce selling and distribution cost composition.
- The liquidity position of these companies is satisfactory and good.

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- <https://in.tradingview.com/chart/8QqIwCm6/>

Acronym:

FMCG = Fast Moving Consumer Goods

EBTDA = Earnings before Taxes, Depreciation and Amortisation

PAT = Profit After Tax

ROE = Return on Equity

ROCE = Return on Capital Employed

FY = Financial Year

YoY = Year on Year

Cloud Computing: Importance, Journey and Influence

**Authors: Pushpa Ramudhum Suryavanshi
and Hemant V Karekar**

Class: MSc (IT)

College: Vikas College of Arts, Science and
Commerce, Mumbai

Contact: (+91) 8425018484, (+91) 86898 62375

E-mail: pushpasuryavanshi2@gmail.com
hemant.v.karekar@gmail.com

Abstract:

In Cloud Computing we can approach (access) applications as useful features (utilities) on Server. Cloud computing services also referring to manipulate, configure, and access the resources of hardware and software remotely. Cloud offers application, Storage of data & infrastructure of the cloud. It offers platforms Self-direction (independency), the software does not require to be installed locally. It has special features like Elasticity and flexibility, auto-updates, increased collaboration, agility, and speed, and it is inexpensive. Cloud server has a different feature as compared to a dedicated server, wherein cloud we don't require to buy and maintain any hardware resources as everything is handled by the cloud service provider itself, whereas in dedicated server the user need to rent or buy the server, software and other required resources from the web hosting provider. So it is better to rent a cloud service for better performance of the organization because it does not require a separate to handle the server. There are some key differences between cloud and dedicated servers like availability of resources, scalability of resources, safety and security, cost-efficiency, level of control, etc. which help users to decide the right options for the business.

Keywords: Cloud Architecture, Importance, Cloud computing reference model, Infrastructure-as-a-service (IaaS), Platform-as-a-service (PaaS), Software-as-a-service (SaaS), Observational study and Cloud Trend from 2008 - today and going forth.

Abbreviations:

CAPEX – Capital Expenditure

DBaaS – Database as a Service

IaaS – Infrastructure as a Service

IT – Information Technology

PaaS – Platform as a Service

SaaS – Software as a Service

XaaS – Anything as a Service

CRM – Customer Relationship Management

ERP – Entity Resource Planning

ISP – Internet Service Provider

ITaaS – IT as a Service

SAP – Systems, Application and Product

VM – Virtual Machine

Introduction:

The cloud reference model refers to important characteristics of capabilities to deliver on demands and different types of service in IT that are quite different from each other. This creates separate perceptions among users of what the cloud server is! Cloud computing service offers categories into three services majorly as Infrastructure-as-a-service (IaaS) solutions deliver virtualized servers, storage, and networking. E.g., Cloud, Amazon EC2, etc. Platform-

as-a-service (PaaS) delivers an Environment for runtime applications, platforms for data processing and development. E.g.: Hadoop, Google app, Windows Azure, etc. Software-as-a-service (SaaS) solution delivers End-user applications, photo editing, office automation, scientific application, CRM & Social networking. E.g., Facebook, Flickr, Salesforce, Google Documents.

Cloud computing is on-demand of computer system availability resources, especially computing power and data storage (cloud storage), without actively participating directly. We can approach applications as utilities on the internet, referring to configuring, accessing, and manipulating hardware and software resources. Renting cloud computing allows runtime environments, infrastructure, and pay as per the usage of services. Users leveraging services of cloud computing can access their data and documents anytime, anywhere, and from any device connected to the server. Cloud computing server provides an opportunity for integrating additional capacity into existing systems. With the wide deployment of systems of cloud computing, the foundation technologies and systems enabling them are becoming standardized and consolidated.

Cloud computing's vision is to allow anyone with the provision of virtual hardware, runtime, and services. The entire stack of cloud computing systems is transformed into required resources, which can provision and collect to deploy systems collection together in a Specific amount of time (hours) rather than days and without maintenance costs. The concerns of providers' Vendor deployment environment are what create problems in the decision of many customers to move to the server on the cloud. These challenges cost reduction and portability of various vendors. The required designs have the correct vocabulary and elements, which matches the implementation of the elements. A Cloud computing application is software provided as a service from the software engineering point of view. It consists of package services of interrelated, which call as a task, the tasks defined, and the configurations file, which contain dynamic information about tasks at run time.

Importance of Cloud Computing:

- **Inexpensive:** Cloud computing helps in reducing the amount of CAPEX (Capital Expenditure), the organization does not need to invest in expensive hardware, software, storage devices, etc. only we need to pay for the resources we utilize.
- **Elasticity and Flexibility:** Cloud computing enables you to reduce the number of resources that increase and decrease as per the requirement of the client. E.g.; If we have heavy traffic on the site, we can increase and decrease the resources as per the demand and vice versa. Flexibility means the client can access from wherever they want and whenever they want all they need an only a high-speed internet connection.
- **Auto Updating:** The client does not have to keep track of any updates. All the software maintenance and updates are looked after by the cloud service provider.
- **Increased Collaboration:** It allows employees to work in a coordinated and collaborative manner. All the data and information of the organization and ongoing project is available for all the employees they can access from anywhere and everywhere whenever they need all they need a high-speed internet connection.
- **Agility and Speed:** Cloud service provider up to 99% flow of business operation and execution.

Architectural Components:

Cloud service models are mainly divided into Infrastructure-as-a-Service, Platform-as-a-Service, and Software-as-a-Service that show by a given cloud infrastructure. It is very helpful to add structure to the service to cloud stacks more which makes the most important security closely connected to services of cloud components which is understandable and provides an abstract overview of the cloud security issue analysis.

To classify the service of cloud computing, service offers three major categories are as follow:

- Infrastructure-as-a-Service (IaaS)
- Platform-as-a-Service (PaaS)
- Software-as-a-Service (SaaS)

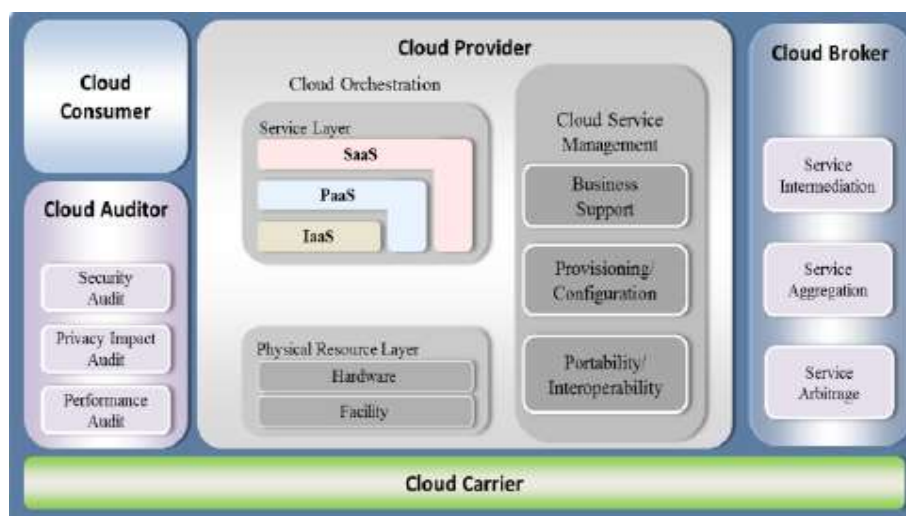


Fig: Cloud Computing Reference Model.

Providing an overview service of cloud computing because these categories are related to each other. Above figure can be referenced as a Cloud Computing Reference model, the model organizes the services of cloud computing in a broad range into a layered view that goes through the computing stack from bottom to top. We define architectural components such as

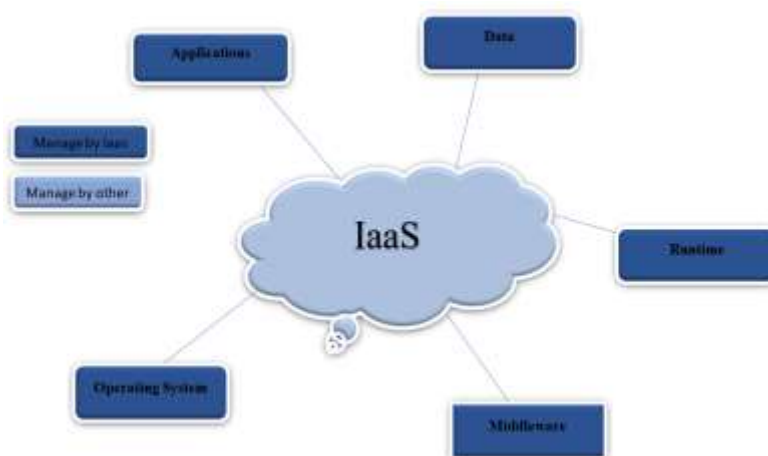


Fig: Infrastructure as a Service

- Infrastructure-as-a-Service (IaaS), Platform-as-a-Service (PaaS), Software-as-a-Service (SaaS). The detailed of services are as follows.

Infrastructure-as-a-Service

Consumers without deviation use infrastructures of IT (Storage, networks, processing and other resources) provided by the IaaS cloud server. IaaS cloud used virtualization extensively in sequence to merge/decompose physical resources in a manner of ad-hoc to decrease or to shrink the IaaS resource demand from cloud consumers. Overall aim is to build virtual machines that are remote from other virtual machines (VMs) and hardware. This strategy is dissimilar from the multi-tenancy model (refer to architecture of software in which a single instance of multiple tenants serves on a software server), which target to transform the application software architecture so that multiple cloud consumers can run on a single application (i.e., the same logic machine) of IaaS is Amazon's EC2.

The general virtual components provided by IaaS are as follows:

1. Computer Hardware.
2. Computer Networks.
3. Internet Connectivity.
4. Platform virtualization environment for running client-specified virtual machines.

Advantages of IaaS are:

1. Reducing the cost of maintenance for the hardware is quite expensive. Software to maintain updates, the latest version is available on the internet.
2. Data stored on the VMs is secured and can be recovered in case of any failure of host allocation, To provide enough space for many virtual instances as per the demand.

Platform-as-a-Service

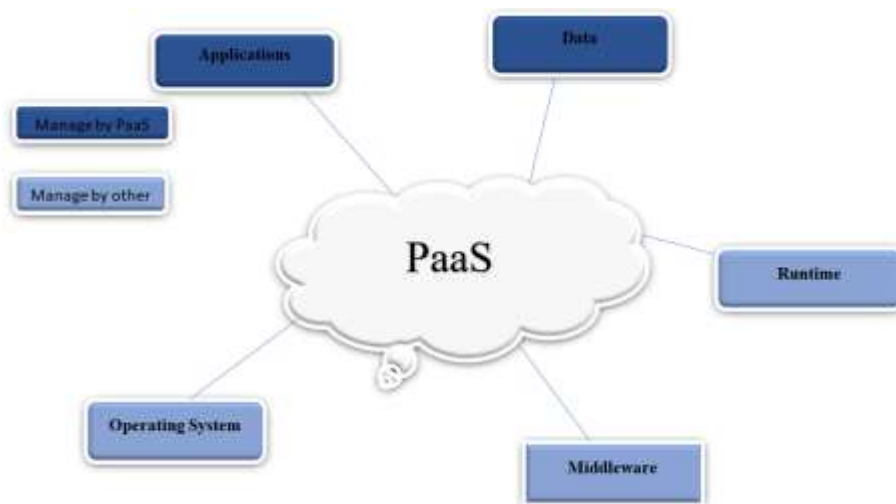


Fig: Platform as a Service

PaaS (Platform-as-a-service) is a service platform where the development happens which supports the full “Software Lifecycle” and it allows cloud consumers to develop services and applications of cloud (SaaS) directly on the cloud of PaaS. And the differentiation between PaaS and SaaS is PaaS offers a development platform that hosts both in-progress and completed

applications, whereas the SaaS hosts completely cloud applications only. PaaS requires, in addition to support application hosting environment, to own development infrastructure including all the tools, management of configuration, and so on. e.g., Google AppEngine.

Advantages of PaaS are:

1. Can deploy and develop agile applications.
2. Focuses on the important resources for the enterprise without worrying about infrastructure cost.
3. The platforms provided by a PaaS provider are revised editions which are updated from time to time, thus applications can be built using the best technologies.
4. Maximizes the productivity and minimized the development time.
5. Doesn't require the developer to know the backend processes of the environment platform of the cloud.

Some of Platform-as-a-Service (PaaS) providers are:

1. Google Engine App by Cloud services of Google.
2. Windows Azure PaaS services by Windows Azure from Microsoft.
3. Amazon Elastic Beanstalk by Web Services of amazon.

Software-as-a-Service

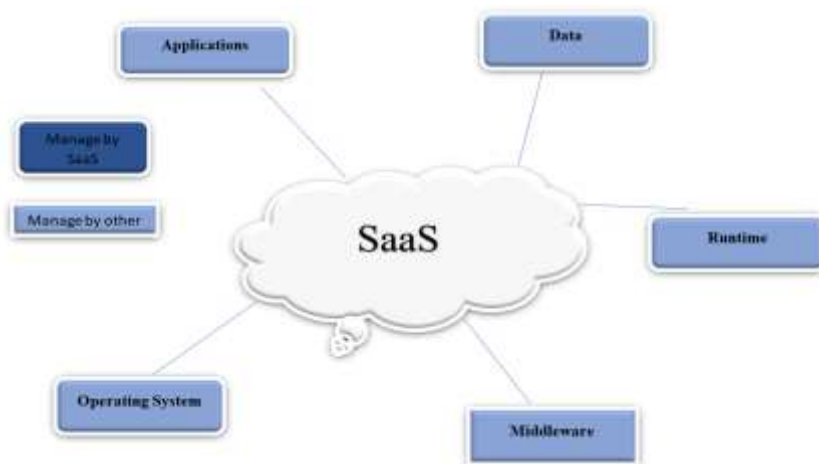


Fig: Software as a Service

The SaaS layer is an area of social networking Websites, in a hosting environment consumer release their application, which can be retrieved from various networks clients by application users. Consumers cannot have a control over infrastructure of the cloud that frequently uses a system of multi-tenancy architecture and different cloud consumers' applications are arranged in a one logical domain in the SaaS cloud to achieve reduction in cost and optimization in terms of security, speed, availability, maintenance recovery and of disaster. E. g.; Google Docs, Google Mail, etc.

Advantages of SaaS are:

1. Easily available software reduces the time required application for the development.
2. Increases the availability of the applications globally.
3. Data consistency and compatibility across the company/organization/enterprise.
4. These applications are flexible and Scalability (Produced to change in capability).

5. The updated versions of the SaaS software are looked after by the service providers.

Some of SaaS service providers are:

1. Salesforce CRM from Salesforce.
2. Oracle CRM from Oracle On-Demand from Oracle.
3. SAP ERP and SAP CRM by SAP Business by Design from SAP.
4. SaaS applications and services from Cloud9 Analytics.

Characteristics and benefits of Cloud Computing:

Cloud computing has characteristics that bring benefits to both cloud consumers and cloud providers. These characteristics are:

- No in advance commitments.
- Access on demand.
- Dynamic pricing.
- Comprehensible application acceleration and scalability (the change in capacity with the respect to size or scale).
- Systematic resource allocation.
- Produce desired results without the waste of energy.
- Smooth and continuous creation and uses the service of third-party.

To increased economical return due to the reduced maintenance costs and operational costs related to software and infrastructure uses systems of cloud computing and technologies. This is mainly because the assets of IT, namely infrastructure and software, are turned into beneficial costs, which are paid for the time on the basis of usage, not paid for up front. Capital costs are assets associated with cost have to be paid in advance to start a business activity. Previously the cloud computing, infrastructure of IT and capital costs generated by software, they were paid so that start-up of business could afford an infrastructure of cloud computing, enabling the activities of the business organization. The revenue of the business is then utilized to compensate over time for these costs. The capital costs always minimize by the organization, since they are often associated with depreciable values.

Observational Study:

According to the study carried out by a well-known ISP (name not disclosed due to identity privacy) on the Q4 of FY2020 it can be concluded that out of their total service subscribers, about 22.87% (rounded up to 23% in Figure) who chose to have IaaS were hosting industry or a large-scale product. They were the Tech companies. Second, in the order comes the PaaS with 22.13% occupancy (rounded up to 22% in Figure), the users of this type of service were mostly from the small service providers or the freelancers. Another around 43.94% (rounded up to 44% in Figure), a large group of users prefer SaaS as their core technology. This is the group of subscribers who might have a little knowledge of development and preferred WordPress as the base service.

The SaaS users are more as compared to IaaS and PaaS users in this case of ISP due to some facts observed and explained as follows -

- Most of their subscribers are mostly from small-scale industries from web development, who prefers the quickest development of websites, which can only be provided by CMS

like WordPress or Wix like website providers who preferably use PaaS and generates SaaS environment for their customers.

- However, there is still an observation that IaaS and PaaS subscribers are also similar in quantity, so we can also conclude that except for big tech companies, there are users of IaaS and PaaS. And according to the observations, they are middle-level companies or freelancers.
- There is another observation that some subscribers neither chooses IaaS, PaaS nor SaaS. They prefer to have a specific service like DBaaS, ITaaS. These services comes under the category of XaaS.

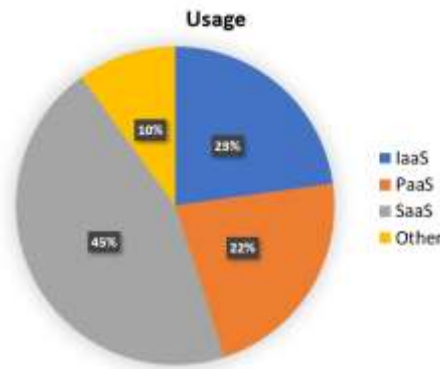


Fig: Comparison chart from a real ISP industry.

The Cloud Trend from 2008 - today and going forth:

Cloud technology came into the picture during the years 2008-2010 when the two of the most giant tech companies Google and Amazon brought up their cloud platforms in competition.

The following diagram represents the trend of Cloud Technologies right from its first industrial appearance.

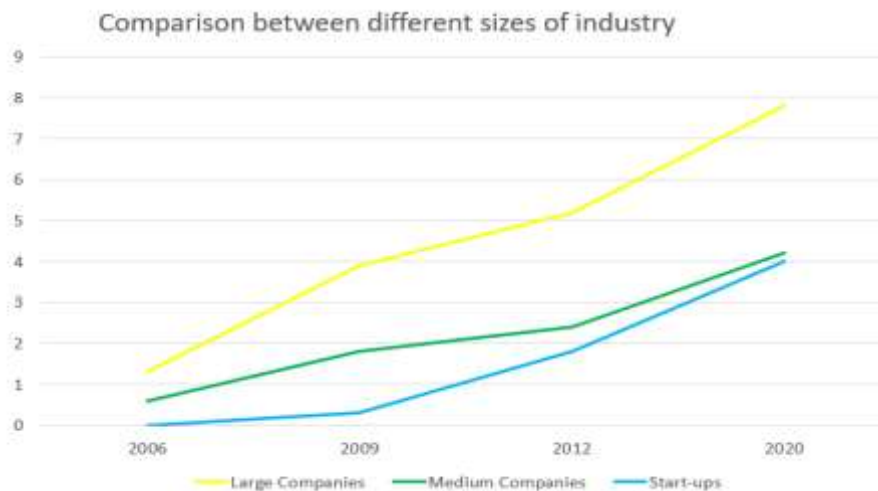


Fig: Comparison chart from a real ISP industry.

The cloud technologies started their journey towards empowering the computing capabilities of ISPs in 2006, by letting the ISPs outsource the resources they want to provide

to their subscribers.

The observation captured from the above graph states that there is a specific trend observed in the usage and adaptation of cloud platforms over time. We can see there's a steep slope for the line of "Large Companies" indicating the fact that these all companies want to stay in the competition of capacity, speed, and reliability. We can also see there's a gentle hike for the line of "Middle Companies" with the latency behind the line of "Large Companies" indicating the fact that either these all companies come to the realization lately or are dependant on the "Large Companies" by means of the utilization of their resources (namely capacity, speed, and reliability) on lease. On the other hand, there has been observed a sharp increasing scope after the year 2009 for the line of "Small businesses and Start-ups".

Conclusion:

Nowadays the usage of cloud computing service in large organizations is huge as compared to dedicated service. In 2007, cloud computing came into the picture but this idea first came in the 1950s. There are five technologies which played a vital role in making cloud computing and the technologies are distributed system and its peripherals which started in the 1950s, Mainframe computing started in 1951, cluster computing(1980s) came as an alternative to mainframe computing, Grid computing(1990s) the concept of grid computing is that the different system was placed in different location these all were connected via the internet, Virtualization is introduced nearly 40 years back, Web 2.0 (2004) gained major popularity, Service orientation (It acts as a reference model for cloud computing), Utility computing(defines service providing a technique for services such as compute services along with other major services) thus, these are the technologies contributed to making of cloud computing. Cloud computing refers to configure, manipulate, and access hardware and software resources. Cloud computing offers storage of data, applications, and infrastructure. Offering platforms to Self- direction (independency), as that does not require to be installed locally on PC.

The promise is to reduce the overhead of developing, configuring, deploying, and maintaining cloud applications by providing virtual required hardware, software, or the client requirement to just pay the resources we used. And it is a new illustration for developing flexible and elastic applications with less time to market.

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Naresh Ramamurthy Avva department of computer science. San Jose State University San Jose, 95192 669-300-8343.

Sai kiran Reddy Padooru department of computer science. San Jose State University San Jose, 95192 510-575-3002.

A Study of Change in Investment Pattern Pre and Post Covid-19

Authors: Nisha Dubey, Anjali Pandey, Sangeeta Gupta

Guide: Dr. Charu Upadhyaya

Class: FY MMS (Finance)

College: Thakur Institute of Management Studies and Research

Email: nishadubey1602@gmail.com,

sangeeta.gupta2598@gmail.com,

anjianjir.1012@gmail.com

Abstract:

Investing is an important aspect of an individual's life. Although majority of India's population is the youth, there is a lack of awareness regarding investment avenues and its importance. Moreover, in March 2020, India was hit by the COVID-19 pandemic. It had an impact across the globe and every sector was affected due to the same. The basic aim of this research is to analyze the impact of pre COVID and post COVID investment trend. This study examines the different behavioral patterns of investors. The survey method was used to collect the data through a structured questionnaire administered among 70 investors selected using stratified random sampling. The results indicate five behavioral investments: Mutual fund, Real estate, fixed deposit, Gold and fixed income securities. According to survey most of the investor invests in mutual fund, they are ready to take high risk so they can earn more money. There are investors who are investing their money in fixed deposit, gold, fixed securities and real estate so with the help of this they can earn fixed income. Also, through survey we found investor are invest less before COVID as compared to after COVID due to the awareness among the youth about the benefits of investment there has been slight increase in the number of investors.

Introduction:

Investment is an allocation of funds to different assets with an expectation to earn returns in future. Investment is an asset or item acquired with the goal of generating income or appreciation. An investment refers to the commitment of funds at present, in anticipation of some positive rate of return in future. Today the spectrum of investment is indeed wide. An investment is confronted with array of investment avenues. Among all investment, investment in equity is in best high proportion. This is because the history of stock market is booming and bursts overnight millionaires, an instant pauper. Indian economy is doing indeed well in recent years. The study has been undertaken to analyze the investment pattern of investment community. The main reasons behind the study are the factors like income, economy condition, and the risk covering nature of the Indian investors. The percentage of Indian investors investing in the Indian equity market is very less as compared to foreign investors.

This project contains the investors' preferences and as well as the different factors that affects investor's decision on the different investment avenues Pre and post COVID. To examine the reasons and results of the financial crisis on housing and securities markets, corporate investment decisions, financial institutions, Bank lending, financial regulations and

institutional investors. Significant research attention has also been paid to the effects of the COVID-19 pandemic on gold prices, crude oil prices, crypto currencies and market indices.

However, the influence of the COVID-19 on individual investor behavior is an area that remains relatively under-examined.

Not only does this help you to meet your goals, but it can also give you the context and the peace of mind that your short-term financial objectives are secure even when there is a massive disruption to financial markets, thus helping you avoid the temptation to react to markets. (European Journal of Molecular & Clinical Medicine ISSN 2515-8260 Volume 7, Issue 11, 2020 5647). Investment in real estate or property can reap long term benefits. With all time low interest rates and rental income remaining intact this is the good time to build the investor portfolio In the post-COVID-19 pandemic scenario, Investors need to be extra cautious, but broadly the definition of the best fund remains the same.

Scope of Research:

- To analyze the preferences of investments made by people in changing scenarios.
- To understand the change in the investing pattern of investors.
- The geographical scope of this study is limited to Mumbai Metropolitan Region.

To determine the relationship between uncertainty in the market and the change in investing pattern of the investors

Objectives of Research:

- To understand the impact of COVID 19 on the preference of retail investors.
- To identify the investment preferences of Investors post COVID 19.
- To assess the change in returns from various sources of investments.
- To study the willingness of the investors to invest during the pandemic.

Research Methodology:

For the purpose of the study, data was collected from primary as well secondary sources. Secondary data was taken in order to analyze the impact of COVID on various sectors and its implication on the financial health of the country. In order to further analyze the impact of COVID on individual investors, primary data was collected by the way of standard structured questionnaire.

Data collection:

A structured questionnaire was circulated to a sample of 100 of which 70 responded completely filled.

Tools to analyze Data:

Descriptive Analysis: A combination of pie charts, bar graph, percentages was the tools used for the descriptive analysis of the data.

Inferential Analysis: For the inferential of the data use of Hypothesis testing and correlation analysis was used.

Data Analysis & Interpretation:

Descriptive Analysis: The paper examines the impact of the pandemic on the investment pattern of investors. The data collected for the study has the following demographic composition.

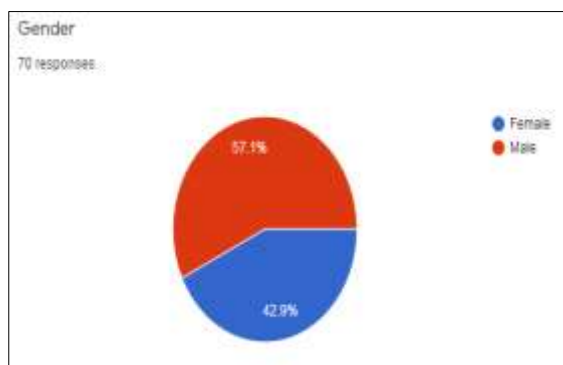


Fig: 01

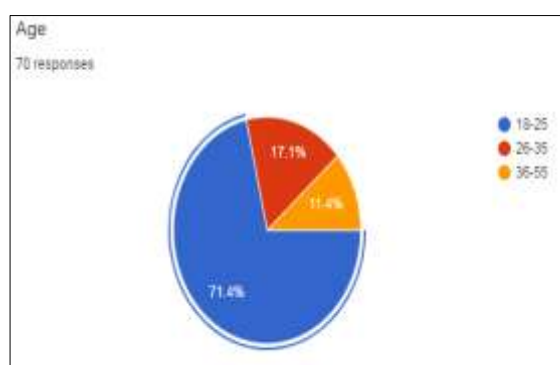


Fig: 02

The data for this research has been collected from 70 respondents from across the city of Mumbai. The survey sample comprises of respondents across the age group of 18 to 50 years. There were 40 male and 30 female respondents. It is found from the study that about 56% men and 57.14% women indulge in investing activities.

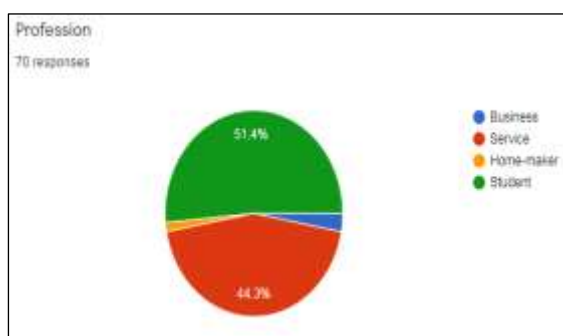
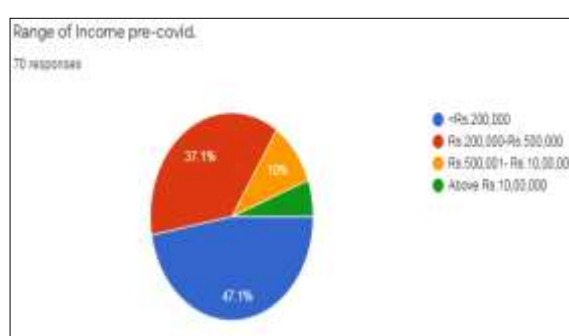


Fig: 03



Figs: 04

The above figure (04) indicates the distribution of the respondents on the basis of their income, of which 47.01% was having income to be, less than Rs.2, 00,000 p.a. and 15.8% were with more than Rs.5, 00,000 p.a. of income. And in figure: 03, 51.4% of respondents were students and 44.03% were from working class. Majority of the respondents belonged to the income class earning below Rs.200000 p. a. Half of the respondents belonged to the student and service employees and a very negligible proportion belonged to the Business class.

Mutual funds continue to be the most invested in instrument pre COVID as well as post COVID. While fixed deposits continue to be the 2nd most popular investment. A slight drop in investments made in real estate can be seen. (Refer charts below).

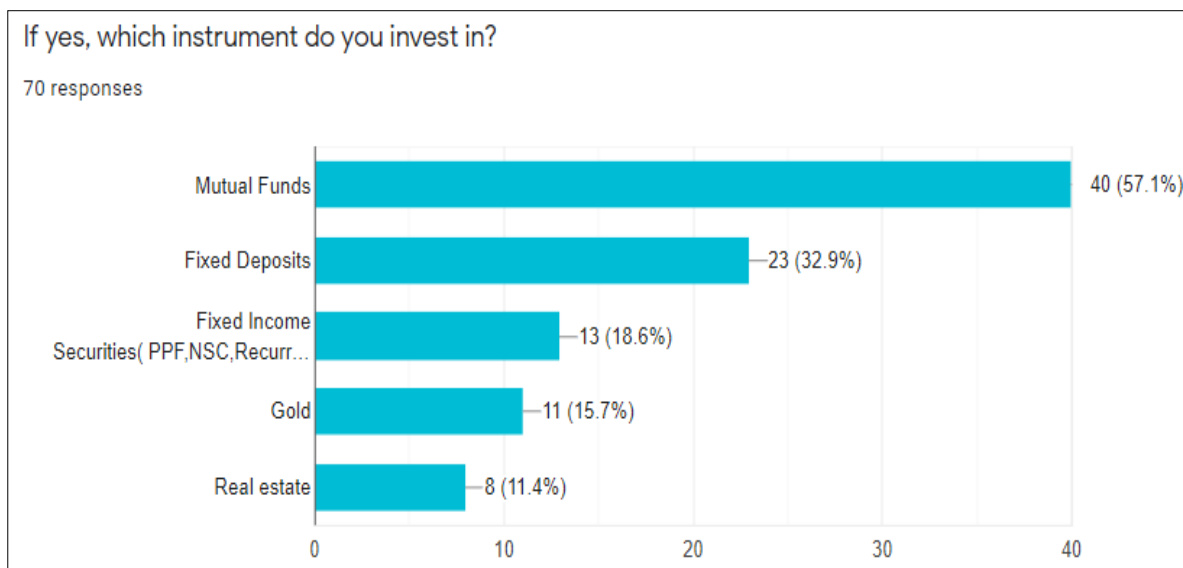


Fig: 05

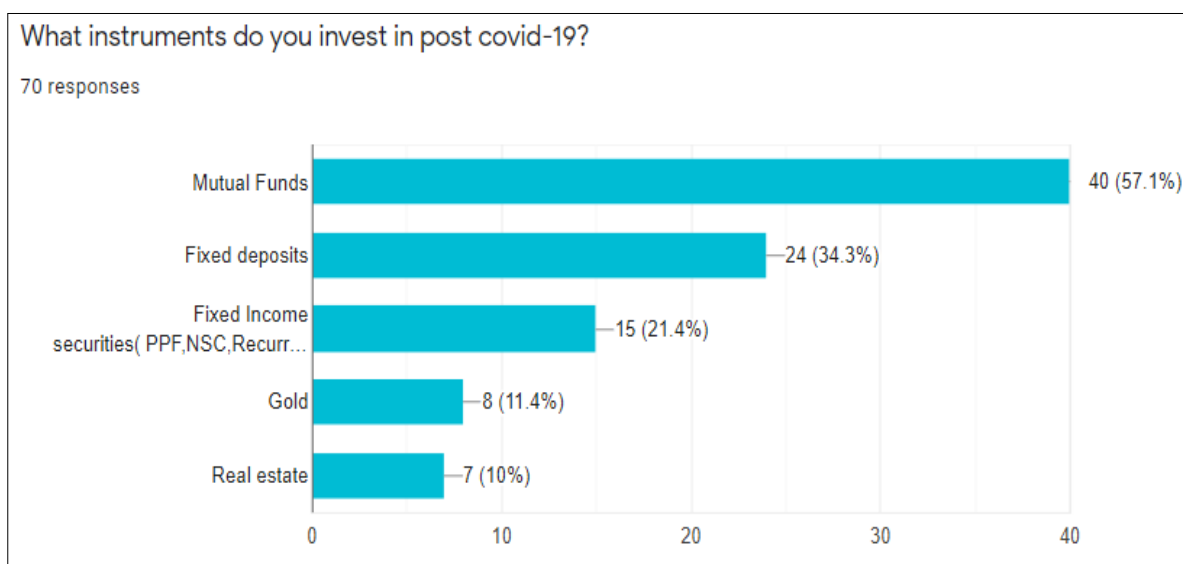


Fig: 06

Inferential Analysis:

In order to study whether there is a significant impact of COVID on investment patterns; hypothesis testing was conducted on the data collected. Following hypothesis is formulated for the purpose of the study.

H01: There is no significant difference in investing pattern of individuals across the professions.

H1: There is a significant difference in investing pattern of individuals across the professions.

H02: There is no significant difference in the investment pattern of individuals across the types of investment instruments.

H2: There is a significant difference in the investment patterns of individuals across the types of investment instruments.

In order to analyze the above mentioned hypothesis two way ANOVAs was applied on the data

collected. Following are the results:

Source of Variation	SS	DF	MS	F	P-value	F-critical
Rows	215.0667	4	53.76667	2.872663	0.095315	3.837853
Columns	294.9333	2	147.4667	7.878896	0.012857	4.45897
Error	149.7333	8	18.71667			
Total	659.7333	14				

F critical for Rows= 7.0061

F critical for column= 8.6491

As the F calculated value across rows (2.87) is less than F critical value (3.83). Thus, we accept the null hypothesis and can conclude that there is no significant difference in the investment pattern of individuals across the types of investment instruments. Since, F critical for column is greater than F calculated we conclude that there is a significant difference in investing pattern of individuals across the professions.

Co-Relation Analysis

To check the magnitude of relation between the income of investors and the amount invested, we found out the co-relation to be 0.755. Thus, indicating that there is a high degree of positive co-relation between the income of an individual and the amount of investment made by the investor pre covid-19. The co-relation between income and the amount invested was calculated to be 0.995. Thus, indicating that there is a high degree of positive co-relation between the income of an individual and the amount of investment made by the investor post COVID-19.

Income Slab	frequency	Investment Slab	Pre-COVID
0-2,00,000	32	<Rs.20,000	47
2,00,001-5,00,000	24	Rs.20,001-Rs.40,000	9
5,00,001-10,00,000	7	Rs.40,001- Rs.60,000	4
10,00,001 and above	4	Rs.60,001-Rs.80,000	7

Conclusion:

The impact of COVID 19 is huge and the economy is going to take time to completely recover from the impact. Investor preferences are dynamic. They are influenced by investor behavior and number of external factors. COVID – 19 was an unprecedented event that changed the paradigm of the entire world and has established a “new normal”.

This research has made an honest attempt to comprehend the preferences of investors primarily towards three investment avenues namely “Mutual Funds”, “Real Estate”, “Gold”, “Fixed Income Securities” and “Equity” in two circumstances:

- i) Before the Outbreak of COVID – 19
- ii) After the Outbreak of COVID – 19.

As per the analysis carried out there was a slight increase in the number of investors in the age group of 18-26 years specifically. The co relation analysis shows that there is a moderate to high degree of positive relation between the amount invested and the income of the investors. The negative impact of the pandemic can be seen in the real estate sector as the investments fell by 2% while the other sectors seemed to have fared well.

Generally, Investors prefer asset classes that ensure constant and steady returns at minimum risk. Ultimately Investment is a rational decision that depends on the individual’s risk appetite and return expectations arising out subjective assessment of multiple factors.

Recommendation:

After a thorough study and analysis of the data collected we recommend people to invest in instruments such as gold and real estate too. These instruments are also good alternatives to fixed income securities and also add value to wealth. In the time of crisis when due to the lockdown a downfall in the stock market could be seen, the prices of Gold continued to rise each day. The prices of gold hiked 38% in comparison to the 2008 crisis when the prices of gold rose by 36%. Among all the instruments considered for this study, gold has proven to be crisis proof investment. Nearly 43% of the respondents focus was the returns provided by the investments, made followed by risk involved, followed by liquidity. In such a scenario the aim of investment should be wealth creation. Real estate proves to be one such instrument. The government of Maharashtra had slashed the rates of stamp duty to 2 %(up to 31st December 2020) which again rolls up to 3 %(up to 31st March 2021). And an added discount of 1% for the female beneficiaries. While the value of real-estate continued to rise by nearly 5% creating a great wealth creation benefits. In our research we also found out that the correlation between the income and the amount invested is positive. Thus we would urge masses to invest not necessarily in the traditional sources of investments but also in the modern day instruments.

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A Comprehensive Analysis of Media Laws in India with special emphasis on the newly introduced legislations in the states of Maharashtra and Chhattisgarh

Authors: Aakanksha Chaturvedi and Priyal Shah

Class: TYBMM

College: SVKM's Mithibai College

Email: aakancvedi@gmail.com

Abstract:

The press and media are the fourth pillar of any functioning Democracy. They are the bridge between the Legislative, Executive, Judiciary and the public. A true democracy can only be upheld by an independent media. Unfortunately, our country India, which is better known as the world's biggest democracy, has seen a remarkable rise in attacks and murders of journalists in recent years, making it one of the most dangerous nations in the world to be a journalist. Several international reports confirm this fact. In the recent two decades, India's ranking plummeted from 80th to 142nd in the World Press Freedom Index, which was released in 2020. Also, India appeared in the Reporters Without Borders' (RSF) list of *Five Deadliest Countries in December 2020*. The main conclusion drawn from all these reports is the fact that our nation lacks strong legislations in place to protect journalists to independently do their work. In reality, there are no laws concerning journalists' safety and protection in our present legislature. The regulations for journalists are derived from other existing laws. Only two states, Maharashtra and Chhattisgarh have taken a step towards rectifying this mistake and introducing laws in their state legislature.

This paper focuses on the existing legislature in India with regards to media personnel and the rights granted to them to defend the democracy. This paper also does an analysis of the new legislations passed/ proposed by the states of Maharashtra and Chhattisgarh to counter the complete lack of any Central legislature to better protect the freedom of the press.

Background:

Journalism is the Fourth Estate of Democracy, an underpinning for sound governance and democratic accountability. According to the Working Journalist Act, 1955, 'Journalist' is a person employed by a newspaper establishment as an editor, writer, reporter, correspondent, photographer or proof-reader. Ensuring the safety of journalists is most vital in a democracy to enable the exchange of information and news on matters of public interest.

In the recent years, India has seen a sharp decline in its ability to create a safe environment for practice of true and fair journalism. In December 2020, India appeared in the Reporters Without Borders' (RSF) list of *Five Deadliest Countries* (The other four countries in RSF's 2020 Round-up were Mexico, Iraq, Afghanistan and Pakistan). In the first World Press Freedom Index released in 2002, India's rank was 80th and in the latest report (2020) the rank fell to 142 out of 180 countries.



Source - RSF's World Press Freedom Index

The Global Impunity Index created by Committee to Protect Journalists (2020) [CPJ] ranks countries where journalists' murders receive complete impunity.

The Global Impunity Index is calculated by taking a percentage of the number of impunities received for journalists murdered per million population. The index was first compiled in 2008, and since its inception, India has consistently featured in the list.

For the index, it displays only those countries where five or more unsolved cases have been committed. The list showcases only those cases where the cause of journalists' death is linked to their work. The index does not include cases where partial justice or partial impunity is served, i.e., if some perpetrators are convicted and not all. It does not include journalists who die while on risky assignments or during combat.

Table 1: Comparing South Asian countries according to CPJ's Impunity Index

	India	Pakistan	Afghanistan	Bangladesh
2008	13 th	12 th	7 th	11 th
2009	14 th	10 th	7 th	12 th
2010	12 th	10 th	6 th	11 th
2011	13 th	10 th	6 th	11 th
2012	12 th	10 th	7 th	-
2013	12 th	8 th	6 th	-
2014	13 th	9 th	6 th	-
2015	14 th	9 th	7 th	12 th
2016	13 th	8 th	7 th	11 th
2017	12 th	7 th	-	10 th

2018	14 th	9 th	6 th	12 th
2019	13 th	8 th	6 th	10 th
2020	12 th	9 th	5 th	10 th

Source: Committee to Protect Journalists (2008-2020)

The UNESCO Observatory of Killed Journalists confirmed the deaths of 45 Indian journalists between the years 1996 to 2020 (UNESCO n.d.). But a national study conducted by Thakur Foundation in the year 2019 recorded 40 journalists were murdered between 2014-19 with relation to their work. Their report ‘Getting Away with Murder’ highlighted those 198 severe attacks on journalists also took place in the same time frame, also in relation to their profession. Their study observed the increased attacks and deaths of journalists and the subsequent status of receiving justice in 63 instances. Out of 63 cases, only 25 had lodged an FIR, out of which 18 had received no progress. In 3 cases, counter complaints were registered against the journalist. These attacks took place while covering/reporting the events while the journalist was involved in an investigative work.

Moreover, it is hard to keep a record of death of journalist’s deaths due to their profession because the government keeps no official data above which, justice is delivered at a sluggish pace. The International Federation of Journalists in 2018 confirmed this, noting the case of Ram Chander Chhatrapati, a journalist who had exposed Gurmeet Ram Rahim and had received justice 16 years after his death. This was the only case resolved among 55 other cases pending since the year 2010.

These examples of delayed justice showcase the lack of vigorous and exhaustive legal framework or assistance that the Indian judicial system should have provided for the safety of journalists. On the contrary, several legal elements and legislations actually create more trouble and restrictions for the journalist while they attempt to report freely.

Media Laws:

There is no specific law dealing with the profession and practice of journalism in India. Article 19 (1) (a) of the Indian Constitution offers Freedom of Speech and Expression to every citizen. The Press Council of India (PCI) draws the validity and right for the freedom of the press from the scope of the same article. The second clause to Article 19 adds certain restrictions, these also apply to journalists, and therefore the freedom given by the former legislation can be stripped if the speech violates the sovereignty and integrity of India, security of the State, friendly relations with foreign states, public order, decency and morality, contempt of court, incitement to an offence, and defamation.

One of the key hurdles for practising journalists in the country has been the Defamation law. Under section 501 of the Indian Penal Code (IPC), printing defamatory content can lead the offender to imprisonment of up to two years, with a fine or both.

Similarly, the Indian Penal Code (IPC) Section 124A on sedition puts forth that any written or visual attempt to stir hatred, contempt, or disaffection in a community or towards the government can cause up to a lifetime of imprisonment. The Section 124A of IPC or Sedition is quoted as:

“words, either spoken or written, or by any signs, or by visible representation, or otherwise, brings or attempts to bring into hatred or contempt, or excites or attempts to excite disaffection

towards the Government established by law.” (IPC Section 124A)

To sum it up, the law forbids any form of verbal or written protest against the government. Justice Madan Lokur, a former Supreme Court judge, while giving a lecture on preserving and protecting Fundamental Rights and Freedom of Speech, claimed that sedition “is not being misused, but is being abused” (Press Trust of India 2020). Justice Sanjay Kishan Kaul and Justice Hemant Gupta, while dismissing sedition charges on Farooq Abdullah who had asked to scrap Article 370, have noted that “Expression of views which are different from the opinion of the government cannot be termed as seditious. It cannot become sedition only because one has a different view” (Anand 2021).

Sedition, originally a colonial law, was formerly utilized by the British Government to suppress Indian voices. Despite amendments and changes in many pre- independence laws, there have been no changes in this legislation. The British Government itself has not used the sedition law in the UK since 1972 and has scrapped it all together in 2009. According to a report by the Human Rights Watch which came out in 2016, due to its vague nature, sedition is prone to be used to silence dissent for political purposes.

Sedition is widely being used to prosecute people who criticise the Indian government. The use of sedition law has significantly increased since the year 2014. As per Purohit (2021), Article 14’s Sedition Database from 2010-20 shows that 96% of all sedition cases filed for criticising politicians were filed after the year 2014. Between 2010-14, 249 cases of sedition were filled on an estimate of 3762 individuals, whereas 519 cases were filled on roughly 7136 individuals between 2014-20 (ibid). NCRB data on sedition claims a sharp rise in cases since it started collecting data in 2014, but with a fall in conviction rate. The number of cases rose from 51 to 93 in 2017- 19 (Ghose 2020).

Recently, various journalists like India Today’s Rajdeep Sardesai, Qaumi Awaz’s Zafar Agha, National Herald’s Mrinal Pande, and Caravan Magazine’s Paresh Nath, Anant Nath, and Vinod Jose were charged under sedition law. According to Purohit (2021), nearly 30% of the FIRs registered for sedition are combined with other laws. Many restrictions (see Table 2 below), along with sedition, are placed to curtail journalists’ freedom of speech.

Table 2: List of Restrictions Used Apart from Sedition

Section 153A	Promoting enmity between different groups on grounds of religion, race, place of birth, residence, language etc.
Section 153	Imputations, assertions prejudicial to national integration
Section 171G	False statement in connection with an election
Section 228	Intentional insult or interruption to public servant sitting in judicial proceeding
Section 505	(i) Statements conducing to public mischief (ii) Statements creating or promoting enmity, hatred or ill-will between classes

Source: Press Council of India (2010)

Despite 71 years of the Constitution recognising basic freedoms, a lack of proactive lawmaking for journalists has resulted in only one government recognised institution, the Press Council of India, for press freedom.

Press Council of India:

On the suggestion of the First Press Commission, Parliament set up the Press Council of India in 1966. It served the purpose of ‘preserving the freedom of the press and of maintaining and improving the standards of newspapers and news agencies in India’ (Press Council Act 1978).

PCI is composed of a Chairman and twenty-eight members whose primary task is to act as the ‘Court of Honour’. It remains, for the most part, a statutory body that recommends instead of rules. If PCI finds the work of any newspaper or news agency offending “journalistic ethics or public taste”, it could “warn, admonish or censure the newspaper or news agency” (Press Council of India 2010).

The Hoot, a media watchdog that conducted research to study media in the subcontinent, has reported that many cases taken up by the PCI were after a gap of three to four years; in which, out of the 90 decisions declared, 54 cases were either dismissed or dropped (Akoijam 2012). Seeing the shortcomings in its own organisation, PCI, in a report addressing the safety of journalists, mentioned that attacks on journalists should “be investigated by a special task force” (Press Council of India n.d.: 19).

To date, no special task force has been allocated to the PCI, and its role has been limited to a statutory body. This leads to an over-accumulation of cases for the PCI and an inability to deliver justice. Albeit one of its objectives is to preserve the Freedom of the Press, it fails to deliver on it.

In 2019, Kashmir Times’ executive editor Anuradha Bhasin had petitioned in the Supreme Court to relax and free movements of media persons and journalists. Instead of supporting the freedom of press, PCI stated that the restrictions were “in the interest of the freedom of the press as well as in the national interest” (IANS 2019) and prescribed self-regulation on reporting by journalists (Global Freedom of Expression n.d.)

Instances like this curtail journalists’ ability to report freely on matters of public attention. PCI’s limited role has led to a failure in securing the freedom of journalists and their profession. Seeing the void in the Centre’s legal system, few states have begun to pass acts and bills for ensuring the safety of journalists, as discussed below.

Maharashtra Media Persons Act

The first state-level law for journalist safety was the Maharashtra Media Persons and Media Institutions (Prevention of Violence and Damage or Loss to Property) Act. It was passed in the assembly in 2017 and received the President’s consent in 2019 (Maharashtra Media

⁶ As mentioned in ‘Press Council of India 2010’.

⁷ Out of 90 cases 40 complaints were registered before 4 years.

Persons and Media Institutions Act 2017). The Act aims to control the onslaught of violence on media persons and media institutions and any damage to their property in Maharashtra. The Act defines media persons and media institutions as follows:

Media Person	Media Institution
is an Editor, Sub-Editor, News Editor, Reporter, Correspondent, Cartoonist, News-Photographer, Television Cameraman, Leader-Writer, Feature-Writer, Copy-tester and/or Proof-Reader	is any Newspaper Establishment, News Channel Establishment, News-based Electronic Media Establishment and/or News Station

The Act promises to protect any “movable or immovable” property and “equipment or machinery” belonging to a media person/institution. Any act of violence against media persons/property can lead to imprisonment up to 3 years and/or a fine up to 50,000 rupees for the offender. Yet, in the case of Raghavendra Dube, no offender was imprisoned while the journalist was covering attacks on two journalists in Mira Road. He was found dead five hours after leaving the police station (FP Staff 2015).

The Act dictates the offender liable to pay the compensation of damaged property. The Act also makes the offence non-bailable whose investigation can be carried by a police officer, not below the rank of Deputy Superintendent and will be triable by a first-class magistrate. Getting a higher police officer to investigate would have been beneficial in the case of Ashish Raje, who was allegedly manhandled by two police officers (PTI 2020).

Shortcomings:

Despite the step in the right direction, this Act does not cover bloggers, freelancers and social media journalists as they are not in alliance with any media institution (Seshu 2017). Maharashtra’s Balasahed Navgire, a freelance reporter, was attacked by a mob, but even after launching an FIR, no arrests were made (PTI 2020). They also note that the Act weakens the punishment prescribed by IPC Section 326 and 307, which are for grievous assault and attempted murder, respectively.

Moreover, the Act also doesn’t feature any repercussions on virtual harassment or trolling faced by journalists using non-traditional methods of journalism. In today’s digital age, not safeguarding those reporting online makes a large section of journalists vulnerable. Senior journalist Sagarika Ghose mentions, “The biggest problem they [trolls] have is with journalists, then liberal journalists, and liberal women journalists are target number one” (Nandkeolyar 2018).

It also doesn’t feature any mandate towards harm done while the person is not on duty. People could further exploit this loophole to harm the journalist before or after doing their job. As observed in the case of Gauri Lankesh and Raghavendra Dube, the act of violence is also committed while the journalist is on duty.

Furthermore, no body or institution is created to ensure that justice is delivered after the demise of journalists. The immediate family or kin of the journalist is not accounted for. The Act also does not mention where the funds or legal assistance will be procured from for the journalists.

The Act asks the offender to pay a penalty under ‘Liabilities to pay compensation for damage or loss caused to property’; however, the offender is often not caught. The police also tend to turn a blind eye in case someone influential is involved.

There has to be a non-local establishment where the report can be filed to avoid the loopholes mentioned above. An option to file the report remotely should be provided to the victim, along with a monthly audit of the cause.

Implementation:

So far, there is no statement or data available regarding the beneficiaries or changes brought about by the Media Persons Act in Maharashtra. The Wire’s Shantha (2020) tracked 15 instances during the COVID-induced lockdown where journalists were restricted from reporting in Maharashtra. In all 15 cases, Maharashtra Media Persons Act was not utilised. Majumder (2019) notes Niranjan Takle’s opinion that this journalism protection law has not been implemented successfully.

Chhattisgarh Protection For Journalists Bill:

The People’s Union for Civil Liberties Chhattisgarh has proposed a Bill titled “Chhattisgarh State Commission for Protection of Journalists and Human Rights Defenders” (Media Vigil 2016). The implementation of this Bill will form an autonomous body ensuring that legal and financial assistance is provided to those who face difficulties while exercising freedom of speech. This Bill is the first in India to receive support from politicians campaigning for journalist safety and winning an election for it (Majumder 2019).

Table 3: Definition provided in Chhattisgarh State Commission for Protection of Journalists and Human Rights Defenders (Media Vigil 2016)

Journalist	Media
Any person who makes the exercise of freedom of expression and /or dissemination of information, his primary, substantive or significant activity	Any means of communication used regularly for purposes of dissemination of information and expression of views and opinions such as the print media, digital media

Source: Media Vigil (2016)

Any case admitted to the committee will be analysed for its potential risk. After risk assessment⁸, the case wherein the journalist’s life is in imminent danger will be met with “extraordinary procedures”. In such high-risk cases, the governing body will study and procure “Urgent Protection Measure” within 3 hours of admission of cases. The plan will be implemented within 9 hours of it being devised.

If danger is not immediate, then the committee will employ “Ordinary Procedures”. The risk assessment would have to be submitted to the governing body within ten days of arrival. The governing body will then draft the measures within one week.

⁸ An instrument will be devised that will count the degree of risk in any case

The governing body can forward some cases to the special investigative unit. This unit will be established to track certain cases where the involvement of police or authorities are involved in harming the journalist. This could be useful as journalists like Prabhat Singh of Patrika are put behind bars for allegedly posting an “obscene message” about a senior police officer on WhatsApp group (Ghosh 2016).

This Bill ensures that any journalist⁹, along with their immediate family¹⁰, will be provided with security and sustenance during risks or threats. Such guidelines would prove helpful in the cases such as Sheikh Anwar’s, where he and his wife were arrested for allegedly obtaining ammunition for Naxals (IBNLive 2012).

The Bill also has the feature to launch an investigation or enquiry into suspected cases. The Bill gives the governing body the power to seek from any state authority/body relevant documents for the case.

Shortcomings:

Journalists have hugely praised this draft as it employs a liberal definition that includes freelancers and bloggers¹¹. According to the Reuters Institute, 56% of people under age 35 consume news online, while 28% access social media for daily news consumption (Aneez et al., 2019). While the Bill includes a growing section of online journalists, it also adds in its committee retired judges and police officers to protect journalists. Mishra (2020) questions here the role the composition of the committee will play in delivering justice.

There is no mention of the budget or the amount the State will provide for such an expensive Act to function properly. Nor does it disclose the location or place from where the functions of the committee will take place.

Another issue with the Bill is that it specifies the governing body having 8-12 members, but there is no mention of whether the governing body will have a hierarchy or will make uniform decisions. Nor is there a mention of how the seats would be distributed amongst the Home Department, members of the Press, State Human Rights Commission, Civil Society Organisations with a mandate for securing Human Rights, and retired judges from the Chhattisgarh High Court.

The Bill also makes no mention of how the special investigative unit will be formed. There is no explanation of how the said officers would be recruited or trained or of their eligibility and the number of positions allocated to the unit. Another flaw with the special investigative unit, a unit specifically created for cases where police/authorities are involved in murder, is that it is placed under the governing body’s command presided by retired judges and home department members.

⁹ The qualification of a journalist is so liberal that anyone with five published articles in the last six months or anyone paid by any publisher in the last three months is counted.

¹⁰ Partner by marriage or otherwise

¹¹ Not covered / protected by the Press Council Act.

Involving people who are a part of the machinery (i.e., police officers, judges, etc.) may cause a conflict of interest, given that instances where they might be under the pressure or influence of politicians or people in power are bound to happen. As was seen in the Banker region of Chhattisgarh, where the police denied to report violence on Bhunkal Samachar's editor Kamal Shukla by Congress members (Mishra 2020).

However, the biggest hurdle would be to pass this Bill on the legislative floor, which consists of politicians who often have incompatible motives. Passing a bill that would empower and strengthen a journalist's position against them would create a conflict of interest. Furthermore, there is a strong possibility that the legislators may strip the defining and protective features in the Bill. In the end, this Bill's ability to protect journalists "boils down to the state's intent" (Subramaniam 2020).

Responsibilities of a Journalist:

On the issue of press freedom, Jawaharlal Nehru had mentioned the danger complete freedom entails, stating, "If there is no responsibility and no obligation attached to it, freedom gradually withers away. This is true of a nation's freedom and it applies as much to the press as to any other group, organisation or individual" (Press Council of India n.d.). The press has to maintain norms of professionalism to help them guide with "their role, their rights and obligations and how they can best perform their job" (UNESCO n.d.).

Under section 13 (2)(b) of the Press Council Act, a code of ethics was developed for news media persons and journalists titled Norms of Journalistic Conduct. The document's role is to maintain "high public taste standards" and foster "responsibility towards the citizens" (Press Council Act 1978). It provides "principles and ethics" for the profession and "guidelines on specific issues" (Press Council of India 2010).

The press today is increasingly diverging from the standards prescribed to them. Journalism is filled with "alternative facts, untruths, fake news" where "only the loudest can be heard" (Shukla 2020). More sensational, voyeuristic, and false content is observed in the reporting (Shukla 2020). For instance, the widespread reporting of Sushant Singh Rajput and especially Rhea Chakraborty violates Norms of Journalistic Conduct part (A) section 6 of Right to Privacy, which states: The Press shall not interfere or invade an individual's privacy, except when it is outweighed by genuine public interest. In reports which are likely to stigmatise women, particular caution is essential (Press Council of India 2010).

Media's Watchdog:

PCI is a quasi-judicial body that serves the function of India's newspapers and news agencies' watchdog. During the emergency, many journalists' rights suffered, which forged a valuable lesson that the PCI is a mere parliamentary body. Recent activities of this body include demands for the title of "Corona Warriors" for journalists and urging editors to verify foreign content before publishing (PTI 2020). Yet, the PCI did not interfere when newspapers broke their ethics by falsely reporting the farmers' protests as "Khalistani" (Mustafa 2019).

Post emergency, in 1978, the Editors Guild of India was established by Kuldip Nayar to protect "press freedom and for raising the standards of editorial leadership"

(Mustafa 2019). The Guild had successfully taken the issue of press freedom on a national level by organising protests during the 1986 Anti-Defamation Act and the 2001 Prevention of Terrorism Ordinance (Editors Guild n.d.). But over the years, the Guild has lost its initial resolve of protecting journalism, with Kuldip Nayar himself acknowledging that “we started giving up on what we stood for, and the Guild stopped functioning” (Mustafa 2019).

Many small organisations have relentlessly contributed to safeguarding the integrity of the profession and the safety of its journalists. Organisations like the Press Club of India, Mumbai Press Club, Press Association, and Delhi Union of Journalist have significantly contributed to the profession of journalism (The Citizen 2019). For instance, in the above-mentioned instances of Ashish Raje, the Press Club was able to draw a response by the Home Minister of Maharashtra (The Quint 2020) and for Raghavendra Dube, the Chief Secretary was involved (Punwani 2015).

Conclusion:

Freedom of the press is the cornerstone of any democracy. Yet we see the largest democracy become one of the most dangerous places for journalists. As such, it becomes crucial to guarantee protection to those exercising their freedom of expression professionally to benefit the masses by staying true to the ethics of the profession.

Seeing the plethora of rules and laws restricting and curtailing journalists’ freedom of speech must act as an instigator to formulate legal frameworks protecting journalists. Maharashtra and Chhattisgarh are the only states that have taken a step in this direction, albeit with varied flaws in their Act and Bill, respectively.

The impunity that offenders receive only highlights our need to take proactive steps to improve the status quo. The first step in this direction would be to introduce a standard set of media laws on a central level. The need here is not to have individual laws in states, but one unified law to monitor crimes against journalists and protect their rights.

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To study the impact of a marketing campaign on the brand image (with special reference to Gillette – We Believe)

Author: Celina Pinto

Guide: Dr. Rekha Katheeth

Class: TYBCOM

**College: SVKM's Narsee Monjee
College of Commerce and
Economics**

Email: celinapinto12@gmail.com

*This research paper won the **Third prize** at Research Fair 2020-21: An Intercollegiate Research Paper Presentation Competition held by the Research Committee of SVKM's Narsee Monjee College of Commerce and Economics on 16th April 2021.

Abstract:

Marketing campaigns affect a company's brand image and revenue. The research paper focuses on two alternatives marketing campaigns of Gillette and Egard Watches on masculinity, one bringing the company to its knees while another to limelight. It aims to understand whether this advertisement campaign which gained 8.5 million views on YouTube in a span of 24 hours, actually encourages men to be the best versions of themselves or it is just an expensive exercise in destroying the company's dominant market share. The paper will first describe both the campaigns and paints the entire scenario to address the issue in a clear manner. Detailed explanation is given on how the research is undertaken and the limitations of the study. Following this, further arguments will be laid forward by analysis of the data collected through primary research. The research undertaken provides justification for Gillette's \$8 billion write-down. Finally, it provides a brief note on how masculinity has always been a shaky ground to work on and the implications for future analysis and scope of future research on the case of Gillette and Procter and Gamble.

Introduction:

Gillette is an American brand making razors and other personal care products inherently for the male population. Gillette was initially introduced in the year 1905 but was later merged with the mega-marketer Procter and Gamble in 2005 for \$57 billion. Gillette sells its products worldwide and has been the market leader in the segment of razors especially in the United States. By 1961, Gillette captured 70% of the razor market share in America. For years, the company advertised its products claiming Gillette is 'The Best a Man Can Get'.

Gillette stuck their nose into a political bee's nest expecting to only get honey, but instead, they got stung. Gillette released a new commercial 'We believe' on its YouTube channel, asking men to be the best versions of themselves. It was launched on January 14, 2019 and is a 1:49 minute video. The general message of the video seems reasonable – treat others with respect. But when you watch the advertisement, it depicts a reality that doesn't exist.

The video starts with showing images of troubled looking men as a narrator makes reference to sexual harassment and bullying and toxic masculinity. It then poses the question 'Is This the Best a Man Can Get.' Further the video depicts ugly behaviours of men including bullying, fighting, sexual harassment also mentioning that only some men act the right way. The ad goes on to state it is time for men to stop making excuses and to renounce the idea that 'boys will be boys.' (Taylor, 2019)

Speaking of 'boys will be boys'; it is not the underlying principle for bad behaviour. The ad shows young boys wrestling in the grass while the men standing around excuse this behaviour because they are boys until an enlightened man decides to stop them. Boys have the attributes of being energetic and aggressive and need safe outlets for these impulses. Wrestling with their equals is one such outlet. As long as it's in good spirit and not an actual case of bullying, stopping the boys from being boys is the wrong approach.

In the end it leaves us with two options: we either let boys be boys or force them to act as girls. But the latter option makes as much sense as forcing girls to act as boys. You wouldn't mandate your daughter wrestle in the grass rather than play with dolls. Similarly, it makes no sense demanding the reverse of boys. Young boys wrestling in the grass is a boy being a boy and not a man being a criminal and that's the point of 'boys will be boys'. The advertisement further shows half of the world's population act as monsters who assault/harass the other half and this is what is inherently wrong with the ad. The ad mentions that there are a few exceptions who act in the right way. But in reality, it is not some but the overwhelming majority of men who act in the right way. The ad acknowledges men being aggressive, but aggression is a virtue of the protector. According to the United States Department of Defence, men comprise over 97% of war fatalities and account for 93% of workplace fatalities as per Bureau of Labour Statistics. However, the ad subdues the very traits that have made men useful throughout human history.

The only company to call out Gillette is Egard Watches. What the two companies have in common is their customer base i.e., the male community. Now Egard makes watches for the female community as well just as Gillette makes razors, but for both the companies, their main customer base is the male population.

Egard Watches released a video on January 16, 2019 called 'What is a man? A response to Gillette'. It was a video dedicated to all those (policemen, firefighters etc) who've sacrificed their lives to make the world a better place and not even remotely close to watches. From a business standpoint, the little-known watch brand gained reputation and was flooded with orders on its website while Gillette shot itself in the foot.

Review of Literature:

1. (Dewi & Hartono, 2019) conducted a research on Matahari mall's advertising campaign which is situated in Indonesia. The mall launched a misleading advertising campaign. Primary research showed this campaign negatively influenced the mall's brand image. However, the advertisement did not influence the purchase intention of customers as the brand was already popular among Indonesian citizens and marketing campaigns aren't the only factor influencing purchase decisions.
2. While men are criticised for being masculine, women accept far less criticism when femineity is questioned. (Markowicz, 2019) mentions in 2015 when Protein World

released an ad in London which sexually objectified women and expected women's bodies to be of a particular standard, more than 70,000 people signed a petition on (Change.org, 2021) calling for the advert to be removed. The city of London immediately banned such "body-shaming" ads as they set unrealistic standards and made women feel physically inferior.

Research Methodology:

Scope of Research

This research paper helps the following parties:

- Marketing firms - A marketer studies market trends, make advertising campaigns etc and this paper makes them realise how important it is to understand customer psychology before releasing an ad campaign.
- Companies - It costs millions to make an advertising campaign and any inappropriate strategy/depiction can be a costly decision leading to losses of billions. Before finalising an ad campaign, the company must ensure that it appeals to its customers.
- Brand managers and corporate salesmen – It helps them understand that they cannot attack their own customer base to sell a product precisely targeted at them.

Objectives of Study:

1. To assess whether the male community (the actual customer base) would be switching to alternatives post this commercial
2. To determine whether men from certain age groups are more accepting of the Gillette commercial than others
3. To examine which ad campaign was a better business decision from a third party's perception (using the answers from female respondents)

Limitation of Study:

- Survey is used for this research which is a quantitative method for data collection. One drawback of surveys is respondents may not give accurate answers or be able to express their grievances with the commercial and this is where qualitative methods such as interviews are more reliable.
- However, given the restrictions during the pandemic, it is difficult to physically approach people for their opinions. Online interviews aren't feasible either as the respondents find it to be time-wasting.
- There are online websites where in people are paid to answer questionnaires such as Just answer, Study pool, Live person and many more. Genuine responses can be received here but the cost and time involved is too high.

Delimitation of Study:

- Originally, the approach to gather responses from the actual customer base across the globe was by leaving a link to the google form below Gillette's YouTube channel in the comments section. That is why one question in the survey was to select the continent the respondent belonged to.

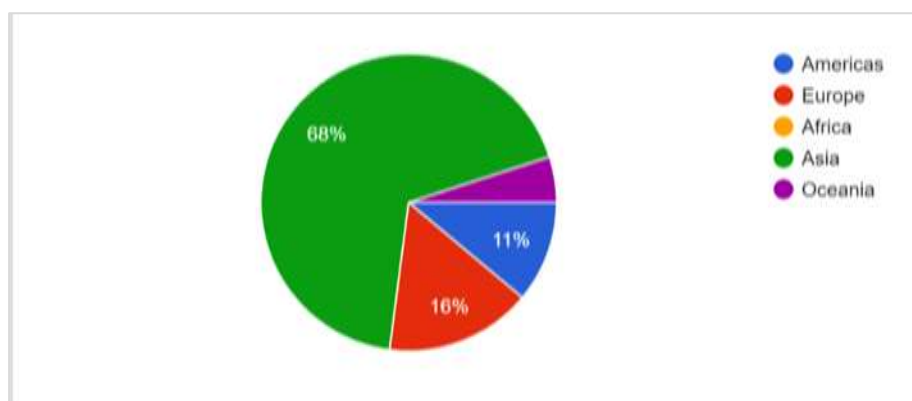
- Thousands of comments were left by the male customers of their reactions to the advertisement on the YouTube channel. Some even pointed out that their negative comments were being deleted and their dislikes on the video being removed.
- This stands true as even my comment (which was a link to the survey) was deleted before I could get responses, making me silenced unjustly. This acted as a hindrance while collecting accurate data.

Research Design:

<i>Type of research</i>	<i>Descriptive</i>
Sources of information used:	
<ul style="list-style-type: none"> • Primary 	A survey was undertaken to identify customer's reactions to the Gillette commercial.
<ul style="list-style-type: none"> • Secondary 	To name a few, websites such as The Guardian, Forbes and New York Post. Research papers from research gate. Videos from Gillette's YouTube channel, PragerU etc.
Sampling plan:	
<ul style="list-style-type: none"> • Sample universe 	The world
<ul style="list-style-type: none"> • Sampling frame 	Family, friends, people through LinkedIn
<ul style="list-style-type: none"> • Sample size and sample unit 	181 respondents 121 male and 60 female respondents
<ul style="list-style-type: none"> • Method of sampling 	Convenience
Statistical technique:	
<ul style="list-style-type: none"> • Data analysis 	Basic ratio proportion, pivot tables, IF and COUNTIF functions
<ul style="list-style-type: none"> • Hypothesis testing 	Chi-square test

Data Analysis and Interpretation:

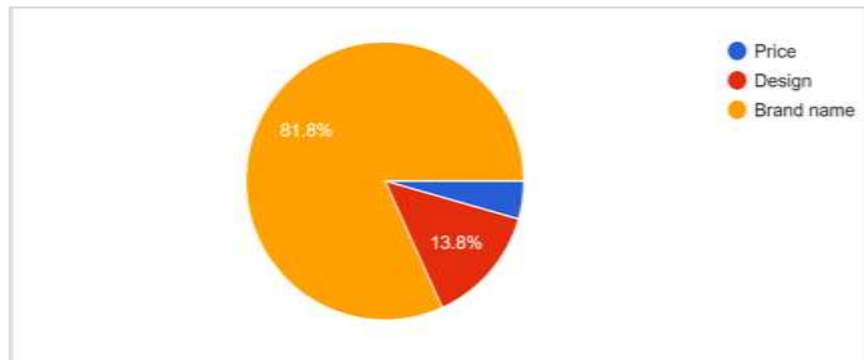
Question 1 – Which region are you from?



Interpretation – Gillette predominantly sells in the United States of America owning 50% of the market share. Out of the total 181, 20 respondents are from the Americas. 18 of these 20 respondents (which accounts for 90%) disagree with the advert and are looking forward to use alternative brands. Now, the responses from these 20 individuals cannot be taken as a base for the entire American male population as a whole, but it confirms that this commercial has backfired on Gillette. Secondary sources of information (*Rasmi, 2019*) tell

us that Gillette has already lost 20% of its market share in America due to lower-priced competitors like Unilever’s Dollar Shave Club and Harry’s. This commercial just adds fuel to the fire.

Question 2 – Your reason for using Gillette:

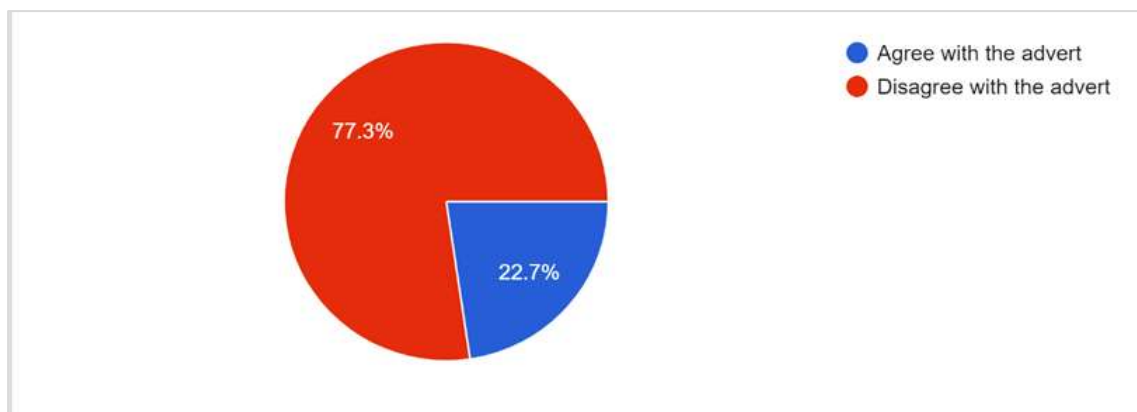


Interpretation - Out of the total sample, the number of respondents who used Gillette products only for its brand name and disagree with the advertisement = 127. Out of these 127 respondents, 115 of them will be switching to alternative brands which is 90.5%. Gillette as a brand does not have a Unique Selling Proposition. It sells products which can be easily copied by competing companies. If a company as Harley-Davidson had to pull such as a marketing stunt, it would still not financially harm the company as the quality of bikes it makes at reasonable prices cannot be easily copied by the competing brands.

From the total sample, 8 of the 181 respondents purchased Gillette’s products for its pricing which is 4.4%. This shows that Gillette as a brand is costly and mainly sells for its design and moreover, for its brand name. The 8 comprises of 5 male and 3 female individuals. But post this ad commercial, 4 male (80%) and 2 female (66.7%) individuals wish to switch to cheaper alternative brands with quality products.

Another contributing factor for Gillette’s sales is the design of the product and the comfort it provides to the user. 25 of the 181 respondents purchase Gillette for its design which is 13.8%. From these 25 respondents, 16 of them agree with the ad while 9 of them don’t. Out of the 16, 14 individuals will continue purchasing Gillette for its design but that doesn’t come as a surprise. However, despite 9 respondents disagreeing with the advert, 4 of them which is 44% will continue buying Gillette for its design and this shows that at the end, a customer is concerned with the ultimate product and not with the company.

Question 3 – Your reaction after watching the Gillette commercial:



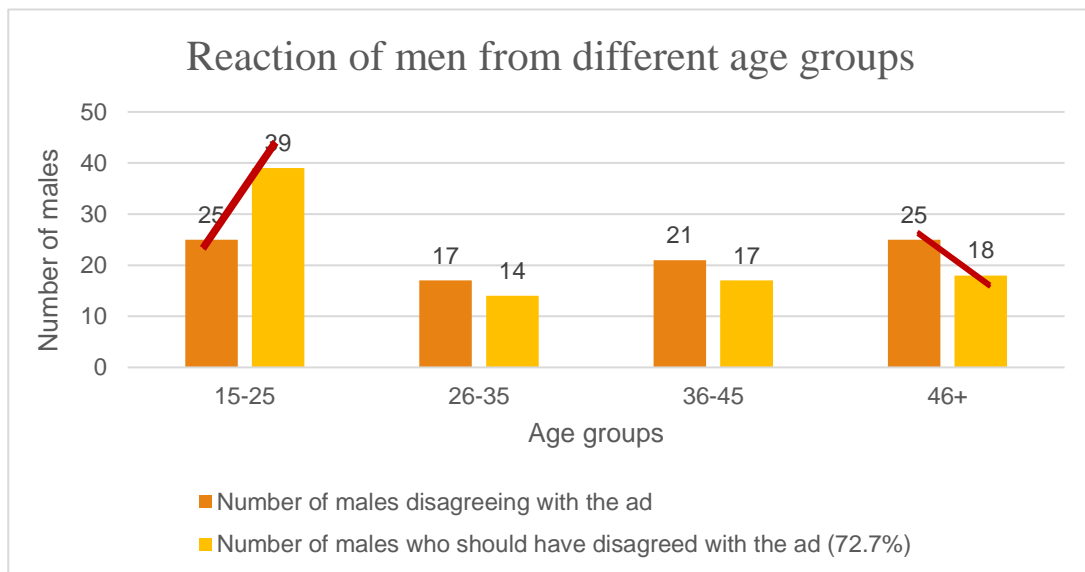
Total number of male respondents = 121 and the total number of female respondents = 60.
Total number of respondents disagreeing with the Gillette ‘We Believe’ commercial = 140

Interpretation - 77.3% disagree with the advert and this consists of 88 males and 52 females. Out of this, 78 males and 45 females will be switching to alternatives which is 88.6% and 86.5% respectively. The male community will be happy to switch to a brand that does not tell them that they aren’t good enough and need to improve. This answers our first research objective. The above figures show that even the female customer base of Gillette disapproves of the advert as much as the male community.

The percentage of males who disagree with the advert but would still consider to buy Gillette products is 5 out of 88 which is 5.6% and for females it is 5 out of 52 which is 9.6%. It is only natural for the female community to still consider buying Gillette’s products as the ad wasn’t offensive to them. This also goes to show that in future, Gillette Venus razors may sell more than other categories but that’s only them reaping the fruits for the seeds they have now sown.

Question 4 – Did men from different age groups react differently to the Gillette commercial?

Out of 121 males, 88 of them disagree with the ad which is 72.7%. Below the table shows reactions of men from different age groups:



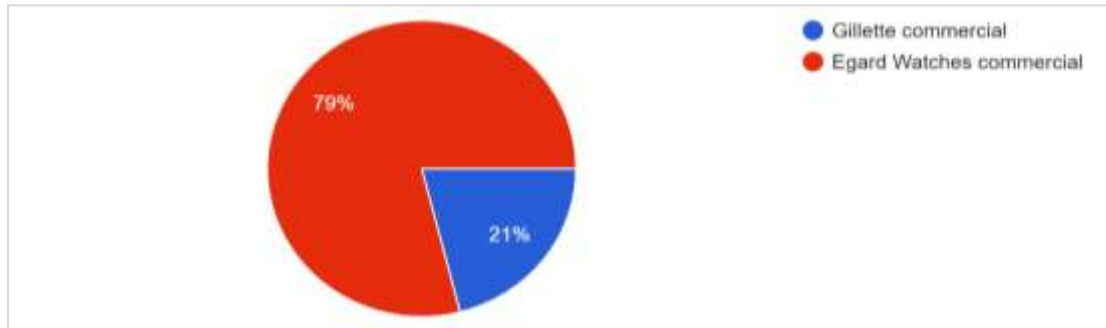
Interpretation - Surprisingly, the younger generation belonging to the age group 15 – 25 agree with the ad. This can nevertheless be because of their naive nature. However, this can be in favour of Gillette as the boys of today will be the men of tomorrow and hence Gillette’s customers. But, the men from the age 26 and above seem to strongly disagree with the message and depiction of the ad indicating the reason for Gillette’s losses and this answers our second research objective.

Question 5 – From a business standpoint

Interpretation - Not taking the male opinion into consideration as they obviously found the advertisement to be offensive, 53 out of 60 female respondents i.e., 88% also felt that Egard

Watches commercial was a better business decision. This stands true because as Egard Watches released its commercial as a response to Gillette, Egard Watches website was flooded with orders from new customers, answering our third research objective.

Question 5 – From a business standpoint, which ad was a better business decision?



Hypothesis:

Ho: Reaction after watching the Gillette commercial is independent of Gender

Ha: Reaction after watching the Gillette commercial is dependent of Gender

Hypothesis Testing:

The Chi Square test evaluates the inherent variability by comparing the data that was collected with the data that a researcher would predict given a specific claim. Chi Square test is suitable for our hypothesis testing as it can be applied to reasonably large sample size where data is collected on random basis.

Your reaction after watching the Gillette commercial:

Gender	Agree with the advert	Disagree with the advert
Female	8	52
Male	33	88
Total	41	140

Using Chi Square Test,

Observed frequency	Expected frequency	Chi square
8	13.59	2.30
52	46.41	0.67
33	27.41	1.14
88	93.59	0.33
181	181.00	4.45

The degree of freedom = (number of rows – 1) x (number of columns – 1)

The degree of freedom = (2-1) * (2-1) = 1

The level of significance is taken at 5%

Chi Square tabulated value at 5% level of significance and 1 degree of freedom = 3.841

Since, Chi-square calculated value $4.45 > 3.841$, H_0 can be rejected.
So, reaction after watching the Gillette commercial is dependent of Gender

Conclusion:

- Shaving away profits – For the year ended March 2019, Procter and Gamble registered a 7-percent hike in sales and a record high in shares at \$121.05 (up 5 percent). These profits are not from Gillette but from products sold through other brands under P&G.
- However, for the following quarter (when the commercial was released) ended 30 June 2019, P&G reported a net loss of about \$5.24 billion – or \$2.12 per share. This was due to an \$8 billion non-cash write down of Gillette (*Haverluck, 2019*). After the commercial released in January 2019, Gillette’s customers abandoned the brand and the impact of this is being seen in the quarter ended 30th June, 2019.
- From the research undertaken, 88.6% of males and 86.5% of females will be switching to alternatives because of this commercial. This shows that this marketing campaign has had a negative impact on the parent company financially – making it Procter and Gamble’s worst gamble.
- It is simply bad marketing practice to offend a significant proportion of your own customer base. For instance, when Michael Jordan an NBA player who also sells his brand of shoes was asked to engage in political commentary, he refrained from doing so saying “Republicans buy shoes too” and this remains wise thinking.
- Thus, marketing campaigns do affect the brand image and revenue. A good marketing campaign (as in the case of Egard Watches) offers good publicity and hence drives up sales. However, if the marketing campaign backfires (as in the case of Gillette), it can ruin the company’s reputation, decrease sales and cause losses of billions.

Suggestions:

- Firms should not take a political stance in their ad campaigns. Gillette should have continued making ads as they were always making as that method was tried and tested for success. The correct approach would have been to say most men act the right way and a change is required by some.
- According to Reuters, P&G says the losses of billions is due to the existence of low-priced competitors, foreign exchange fluctuations and a contracting market for razors as customers now shave less frequently. In reality, P&G’s losses were due to hurting their customers sentiments, but instead of accepting this P&G preferred to justify their losses. Companies need to realise that it is essential to be transparent and ethical with their customers, irrespective of whether they are the market leaders or followers.

Scope of Further Research:

- Extensive research can be undertaken continent wise to see if people from different countries have different opinions on the Gillette advertisement. For example, to verify whether Asians and Americans share the same opinion.
- Another research can be carried out to see whether the competing brands such as Dollar Shave Club, Harry’s etc have increased their market share/customer base because of this commercial.

- Detailed analysis can be undertaken to see how Egard company has been impacted financially, specifically its sales after it launched its ad which was a response to Gillette.

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Appendix

1. Link to the Google Sheet containing all the responses <https://docs.google.com/spreadsheets/d/19ODaEus3fja0vfmD-TsqgGDNaWbngHKGWxrhrUkMzY/edit#gid=1437700539>
2. Link to the Google Document with pie charts for each question https://docs.google.com/document/d/1HB6OookCF0uuSKteAhWZHzSc2aHgD9Hc_aEB6tYQC1k/edit

Indian Education System: A flawed reality?

**Authors: Devanshi Kasabwala
and Riya Rajayyan**

Class: FYBSc

College: SVKM's Mithibai College

Email: devanshik821@gmail.com

riya.rajayyan@gmail.com

Abstract:

Education is one of the biggest stepping stones in one's life which prepares an individual intellectually, emotionally to deal with the challenges life gives. Education aims to give meaning and value to life. The main purpose of this research paper is to highlight the problems in our education system and the main aspects covered are digital literacy, privatisation, mental health, infrastructure. We have used data from our primary research (survey) to gain an insight into what people in society think of these challenges. Our findings indicate that most people believe our system is flawed and there is a lot of room for change. The scope of improvements is, however, not highlighted because the problems identified are themselves an answer to what can be done for the betterment of our system.

Introduction:

The education system of India is a widely discussed topic. We are well aware from the numerous researches done around specific issues related to the system that it requires a much needed revamp. The difference our research makes is that we have collectively brought together and analysed some of the most important issues that arise concerning the Education System of India coupled with our primary research which was done by the process of surveying. These main factors such as lack of digital literacy, privatisation of the education sector, lack of proper infrastructure, low staff and untrained teachers, redundant syllabus and poor mental health of the students have had the biggest part to play in the downfall of the system. Through this research process we discovered some appalling figures and numbers that are as follows; only about 21.3% students have access to computer devices in their school while only 10% have ever had a chance to use one, almost 50% of the education sector has been privatised which is affecting the weaker sections of the society, 95% of the schools did have access to basic amenities like toilets and drinking water but only 60% have access to electricity and the numbers keep lowering when we talk about other facilities, the student to teacher ratio in our country keeps lowering and currently the ratio is 24:1 and not to mention that about 1.1 million elementary school teachers are still untrained, the syllabus taught throughout most of the country is often outdated with little to no updates with the exception of expensive private schools that update their syllabus timely but is only accessible to the elite classes and the mental health of most students throughout the country is poor with 23.3% school students having mental health issues and 18.4% being depressed.

Literature Review:

The education system of India is a topic to come into our daily conversation because many people realize the complexity and also take notice of the flaws it holds. This literature review examines the various factors which make the system have these flaws and the effects it has on students.

Privatization and marginalisation.

“Privatization of higher education is actually a new but a wanted trend and is indispensable to sustain resourcefulness, adaptableness and superiority” (Radhika Kapur,2018). The need for liberalization makes almost 50% of higher education privatized but with an interest of profit, (Radhika Kapur,2018) draws attention to how private institutes have their main aim of profits and minimizing spending costs thereby affecting the quality of education. “Privatization increases the number of degree holders on the one hand and unemployment on the other hand.”(Vishavpreet Kaur,2017). Ways privatization can be encouraged like Tuition Tax Credits and Deductions for Parents, Subsidies and assistance grants to private schools which could thereby reduce the burden on the public sector is highlighted.

Infrastructure and low training.

(Bhunia, Kumar, & Duary, 2012) attempted mapping and analysis of current school infrastructures and areas where improvements are required were taken into consideration. Results of their analysis proved that in places where teaching-learning was not put into practice, students failed to grasp academic concepts. The relationship between student achievement and infrastructure condition has been rightly expressed in the phrase of Prof. Berner “Good infrastructure is truly at the base of quality education”. At the same time, the lack of training in most schools affects learning drastically, “There still is a lack of funding for developing e-resources, online instructional content and teacher training, etc.” (Arnab Kundu, 2018) and teaching jobs need regular training for even experienced teachers to grow and get accustomed to the current generation. (Dr. R. N. Nadar,2018) brought attention to the need for quality seminars and workshops required to train the teachers to cope with changing culture.

Educational barriers in rural India.

(Article, Siddharth Chaturvedi, 2020) Some major barriers faced by the Indian education system are listed in this article; lack of digital literacy and infrastructure due to not receiving proper bandwidth and improper infrastructure such as not having a steady flow of electricity, inaccessibility of right devices such as computers or laptops and not being able to afford the cost of internet data packages, lack of skills in teachers for teaching digitally, language barrier since most students cannot speak English and quality educational content is unavailable in Hindi or other regional languages, E-learning content being unavailable in multiple languages and “we don’t yet have good quality e-learning content covering all the major curriculum at K-12 and higher education level” and lastly gender inequality which leads female students receiving little to no education.

Mental Health.

(Kaushik Nag et al, 2019) This study done in Tripura aimed to find the burden of anxiety among school students and the association of different grades of anxiety with the sociodemographic characteristics and other factors, their findings concluded that most students suffer from at least a mild form of anxiety and mostly females were suffering from it. (Kunal Kishor Jha et al, 2017) The objective of this Bihar based study was to find how

prevalent depression is amongst adolescents. The findings suggest that about 49.2% of adolescents were prone to depression and 7.7% were prone to severe depression. It is suggested that more awareness regarding depression and mental health issues should be created. (Raman Kumar Sandal et al, 2017) This Chandigarh based study aimed at uncovering the percentage of students who suffer from DAS or Depression, Anxiety and Stress. The findings suggested that DAS was prevalent by 65.53%, 80.85%, and 47.02%. They concluded that the prevalence of DAS was higher among school-going students.

The methodology used:

The primary research was carried out using a google form survey which was circulated online on the application called WhatsApp across 149 people that we knew. 4.7% of those people were under the age of 18, 34.9% of them were between the age of 18-25 and 60.4% were above the age of 25. The research was focused on the older crowd that had completed school since they had the complete experience of school life. Most of the participants were parents as well, so they were also aware of their child's school going experience apart from their own. Our secondary research involved going thoroughly through research papers and articles related to our topic, which are mentioned on the references page. Hence, qualitative as well as the quantitative analysis was conducted.

Data Analysis and Interpretation:

Lack of digital literacy: Digital literacy has become an important factor with regard to education even before the Covid-19 pandemic struck the nation. Learning how to operate computer machines has become important as most components of society have digitised. According to our primary research which was conducted across 149 participants most of who belonged to the city of Mumbai which is considered to be a metropolitan city, about 16.1% were unaware of the term digital literacy. While in the rural regions, due to issues such as poverty and caste-based discrimination, affording the costs of mobile phones, laptops, desktops and the necessary supply of strong Wi-Fi signals and electricity becomes difficult. We can see this in play by looking at the numbers which suggest that only 21.3%

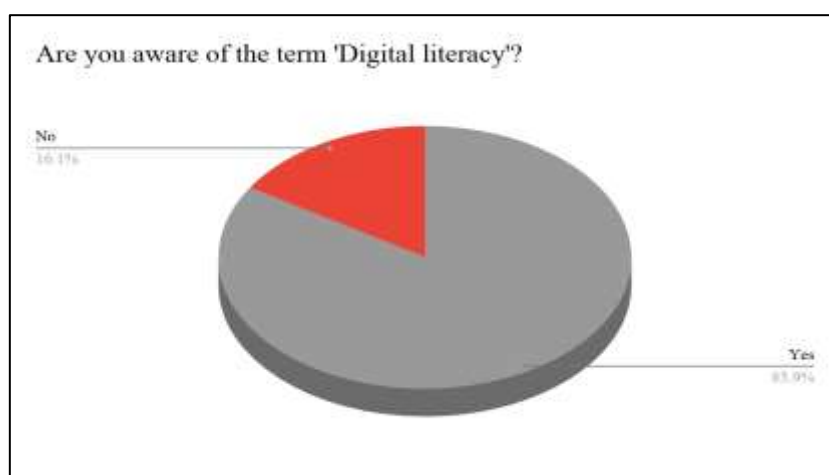


Figure 1 illustrates how many people were aware of the term Digital literacy.

of students have access to computers in their schools. Apart from this, due to the absence of a social support network, the rural communities don't get the chance to gain the

knowledge to operate and utilize such resources. In the villages of Rangala and Khori, in district Nuh, Haryana in a study of youth for digital literacy classes, it was found that 44% of the students who had enrolled in these classes had computers in their schools, out of which only 10% were taught how to use it. Such low figures were a result of the lack of computer teachers. Even though 44% of students had access to computers, only 10% of them had the availability of computer teachers. What is important to note is that 78% of students do have access to mobile phones but only 17% have access to laptops or desktops and 15% don't have access to any of these devices. Overall, only 10% of students have ever used a computer device.

Privatisation of the education sector: Education is a vital service that every democracy is expected to give to its people in the most accessible way possible. Over a period of time, a large percentage of the education system began falling under private institutes. Almost 50 per cent of higher education in India is through private institutions. The basic idea of privatisation is that the education institute runs without taking any kind of financial subsidy from the government. Although autonomy aims to provide self-financed courses to students, the consequences are worth paying attention to. For instance, homogenisation of critical thinking, marginalisation of students from backward communities to name a few. Many believe that education is the first service a state provides to its people, but private institutes run and are dependent on market rules, a question of morals arises here. Is education a business? It also creates an underrepresentation of weaker sections of society, who struggle to make it to private, quality education institutes. This makes Education, a basic right, more of a privilege enjoyed by the elite.

Lack of Infrastructure: School infrastructure includes physical infrastructure like benches, blackboards, grounds and intellectual infrastructures like libraries and well-trained teachers. It, therefore, plays a critical role in the educational outcome of students. Although it is to note that necessities like toilets and drinking water are available in 95% of schools across the country, 60% of schools have access to electricity, and only 21.3% have access to computers in this age of digitalization. The government's education budget accounts for only 3-4% of India's total GDP, and the reasons for these low investments in the education sector, specifically infrastructure, is the returns. And although the government has The Swachh Vidyalaya Initiative, Midday Meal Scheme, Balika Manch, and Beti Bachao-Beti Padhao Yojana, the implementation of such schemes are the real problem. The effects of these programmes at a base level, sometimes are inefficient, making the policy of little to no use. Infrastructure development should be a collaborative initiative between the state and citizens for it to be a priority. One such example is a 2018 PIL filed by Mohammad Mumtaz Ansari of Wasseypur, Jharkhand, who demanded basic infrastructure for a local Urdu-medium school that lacked electricity as well. The Jharkhand High Court directed the state government to take appropriate action, and eventually, facilities were provided but this happened only because a citizen decided to speak out.

Low staff and untrained teachers: Teachers as we know are the most important part of the education system, but in our country, the student to teacher ratio is 24:1 which is lower than in Brazil, China, Sweden, Russia, Canada and Britain. It was also found that while the student enrolment in pursuing higher education had increased from 32.2 million to 36.6 million from 2013-14 to 2017-18, the number of teachers had decreased from 13,67,535 to 12,84,755. These numbers point us out to the fact that the teachers who are currently a part of the system are burdened with a huge amount of workload. The situation worsens when we couple this with findings that suggest that a huge amount of teachers

aren't professionally trained. According to the most recent figures, 1 in 6 elementary school teachers are not professionally trained. The Section 23 of the Right to Education Act of 2009 made it mandatory for school teachers to possess certain minimum qualifications which were laid down by the National Council of Teachers Education. According to guidelines laid down in 2010, teachers that were untrained were given time till 2015 to complete their training, yet it was found that out of 6.6 million teachers, 1.1 million were still untrained. Even at the Secondary school level, out of 2 million teachers, about 14% were not professionally qualified. Most of these numbers come from states like West Bengal, Bihar, Jharkhand, Uttar Pradesh and Chhattisgarh. Studies have also found the most probable reason for such poor numbers. The teacher's education budget in schools has consistently declined from 1.3% to 1.1% (estimate numbers) from 2009-10 to 2018-19. Teachers training has been a low priority. The largest numbers come from the states of West Bengal, Uttar Pradesh, Chhattisgarh and Bihar. The numbers suggest that not even 1% of the budget is being spent behind teachers.

Redundancy: In a survey conducted as part of our primary research, with our main demography being 18-25, above 25 and below 18-year-olds we asked people whether they felt that we are being taught old and redundant.

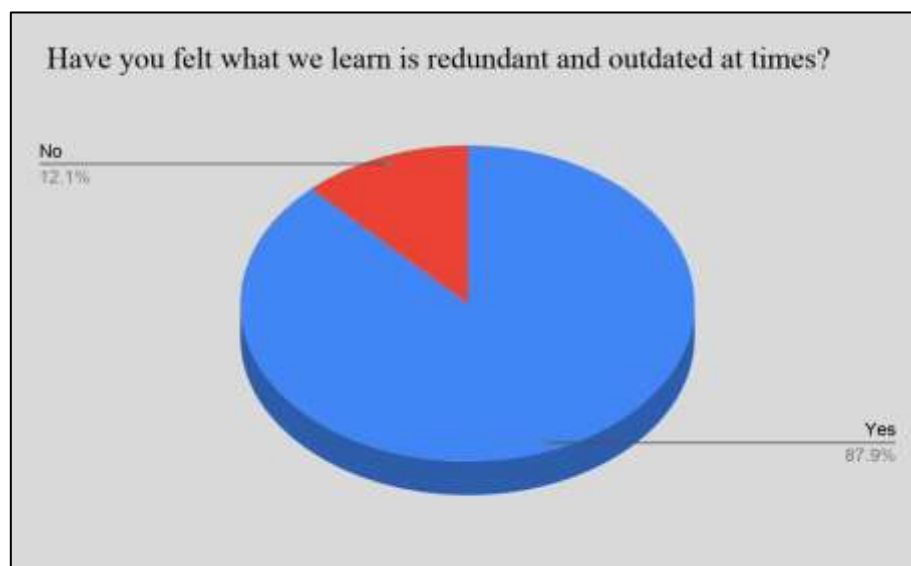


Figure 2 illustrates how many respondents felt what we learn is outdated.

As seen in the responses in Figure 2, 87.9% of the 149 people who took part in the survey said yes and only 12.1% said No. This response is very drastic in its differences and it is important to realize that the syllabus of most Indian boards is outdated at times. For example, NCERTs in CBSE schools teach the same curriculum over and over again with little to no updates but elite schools have a very niche student pool and charge huge amounts as well. Their curriculum is usually very much to date and books are updated on a timely basis but this creates a gap in our society which only leads to the rich getting richer. "If the schools are not offering useful education, then the right to education is more like the right to "useless" education." as stated in an article by TOI. A part of this redundancy also has to be with faculty members not being reformed and the time gap between industry and academia only widens.

Mental Health of students: It is a well-known fact that our mental health can have a huge effect on our physical health as well. A person struggling with issues such as anxiety,

depression, addiction or eating disorders can often have a hard time focusing, concentrating, understanding or finding the motivation to do basic tasks as well. Mental illness has been affecting most students today. According to our Primary Research conducted across 149 participants belonging to the city of Mumbai, it was found that 66.4% agreed that the competition among students was so unhealthy that it would lead to one doubting their abilities. 67.1% also agreed that either they or their friends would pour out whatever they would learn during exams and then forget most of it later. Lastly, 68.5% accepted that the current system is affecting one's mental health. These are just the results of the primary study, another study whose results were conclusively analysed by doing 16 community-based studies across 14,594 adolescents and children and 7 school-based studies across 5687 students concluded that mental health disorders are 6.46% prevalent among the children living in communities and 23.33% prevalent among school students. A more detailed study revealed that about 15.2% of adolescents who attended school were found to be having symptoms of distress, 18.4% were depressed and 5.6% were positive for both issues. The general factors affecting the children included beating at home, inability to cope up with studies, physical punishments at school, teasing in school and parental fights. This study concluded that mental health issues such as depression and stress are common among students but are ignored by school staff and parents often.

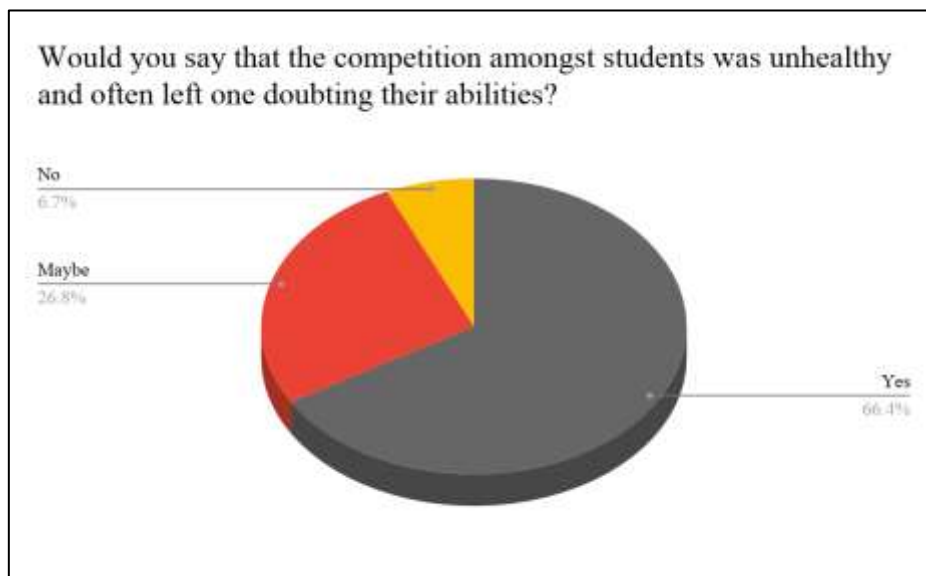


Figure 3 highlights whether respondents felt competition amongst students was unhealthy leading to unnecessary self-doubts.

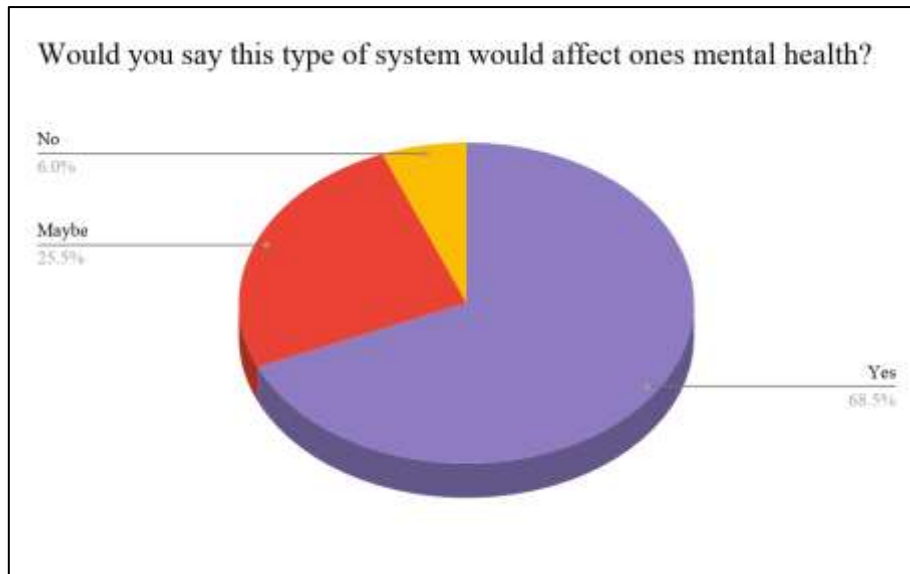


Figure 4 depicts whether respondents felt the system affects mental health.

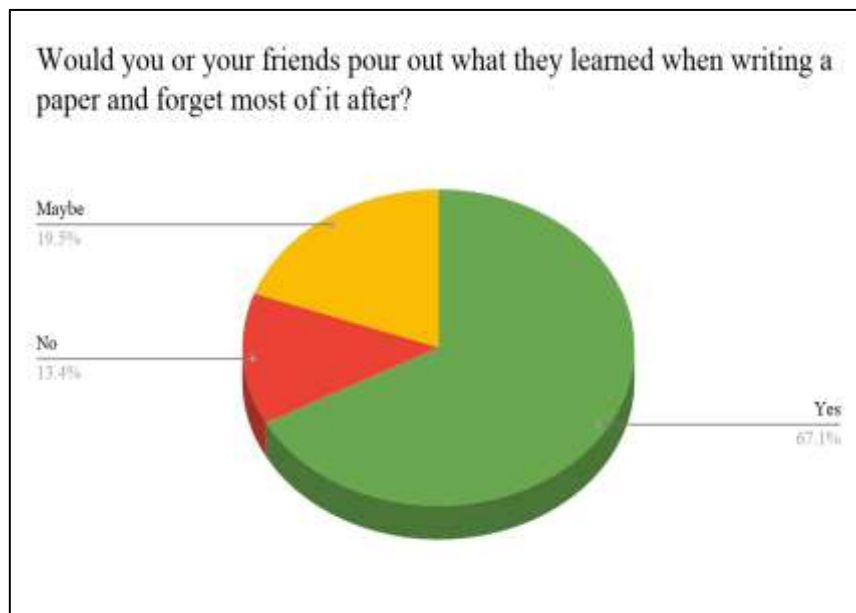


Figure 5 highlights whether people forget most of their preparation post examinations.

Conclusion:

This study highlights the most important issue faced by the Education System of India and some reasons as to why these issues may be occurring. Our major findings from this research were that many people who are currently studying and have completed their education believe that competition throughout was unhealthy and caused self-doubt, secondly, the mental health of students is not given as much importance and almost everyone who was part of our survey felt that their mental health was affected some way or the other, and lastly many aspects of the education sector like training, infrastructure have little to no investment from the government's end leading to poorer quality of education. We believe these issues need to be looked into at the earliest for the betterment of this country and the general well-being of its children.

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A Study on Role of Targeted Public Distribution System During Pandemic

Author: Dhruvi A. Mehta

Guide: Dr. Muktha Manoj

Class: FYBCOM

**College: SVKM's Narsee Monjee
College of Commerce and Economics**

Email: dhruvi.mehta1210@gmail.com

Abstract:

Targeted Public Distribution System had play a role of large supply chain between the Food Corporation of India and Public in emergence of COVID 19 pandemic. As the Pandemic creates feeling of insecurity among people for the food. Thus, Government had provided food security with the scheme of Pradhanmantri Garib Kalayan Ann Yojna under which TPDS had distributed the extra free quota of food grains to the public through Fair price shops. The present study discover the quantity of extra food grains distributed by the TPDS with their regular distribution under National Food Security Act, 2013 during pandemic and the beneficiaries perception on the role of their TPDS to provide food security during pandemic.

Keywords: COVID 19 Pandemic, Targeted Public Distribution System (TPDS), Fair Price Shops, Pradhanmantri Garib Kalayan Ann Yojna (PMGKAY), Food Security.

Introduction:

Indian government was announced national wide lockdown on account of COVID 19 outbreak. The lockdown results in shutdown of economic activities and decline in purchasing power of common man. As many people lost their jobs and incomes in lockdown it makes situation more vulnerable where people were not only fighting with virus but also for the food and money. Thus, this pandemic has threaten the food security of India. It has impacted on food security of people that is Availability, Access, stability and Affordability of food. There was food insecurity for the poor and migrant workers at large. As remedy to this situation of food insecurity among population, the government of India has taken major efforts.

The Honorable Prime Minister Shri Narendra Modi was announced the largest food welfare security scheme in his first address to nation during COVID 19 pandemic that is 'Pradhan Mantri Garib Kalyan Ann Yojna (PMGKAY)'. The scheme was for about 800 Million people under which the distribution of free and subsidized food grains was declared to the people with the help of Targeted Public Distribution System (TPDS) system of India. The aim of scheme was to ensure that not a single country man sleep in hunger.

The TPDS is world's largest food Security Program. TPDS are operated by the Department of Food and Public Distribution under the Ministry of Consumer Affairs. Targeted Public Distribution System (TPDS) has 'Fair Price Shops(FPS)' working under it. The National Food Security Act, 2013 (NFSA) has broaden the scope of TPDS by raising levels of subsidies and coverages to public. During the pandemic TPDS had played a

significant role. As per the scheme of PMGKAY people were provided an additional ration of 5 kg of wheat or rice per person and 1 kg of pulses per ration card every month for free of cost through their TPDS. Earlier the scheme was announced from month of April 2020 to June 2020 but then it was extended till November 2020.

Key Beneficiaries Under TPDS: Earlier there was Above Poverty Line (APL) and Below Poverty Line (BPL). But NFSA (2013) have categorized household ration cards in Two categories :

1. **Antyodaya Anna Yojana (AAY):** It is for the poorest people who do not have any stable income. Household of AAY are entitled for 35 kg of food grains per household per month. In which Wheat of 15 kg at rate of Rs.2 and Rice 20 kg at rate of Rs.3 per kg.
2. **Priority Households (PHH):** This card holder are entitled for 5 kg of food grains per person per month. Where wheat for Rs.2 and Rice for Rs.3 and coarse grains at Rs.1.

Scope of Study:

The present study aims at analysing the role of TPDS during pandemic. It analyses the extra quantity of Free Food Grains distributed through TPDS in Maharashtra during pandemic. It also discovers the beneficiaries perception on role of their TPDS during pandemic to attain food security.

Limitations of Study:

The secondary data collected for study is limited to the state of Maharashtra and the primary data collected to discover beneficiaries perception is limited to the Mumbai only. Primary data may get biased.

Objectives:

1. To analyze the extra distribution of food grains during pandemic through TPDS.
2. To discover the beneficiary's perception on role of TPDS during pandemic.

Hypothesis:

H0: TPDS had played unsatisfactory role for people to get food security during Pandemic.

H1: TPDS had played satisfactory role for people to get food security during Pandemic.

Research Methodology:

In present research both the primary and secondary method of data collection is used to fulfill the above stated objectives. Primary data have been collected through the structured questionnaire. The sample of 100 beneficiaries have taken from Mumbai, which is selected at convenience to know the consumer's perception on the role of TPDS for ensuring their food security during pandemic. Questionnaire was created through the Google form and link was send to the respondents. The secondary data was collected from websites, articles, newspapers, magazines and websites. The collected data were further analyzed by using simple statistical tool like percentage.

Review of Literature:

Pathak P, Gope T, Bader N. June 2020 have covered a study on Effect of COVID-19 on public distribution system in India. Their study gives an understanding about the food security situation in India, problem faced by the citizens, in particular the poor and vulnerable population, small and marginal farmers during the COVID-19 pandemic. It has also analyses the steps taken by the government of India to address the food security challenges during COVID-19. They have discussed some measures to strengthen public distribution system in India. They have also discussed policies to support the small and marginal farmers, wage laborers, and migrant workers.

Data Analysis and Interpretation:

1. Regular distribution of Food grains under NFSA by TPDS in Maharashtra during COVID 19 pandemic

Table No. 1 Distribution of Food Grains under NFSA

Distribution of Food Grains in Maharashtra through TPDS under regular sale of NFSA			
Month	Wheat	Rice	Sugar
April	194389.304	152476.13	1992.337
May	196590.902	153268.268	2216.953
June	194767.709	151510.098	2190.103
July	198544.116	155375.881	2233.683
August	176773.207	147049.426	2121.066
September	149741.384	15184.895	2121.932
October	166671.649	149906.826	1912.821
November	171026.368	150616.21	10284.946
Total	1448504.639	1075387.734	25073.841

Above table shows the total quantity of wheat, rice and sugar distributed by TPDS under NFSA during pandemic in Maharashtra.

2. Extra Distribution of Food Grains under PMGKAY by TPDS in Maharashtra during COVID 19 pandemic.

Table No.2 Distribution of Free Food Grains under PMGKAY

Distribution of Food Grains in Maharashtra under PMGKAY scheme during Pandemic (in MT)			
Month	Wheat	Rice	Pulses
April	0	315192.67	0
May	0	317329.7	9702.940
June	0	315231.32	27181.849

July	117328.28	138539.27	2129.164
August	174562.97	136060.66	730.891
September	191539.49	149711.85	6698.475
October	174381.94	136516.02	7630.924
November	168544.72	132189.9	9179.132
Total	826357.4	1640771.39	63,253.375

Above table shows the total quantity of Free wheat, rice and pulses distributed by TPDS in Maharashtra. In addition to regular distribution TPDS has distributed the excess food grains under PMGKAY during pandemic.

Findings : The TPDS have played the important role to give food security during pandemic. As they distributed extra quantity of food grains to the public without any remuneration at that time. TPDS was distributed almost double quota of food grains during pandemic. Distributors were required to adjust the storage of extra stock quota they received. The main challenge to distributor was to supply such large quantity of food grain with same number of workers at shop. Even increasing COVID 19 cases were creating a threat to get affect by virus to distributor specially in slum areas. The TPDS has been an intermediary between the government and beneficiary during pandemic. It was possible for government to reaching out people during pandemic to give access to extra food requirements because of TPDS.

3. Beneficiaries perception on role of TPDS during pandemic :

A. Profile of Respondents

In order to get detailed profile of respondents they were categorized into gender and age.

Gender – Among all the respondents there was 55% Female respondents and 45% were Male respondents.

Age – Among all the Respondents highest 40% of respondents were between the age of 41 to 50. 25 % respondents were between the age of 31 to 40. 22% of respondents were above the age of 50. 13% of respondents were between the age of 18-30.

B. Food Security during Pandemic

Availability and access to food was a point of concern during pandemic. A sudden imposition of an unpredicted and prolonged lockdown in the wake of the COVID-19 pandemic was bought the problems of hunger and food insecurity among people. Thus, in order to ensure food security government was come up with many food security programs for people.

Table No. 3 Food security during pandemic

Get The Food security	Percentage
YES	89%
NO	11%

Findings: The above table states the food security experienced by respondents. Out of total respondents taken for study, 89% of respondents says yes they get food security

during pandemic whereas 11% of respondents says that they do not experience food security during pandemic.

C. Awareness About the Distribution of Free Food Grains through TPDS

As to resolve the problem of food insecurity among people our government announced the scheme of PMGKAY under which the holder PHH ration card or The people comes under AAY will get the free food grains through their fair price shops of TPDS. Thus respondents were asked about their awareness of the people about the scheme of free food distribution through TPDS.

Table No. 4 Awareness about the distribution of free food grains through TPDS

Aware	Percentage
YES	100%
NO	-

Findings: The above table states awareness among respondents about the distribution of food grains through the TPDS. 100% of respondents says that they were aware. The reason of everyone's awareness can be assume because scheme announcement was made by the Honorable Prime Minister on national television in his speech.

D. Accessibility to TPDS during Pandemic

The respondents were asked about their accessibility to TPDS shops during pandemic.

Table No.5 Accessibility to TPDS during Pandemic

Accessible	Percentage
YES	59%
NO	41%

Findings: The above table states the accessibility of respondents to their TPDS during pandemic. Out of all the respondents 59% of respondents says it was easy to access TPDS. 41% of respondents says that it was not easy for them to access their TPDS shops. The reason could be due to the lockdown restrictions during pandemic.

E. Distribution of food grains through TPDS for Specified period

The free food grains were distributed among consumer from the month of April 2020 to November 2020 through their TPDS. Earlier it was till the month of June but then it was extended for further five months. But does all the people received the free food grains for this period or not ? To know that respondents were whether they received free food grains for specified period from their TPDS shop.

Table No. 6 Distribution of Free Food Grains through TPDS for Specified period

Distributed	Percentage
YES	93%
NO	7%

Findings: Though all the respondents were aware of the scheme 7% of respondents says no they did not received free food grains for all specified months through their TPDS distributor which shows inefficiency from the side of TPDS distributor system.

But 93% of respondents says Yes they have received the food grains for specified period from their TPDS distributor.

F. Quantity of Free Food grains Distributed by Respondents TPDS

The government was announced free food grains 5 kg of wheat or rice to per person. Thus Respondents were asked whether they received or not the same Quantity from their TPDS.

Table No. 7 Quantity distributed by Respondents TPDS

Quantity	Percentage
5 kg	74%
4 Kg	11%
3 Kg	9%
2 Kg	5%
1 Kg	1%
Not Distributed	0

Findings: The above table states that 74% of respondents says that they had received free food grains of the full quantity of 5 kg. Whereas 11% of respondents received 4 kg, 9% of respondents received 3 kg, 5% of respondents received 2 kg and 1% of respondent have received 1kg of free food grains from their TPDS distributor. Which shows the loop holes in distribution system.

G. Distribution of free pulses

The government was announced 1 kg of free dal to the beneficiaries. Thus Respondents were asked whether they received dal/ pulses or not from their TPDS distributor.

Table No. 8 Dal/ Pulses distributed by Respondents TPDS

Received	Percentage
YES	54%
NO	6%
SOMETIMES	40%

Findings: The above table shows the 54% of respondents have received the free 1kg of pulses from month of April to November. 6% of respondents says that they had not received the free 1kg of pulses and 40% of Respondents says that they had received free 1kg pulses for some months.

H. Quality of Free grains received by respondents

The respondents were asked about the quality of food grains distributed through TPDS.

Table No. 9 Quality of Free food Grains

Quality	Percentage
FAIR	62%
POOR	38%

Findings: The above table states that 62% of respondents says Fair quality of food grains were distributed for free. Whereas 38% of respondents says the quality of food grains were poor.

I. COVID Safety measures taken by Respondents TPDS distributor

As large number of beneficiaries comes under the TPDS. The safe distribution during pandemic was challenge in front TPDS. All the TPDS distributor were required to take all COVID safety measures during the distribution of food grains to beneficiaries such as Social distancing and hand Sanitation facilities at their shops.

Table No. 10 Safety measures Taken by distributor

Measures Taken	Percentage
YES	80%
NO	20%

Findings: The respondents were asked whether their TPDS distributor has taken required safety measures during distribution of food grains or not. 80% of respondents says safety measures were taken whereas 20% of respondents says proper safety measures were not taken by their TPDS distributor.

J. Role of respondents TPDS

The TPDS role as chain of supply of Food Grains to public was important.

Table No. 11 Role of Respondents TPDS during pandemic

Role	Percentage
EXCELLENT	23%
VERY GOOD	19%
SATISFACTORY	45%
POOR	13%

Findings: Respondents were asked about their view on the role of their TPDS distributor during pandemic. 45% of Respondents says that role of TPDS during pandemic was satisfactory. 23% respondents says Excellent, 19% of respondents says Very Good whereas 13% of respondents says the role of TPDS was poor.

Hence, the null hypothesis “TPDS had played unsatisfactory role for people to get food security during Pandemic.” is rejected and alternate hypothesis “TPDS had played satisfactory role for people to get food security during Pandemic.” is accepted.

Conclusion:

TPDS was an important chain between the government and public to provide easy access to food grains for free or at minimum support price during COVID 19 Pandemic. Excess distribution of large quantity of food grains by TPDS was supported the government to handle the uncertain situation of COVID 19 lockdowns. TPDS has even played satisfactory role for public during this pandemic.

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Level of Motivation of Employees During Work from Home and Its Impact on Work Life Balance

Author: Krutika Sheth

Guide: Dr. Vaishai Dawar

Class: TYBcom

**College: SVKM's Narsee Monjee
College of Commerce and
Economics**

Email: krutikasheth19@gmail.com

Abstract:

This study is based on working from home, primarily due to the pandemic and the aim of is to assess the level of motivation of employees and its effect on their work life balance. In the present situation, this research is very relevant in the prevalent times. Given the entire pandemic and Covid-19 situation, the entire world has to change their way of work and resort to work from home. Majority of the countries made it compulsory to work from home, only a fraction could physically work out of office. Having an awareness of balance is extremely necessary. This paper would help about organizations to bring about a work life balance for their employees.

This research signifies that there are different views regarding work from home and while it is more flexible and comfortable for some, on the other hand others feel going to work place is better.

Keywords: Motivation, Work from Home, Work life Balance

1.1 Introduction:

Work from home is referred as the concept of working where the employees do not have to commute to a central or a single place of work and can work from their preferred location. Physical location of a work place has been gradually losing its importance due to the growth of Information Technology. **Modern working life** has adopted the system of work from home. **This system has become prevalent everywhere now and due to the pandemic of Covid-19 people were compelled to adapt to it. The outcomes of these arrangements are indeed both positive as well as negative.**

Work life balance has always been a concern for a working person who has to **manage** his professional life as well as personal and strive to do well at both simultaneously. **Balancing a successful career with personal/family life is challenging and can impact a person's satisfaction in their work and personal roles. Work life balance refers to effectively manage and juggle between paid work and other activities that are important to a person** such as family, personal development, hobbies and other recreational activities. An efficient and flexible schedule is required to achieve both the needs.

While being at home, it is difficult for a person to **divide time** between **working hours** and **personal hours**. Usually, a person spends time on both during working hours

and ends up extending the time at which works needs to stop. This gives a **sense of feeling** to the person that the work is going on for **entire day**.

Setting **boundaries** with others can be difficult when other people expect that one should have the time to talk when they do. Setting boundaries with oneself can even be more difficult when they are feeling a lack of **motivation** while some of them find it quite perfect to work while being alone to entirely focus on their work and finish it **efficiently** in a timely manner.

This research is about finding out the **level of motivation**, which keeps the people going under these conditions. People always find out some ways, which help them **cope up** with situations and pursue their goals under any circumstances. This is usually easier when they are well motivated and focused. The research finds out if the people feel they are **more productive or less productive during work from home**, if they feel more **comfortable** or isolated being in one place for so long and whether they feel they are able to **focus** more being at home or they are **distracted more often**.

This research has taken into consideration Maslow's Theory of Motivation.

Maslows Theory of Motivation:

Maslow's hierarchy of needs is a motivational theory in psychology comprising a five-tier model of human needs, often depicted as hierarchical levels within a pyramid. From the bottom of the hierarchy upwards, the needs are: physiological (food and clothing),



safety (job security), love and belonging needs (friendship), esteem, and self-actualization. Needs lower down in the hierarchy must be satisfied before individuals can attend to needs higher up.

Review of Literature:

A number of studies indicate the level of

motivation varying due to work from home and its impact on work life balance.

- Dr Hemaloshinee et al conducted a research in 2020 on the psychological impact of working from home during coronavirus (Covid 19) pandemic. It was conducted to reveal the impact on employees stranded and forced to work during Covid 19 in Malaysia. It concluded with strategies to overcome psychological impact on working from home during a pandemic.
- In addition to that a Research was conducted by Mahammad Shahid et al on the COVID-19 pandemic which has enforced the concept 'Work from Home' (WFH) into an officially mandated, strictly enforced rule. As the employees are experiencing new environment, this paper attempts to find out the experience of the employees in working from home when compared to working in office. The study found that willingness to work from home is entirely dependent on presence of their children at home, comfortable space at home, quiet environment at home and good internet connectivity.

- In another research by Lutz Bellmann and Olaf Hubler (2020) on working from home, job satisfaction and work life balance, the purpose was to analyze whether working from home improves or impairs the job satisfaction and the work life balance. It was found that if the imbalance is conditioned by private interests, it is not corroborated in contrast to job conditioned features. Employees working from home are happier than those who want to work at home, job satisfaction is higher and work life balance is not worse under a strict contractual agreement.
- Hannah Ward (2017) studied the impact of working from home on the overall motivation and performance level within the banking organization and it was found that employees are more motivated and performing to a higher standard and is likely to have a positive effect on the organization in term of retaining staff and achieving more from their employees.
- Malgorzata Kluczyk (2013) conducted a research regarding the impact of work life balance determined by work family conflict and it was concluded that employees can improve WLB by implementing family friendly initiatives such as flexi time, time off in lieu, compressed working week, childcare support and eldercare support.

1.2: Purpose:

To study the impact of work from home on the level of motivation and work life balance in the current Covid-19 pandemic situation.

1.3: Significance:

In the present situation, this research is very relevant in the prevalent times. Given the entire pandemic and Covid-19 situation, the entire world has to change their way of work and resort to work from home. Majority of the countries made it compulsory to work from home, only a fraction could physically work out of office. Having an awareness of balance is extremely necessary. This paper would help about organizations to bring about a work life balance for their employees.

1.5 Hypothesis:

Hypothesis 1-

H0 There is no significant relationship between the level of motivation and working from home.

H1 There is a significant relationship between the level of motivation and working from home.

Hypothesis 2-

H0 There is no significant relationship between the work life balance and working from home.

H1 There is a significant relationship between the work life balance and working from home.

2.1 Research Methodology:

A primary research was conducted where the **survey method** was adopted. The data collecting technique used was a 'Structured Questionnaire' prepared and disseminated

through Google Form using social media tools like Facebook and WhatsApp. The questionnaire was divided into **3 sections**.

- The 1st section consisted of Biographic details of the Respondents i.e., Name, Gender, Age Group, Qualification and Years of Work Experience.
- The 2nd section focused on the level of motivation affected during work from home.
- The 3rd section concentrated on the impact of work from home on their personal life and their work-life balance.
- The Likert scale was used for the responses as:
 - i. Strongly disagree-disagree-neutral-agree-strongly agree
 - ii. Always-Often-Sometimes-Rarely-Never
 - iii. Most likely-very likely-neutral-less likely-not likely
- The Google Form Platform was used to create the Questionnaire. Google form was sent to 80 individuals having work experience and belonging to different age groups and sectors, spread across a diverse segment.
- The population of the Research Respondents was a total of 65 respondents, which is 81%
- Once the responses were collected, the Data Analysis was done using tools such Tables, Bar Graphs and Pie Charts.
- Refer to Appendix-1 for the questionnaire.

3. Analysis of the responses from questionnaire:

Hypothesis 1:

There are a lot of **factors** that effect of level of motivation while working from home. We have identified some of them here. 53.8% of the people responded that they are **satisfied** with their current working hours. People are moderately **motivated** at work. Over 50% of the people agree that their job is challenging and exciting even while working from home and they agree that the **recognition** they receive from their senior and colleagues, motivates them the most.

It was observed that 16.9 % feel less motivated because of **lack of Face-to-Face** interaction with colleagues, 56.5% responses felt less motivated due to lack of **inspirational work atmosphere**.

The 49.2% of the responses are **equally productive** while working from home, while 12.3% feel they are more productive while working from home.

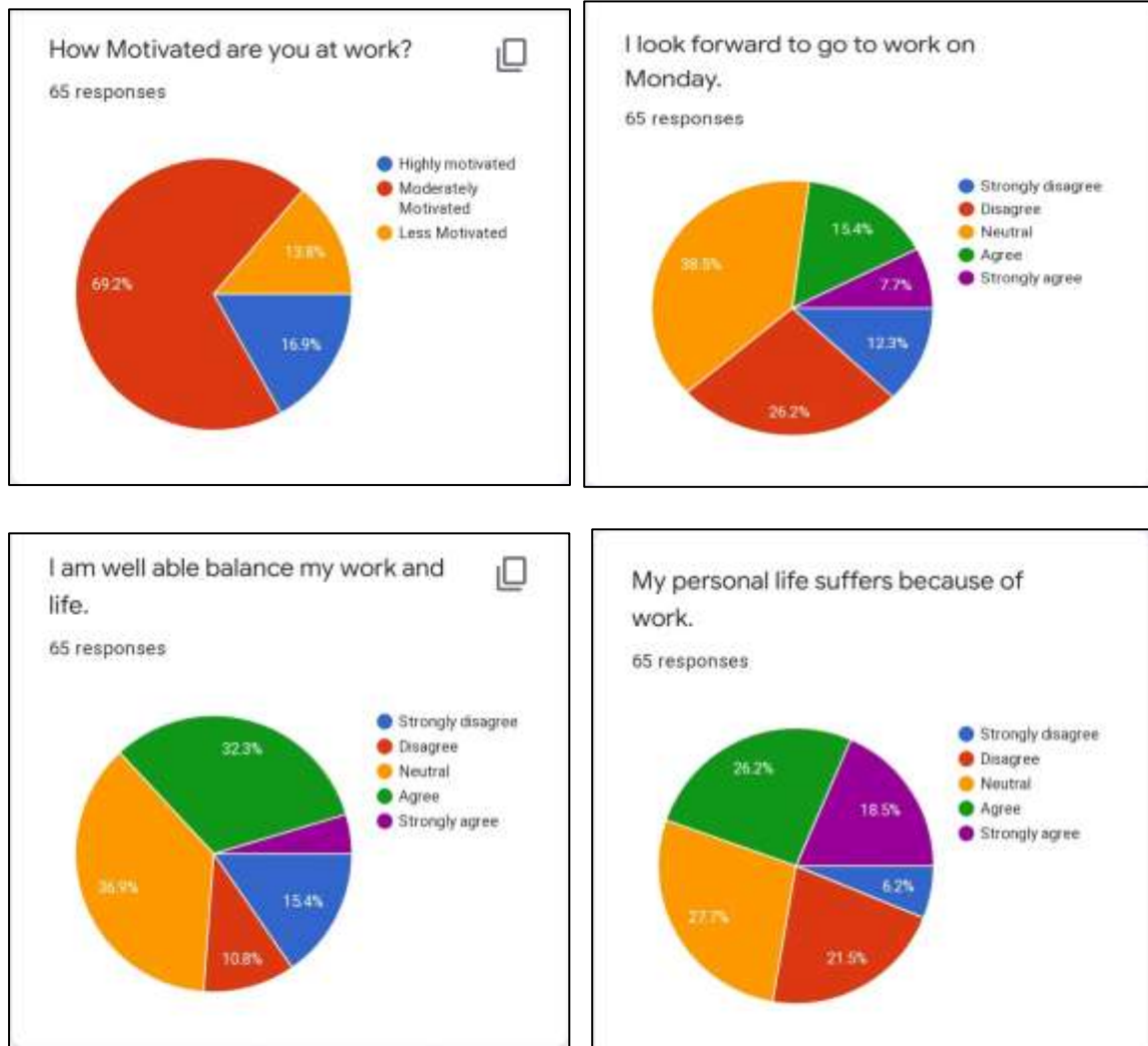
Hence, **H1** is supported, and **H0** is refuted. Hence, From the above research and studies conducted, we conclude that there is a significant relationship between work from home and level of motivation.

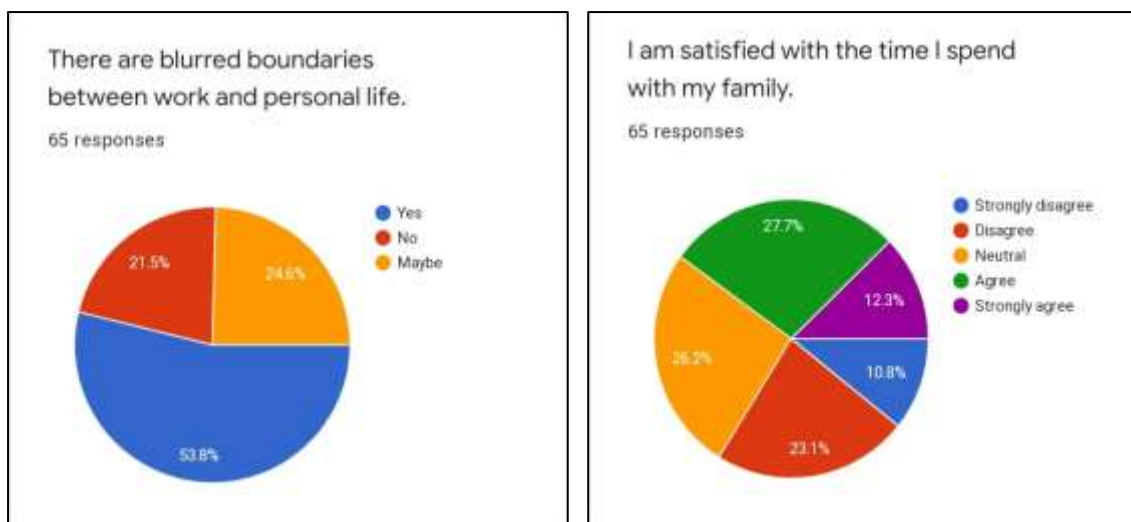
Hypothesis 2:

We also took a survey on work life balance of the individuals working from home and found out that most of the employees are able to **manage their work and personal life** considerably well. Their personal life is affected to a certain extent with regards to unexpected work and working overtime, but employees do manage to give work and personal life equal priority. The 53.8% respondents agree to the fact that there are **blurred**

boundaries between work and personal life. 30% employees also had **enough leisure time** after work to refresh themselves and follow their hobbies and interests. 73% of the respondents strongly agree to the fact that lack of work life balance will have an adverse effect on their career as well as family life and so the organization has recognized the importance of their personal lives.

Hence, **H1** is supported, and **H0** is refuted. Thus, there is a significant relationship between the work life balance and working from home.





4. Conclusion

4.1 To identify what aspects of work from home affects with the level of motivation.

Table 4.1: Indicates the mean for Work from Home affects with level of motivation.

Particulars	Mean
I look forward to go to work on Monday.	2.80
I am very focused and engaged while working from home.	3.11
I am motivated by my organization's vision.	3.32
My job is challenging and exciting.	3.60
The recognition I receive from my seniors and colleagues motivates me the most.	3.77
I feel less motivated because of lack of face-to-face interaction with colleagues.	2.40
I feel less motivated due to lack of inspirational work atmosphere.	2.52
There is complicated access to work-related information and Documents	2.65
I take personal responsibility of my own work.	4.12
How productive are you while working from home?	2.48

Table 4.1 indicates that 56% of the people are motivated and look forward to work on Monday (2.80). Even while working from home, employees are focused and engaged (3.11). The employees are motivated by the organization (3.32) and find the job exciting even while working from home (3.60). The recognition received from colleagues is highly motivating for employees (3.77). Due to lack of face-to-face interaction and lack of inspirational work atmosphere, motivation level is affected negatively (2.40) and (2.52) respectively. The employees feel there is a complicated access to work related information (2.65). It is seen a large number of employees are self-motivated and take personal responsibility of their own work. (4.12). Even while working from home, employees feel productive and motivated. (2.48)

The level of motivation of employees is affected because of work from home in the range of 1.00-5.00. With one cluster in the range of 1-3, representing low interference value and the other in the range of 3.00-5.00 representing moderate interference.

This concludes that there is a significant relationship between working from home and level

of motivation of employees. There are a lot of factors affecting it, which vary independently for all individuals. Some factors have a positive outcome, while some have a negative one. The level varies too.

Hence, we conclude from hypothesis 1 that **there is a significant relationship between the level of motivation and working from home.**

4.2 To identify what aspects of work from home affects their work life balance.

Table 4.2: Indicates the mean for Work from Home affects their work life balance.

Particulars	Mean
I am well able balance my work and life.	3.00
My personal life suffers because of work.	2.71
I am satisfied with the time I spend with my family.	3.08
I prioritize work over personal Life.	2.86
I sacrifice my sleeping hours for work.	2.89
I work on weekend and on irregular working hours due to extra work load.	2.72
I don't mind being too busy because I love my job.	2.89
I have enough time after work to decompress from my workday.	2.75
It is easy for me to find time for hobbies and interests.	2.63
My family supports me when I have to over work.	3.83
My organization recognizes the importance of my personal Life.	3.26
Lack of work-life balance has had an adverse impact on my career.	2.71
I take work related phone calls after working hours.	2.54
I have to rearrange, alter or cancel personal plans due to emergence of expected work from seniors.	3.38

Table 4.2 indicates that a moderate amount of people are able to balance their work and personal life. (3.00). Employees also feel their personal life suffers because of work from home (2.71) Results show employees are satisfied with their family time (3.08). Approximately 50% of the employees felt they prioritize work over personal life and even sacrifice their sleep (2.86) and (2.89) respectively.

Employees work on weekend and on irregular working hours due to extra work load. (2.72). Some employees don't mind being busy as they love their job (2.89). Employees feel they have enough time after work to decompress from my workday (2.75). 50% of the employees are able to balance their work life and make time for their hobbies (2.63) The number employees whose family were supportive while having to overwork was impressive. (3.83).

The employees also felt the organization recognized the importance of personal life (3.26) Employees recognize that the lack of work life balance has an adverse effect on their career (2.71). Employees agreed that they have been taking work related phone calls even after working hours (2.54) and they have to rearrange, alter or cancel personal plans due to emergence of expected work from seniors (3.38) The level of motivation of employees is affected because of work from home in the range of 1.00-5.00. With one cluster in the range of 1-3, representing low interference value and the other in the range of 3.00-5.00 representing moderate interference.

This concludes, there is a significant relationship between working from home and impact on work life balance of employees. There are number of factors affecting it, which vary independently for all individuals. Some factors have a favorable outcome, while some have a non-favorable one.

Hence, we conclude from hypothesis 2 that **there is a significant relationship between work life balance and working from home.**

This research **signifies** that there are **different views** regarding work from home and while it is more flexible and comfortable for some, on the other hand others feel going to work place is better. We have referred multiple researches, which are already conducted related to this topic for a better understanding as well as adopting a good and appropriate approach to move forward with our own research. The research helped in broadening our perspective through which we perceived the idea of working from home and gives us an idea about how people motivate themselves to keep going through or deal with different problems or distractions that come up.

4.3 Suggestions:

This study is extremely important as it's relevant in today's time, more than ever. With the **pandemic** hitting us worldwide, companies have had to take the step of working from home. Although new, the employees had to adapt to this change and get started with working from home.

Due to **COVID-19**, organization understand how there could be **conflict** and **stress** while working from home. This research shows how organizations go about **motivating** their employees in these trying times, while still having to run their business.

In our research, we have analyzed how a number of factors affect the level of motivation of employees while working from home.

It is essential for organizations also to identify where the level of motivation goes down, and what keeps the employees up and going. Some employees may love the job and be self-motivated, while some may need a little push and they will do wonders.

Some factors such as lack of face-to-face interaction and 'work' atmosphere affected employees negatively. On the other hand, some employees were equally productive, if not more. Although it varies from person to person and depends on an individual, the organization can definitely increase their motivation based on Maslow's Theory of Motivation.

A few suggestions are –

- Making the employees feel **connected** and hosting sessions that allow them to free their mind.
- **Recognizing their efforts** and appreciating them. It will increase their **job satisfaction** and in turn keep them motivated and make them work harder towards their goals.
- Employees should be allowed to take their breaks and have **family** and **leisure time** past working hours.

While working from home and **balancing** a personal and work life can be overwhelming at times, organization need to set clear boundaries, standard procedures set and incorporate it.

If organization keeps their employees happy, employees will perform better as they **feel fresh and motivated**. When they have the time for themselves, they can **balance** both well and prioritize work accordingly. An overworked employee rarely is putting their best foot forward. While an employee who is allowed to balance his/her personal and work life, feels more **satisfied**. The employee is **self-motivated** to achieve the goals that are in synchronization with the organization. Organization should understand the situation about the psychological trauma people are already facing and should be empathetic. They should have a **good work environment** enabling employees to work willingly with having a healthy work-life balance, which is in the best interest of both the employee and in turn the organization.

Evidence from Research of primary as well as secondary study suggests that improvement in people management practices, especially work time and work location flexibility, contribute to increased work life balance.

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Appendix 1: Questionnaire

1. Name *
2. Gender *
 - a) Female
 - b) Male
 - c) Prefer not to say
 - d) Other:
3. Age *
 - a) 18-22
 - b) 23-26
 - c) 27-30
 - d) 31-35
 - e) 36 or above
4. Qualification *
 - a) Undergraduate
 - b) Graduate
 - c) Post Graduate
 - d) Professional
5. Work Experience (Internship, Job, Business, etc.) *
 - a) 0-2 Years
 - b) 2-4 Years
 - c) 4-6 Years
 - d) 6 Years and above
6. How many hours on an average do you work every day? *
 - a) 0-3 hours
 - b) 3-6 hours
 - c) 6-9 hours

- d) 9-12 hours
- e) 12 hours or more

7. After approximately how many hours of working you start draining mentally or physically? *

- a) After 2 hours
- b) After 4 hours
- c) After 6 hours
- d) After 8 hours

8. How satisfied are you with your current working hours? *

- a) Very Satisfied
- b) Satisfied
- c) Not Satisfied

9. How motivated are you at work? *

- a) Highly motivated
- b) Moderately Motivated
- c) Less Motivated

10. I look forward to go to work on Monday. *

- a) Strongly disagree
- b) Disagree
- c) Neutral
- d) Agree
- e) Strongly agree

11. I am very focused and engaged while working from home. *

- a) Strongly disagree
- b) Disagree
- c) Neutral
- d) Agree
- e) Strongly Agree

12. I am motivated by my organization's vision. *

- a) Strongly disagree
- b) Disagree
- c) Neutral
- d) Agree
- e) Strongly agree

13. My job is challenging and exciting. *

- a) Strongly disagree
- b) Disagree
- c) Neutral
- d) Agree
- e) Strongly agree

14. The recognition I receive from my seniors and colleagues motivates me the most. *

- a) Strongly disagree
- b) Disagree
- c) Neutral
- d) Agree
- e) Strongly agree

15. I feel less motivated because of lack of face-to-face interaction with colleagues. *

- a) Strongly disagree
- b) Disagree
- c) Neutral
- d) Agree

e) Strongly agree

16. I feel less motivated due to lack of inspirational work atmosphere. *

- a) Strongly disagree
- b) Disagree
- c) Neutral
- d) Agree
- e) Strongly agree

17. There is complicated access to work-related Information and Documents. *

- a) Strongly disagree
- b) Disagree
- c) Neutral
- d) Agree
- e) Strongly agree

18. When telecommunicating, the team becomes focused on the communication rather than on the tasks. *

- a) Always
- b) Often
- c) Sometimes
- d) Rarely
- e) Never

19. I take personal responsibility of my own work. *

- a) Strongly disagree
- b) Disagree
- c) Neutral
- d) Agree
- e) Strongly agree

20. There is a lack of Team spirit, the 'we' feeling. *

- a) Always
- b) Often
- c) Sometimes
- d) Rarely
- e) Never

21. How productive are you while working from home? *

- a) Less productive
- b) Equally productive
- c) More productive

22. Do you have a dedicated work space where you can work at home? *

- a) Yes
- b) No
- c) Maybe

23. I am well able balance my work and life. *

- a) Strongly disagree
- b) Disagree
- c) Neutral
- d) Agree
- e) Strongly agree

24. My personal life suffers because of work. *

- a) Strongly disagree

- b) Disagree
- c) Neutral
- d) Agree
- e) Strongly agree

25. There are blurred boundaries between work and personal life. *

- a) Yes
- b) No
- c) Maybe

26. I am satisfied with the time I spend with my family. *

- a) Strongly disagree
- b) Disagree
- c) Neutral
- d) Agree
- e) Strongly agree

27. I prioritize work over personal Life. *

- a) Always
- b) Often
- c) Sometimes
- d) Rarely
- e) Never

28. I sacrifice my sleeping hours for work. *

- a) Strongly disagree
- b) Disagree
- c) Neutral
- d) Agree
- e) Strongly Agree

29. I work on weekend and on irregular working hours due to extra work load. *

- a) Always
- b) Often
- c) Sometimes
- d) Rarely
- e) Never

30. I don't mind being too busy because I love my job. *

- a) Strongly disagree
- b) Disagree
- c) Neutral
- d) Agree
- e) Strongly agree

31. I have enough time after work to decompress from my workday. *

- a) Strongly disagree
- b) Disagree
- c) Neutral
- d) Agree
- e) Strongly agree

32. It is easy for me to find time for hobbies and interests. *

- a) Strongly disagree
- b) Disagree
- c) Neutral
- d) Agree
- e) Strongly agree

33. My family supports me when I have to over work. *

- a) Strongly disagree
- b) Disagree
- c) Neutral
- d) Agree
- e) Strongly agree

34. My organization recognizes the importance of my personal Life. *

- a) Strongly disagree
- b) Disagree
- c) Neutral
- d) Agree
- e) Strongly agree

35. Lack of work-life balance has had an adverse impact on my career. *

- a) Strongly disagree
- b) Disagree
- c) Neutral
- d) Agree
- e) Strongly agree

36. I take work related phone calls after working hours. *

- a) Always
- b) Often
- c) Sometimes
- d) Rarely
- e) Never

37. I work on a personal vacation. *

- a) Always
- b) Often
- c) Sometimes
- d) Rarely
- e) Never

38. I have to rearrange, alter or cancel personal plans due to emergence of unexpected work from seniors. *

- a) Always
- b) Often
- c) Sometimes
- d) Rarely
- e) Never

39. How likely are you to recommend your organization as a place to work? *

- a) Most likely
- b) Very likely
- c) Neutral
- d) Less likely
- e) Not likely

A Study on Comparing the Prices of Gold Over Years and Understanding the Prevailing Factors that Lead to the Changes

Authors: Nikita Menghani and Priyanshi Tejnani

Class: SYBAF

College: Jai Hind College, Mumbai.

**Email: nikitamenghani1610@gmail.com
priyanshitejnani@gmail.com**

Abstract:

The prices of gold have always increased and decreased with the various significant changes that take place in the market. Hence, this study aims to significantly understand the factors that cause a change in the prices of gold over the years under varying circumstances. It has been observed that there is an inverse relationship between the stock market and the gold market. Therefore, the study focuses on understanding the factors that cause this relation and implying them to gain a better perspective in the future to understand gold investments. It not only provides information about the change in factors but also focuses on the crises that occur due to the fall in price and its solutions, demand and supply chain of gold as well as the black market of gold. It also analyzes the possible future of gold with respect to the ongoing market scenarios and their effect on the economy. The study includes primary data collected from people who invest in the gold market and have expertise in the same. The global depression creates a major impact on this market and thus this study aims to understand the changes that the gold market goes through during such unstable times.

Introduction:

Gold is an asset that the world believes to be the safest. The gold market has been one of the most important and reliable investment opportunities and serves to be the backbone of the economy. As we know, Gold backs the currency and withholds its value. Because of this, the currency is trusted. Gold is an indirect mode of payment but its high liquidity factor allows conversion into any currency with ease. Let's take a look at our past-Royal families in India used gold merely as a standard of wealth and to attain dignity in their kingdom. Even during those days, gold was used as a barter for goods as currency. Although after conducting market research, we learn that investors don't usually consider gold as a long term investment but what changed that was after the Great Depression in 2008, where all assets were going lower, gold was going high in value as the supply boosted; that is when investors began to consider gold as an asset that wouldn't go extremely low and if it would due to certain factors, within a stipulated period it would withhold its value.

This research aims to study the factors that directly or indirectly influence and affect the prices of gold over a period. Additionally, it also focuses on the factors and studies them deeply.

Some other aspects such as:-

- Gold with respect to the economy

- Gold with respect to currency
- Gold v/s equity, are studied thoroughly.

Also, taking into consideration the history of gold, studying the present, and analyzing the future are some of the other aspects covered in the study. Moreover, an in-depth analysis of the performance of gold over the past twenty years (2001-2020) and how prices change from country to country is also summarized.

Objectives:

- To study fluctuations of the gold prices with respect to the past, present, and analyze the future of the gold market.
- To analyze the factors influencing the price of gold globally.
- To understand the factors affecting the price of gold within states, cities.

Hypothesis:

- H0- The gold market has fluctuated over years and that has been caused by various factors that affect the economy and thus the past, present, and future show variation in prices.
- H1- The gold market has not fluctuated over years and that has been caused by various factors that affect the economy and thus the past, present, and future show variation in prices.

Scope of Study:

- The general purpose of this study was to study the Gold Market and its various factors influencing its price.
- Keeping the prime focus on the objectives of our study, we have chosen Survey Method to conduct our primary research.
- The duration of the study was 3-4 weeks.

Methodology used:

- Sample - 100 responses by keen observers of the gold market as well as investors were collected.
- We also interviewed a few investors to understand their opinion on Gold.

Let us now understand about what is the significance of gold in India and its effect on the economy.

Gold in India:

Considering the gold prices in India, keep changing due to many factors. Demand and supply, global crisis, and many such economical factors but, India a country of traditions, the cultural factors also affect the price of gold. For example, during Diwali, the price of gold rises as Hindus believe in purchasing gold on an auspicious day. In southern India, consumption of gold is higher i.e. demand boosts this leading to a tremendous rise in the price of gold. In such cases, people from cities where the price is high, purchase gold from the cities where the price is low. They smuggle them and sell gold at a higher price and generate more profit.

As for Securitization, multiple bonds, loans, financial instruments, etc. back their intermediaries with gold. Gold according to the market research after the depression of 2008 proves that gold when used as asset-backed or monetary security is the safest securitized option and also acts as collateral. Gold is backed by government assuring and this information insensitive. In 99 out of 100 cases:

Disbelief > Risk.

Let's go back to the times where gold initially started off as a metal of showing its self-worth. Thereafter one thing led to another and the ramifications of which were gold backing the entire economy. In times of market crisis, financial crisis, etc gold never fails to withhold its value. This has been proven. Let's look at the Great Depression of 2007-08 once again. All markets started falling which in turn was followed by the financial crisis. Banks declared bankruptcy. House prices drastically lowered leading to the housing crisis. Within a stipulated period, gold withheld its value. It proved to be a safe asset in times where all safe government-backed assets failed.

Effect of Gold on the economy in India

Gold has always been considered important in India. Be it possession of gold in Indian households (gold coins, bars, and jewelry) as well as for trading purposes such as gold exchange trading funds, gold mutual funds, and Sovereign Gold Bonds. India's gold market primarily functions on consumption and manufacturing factors. This adds immense value to the economy. Gold made a direct contribution of more than \$30 billion to the Indian economy.

(A report commissioned by the World Gold Council from prince Waterhouse coopers).

Effect on Economy

- Non-productive asset: Most of the people who are in possession of gold are eager for a good return on their investment. They tend to wait for selling away their stored gold (whichever form it may be in) when the value of the same increases and they are most likely to gain profit out of it. Until then, it is kept in their safe at home or in their bank locker. Thus, no real value is added to the productive capacity of the economy.
- The mentality of Indians is that Gold is safer when kept with ourselves in a box or a locker. The idea of investing in gold bonds and securities doesn't occur as a primary thought. They feel that the value remains the same as it would appreciate either way and creates a sense of real value to this asset.
- India is known to be one of the world's largest smuggling hubs for gold. This is because
- India is the largest consumer market for Gold.
- The festival times call for huge sales in Gold jewelry and bars. Thus, demand increases.
- It is easy to smuggle as checking and investigation aren't thorough.
- Indian individuals refusing to pay import duty with the excuse of buying it for either personal use (purchase) or resale leads to smuggling.

UAE is considered to be India's largest source of smuggled gold. This has caused the government to increase the Import duty to 15% (as of 2019) in order to restrain this act.

Gold is one of India's major and improving sectors and hence the weak points of the sector need to be fixed. This could be done in the following ways:-

- Educating people about the manufacturing process in gradual ways so as to avoid the import of Gold. This would lead to employment opportunities as well as curb the increasing smuggling rates.
- Thereafter leaning forward to increasing international trade with other countries so as to increase export.
- Another reason for people to ignore the factors like performance, structure, behavior, and decision-making of the economy as a whole and to have faith in gold is their belief that there is no such safer investment opportunity that gold offers as the value it would always hold value in some or the other way. Unlike other value-based forms of wealth like the currency that would tend to lose value due to inflation, etc.
- The lack of trust in the amount of Risk and Return factors involved in equity, investment in property, assets like vehicles, etc. is leading to a downfall for the economy.

‘Gold’, in the eyes of the world is an asset-backed securitized safest investment option. But in India, gold is a lot more than that. Gold is an emotion during the festival of Diwali, the beauty of southern India, threads of bridal wear, and desire for financial protection with religious wires. With such diversified interest and demand of gold in a country like India, It gets difficult to meet the demand and supply balance and that’s when the price fluctuations come into the role. Let’s take a look at the genuine demand rate prevailing in India, as per the last five-year census report. India comprises 27% of the total world demand in gold being the highest. Not only does history or our present prove it but gold is here to stay and India is here to dominate its demand for many more years to come.

Gold v/s equity

Gold is typically considered to be an investment that people lean towards when markets are crashing. Gold typically doesn’t show graphs of going up at all times but does significantly hold its value. The reason we say that the gold market and equity market have an inverse relation is that because when there is tension in the equity market those investors panic and rush towards the gold market causing a high demand and thus when prices fall in equity, prices rise in gold. Where the entire world believes in investment of gold in the form of portfolio asset, in India people believe in physical investment which comes with attached costs of insurance and storage. As per a 30-year gold analysis, gold has crossed stocks by 280% although if we go through the 15-year analysis gold shows low results as that of the stocks but particularly high during the global savings glut period. Thus we can say from the study that the gold V/s equity ratio depends on the time horizon. Studies prove that the long-run horizon is profitable for gold but the short term shows weaker results.

Let’s take an overview to the same as a historical perspective.

Let’s take a look at a shorter circuit

2001 \$276.50

2002 \$342.75

2003 \$417.25

2004 \$435.60

2001 to 2002 = +66

2002 to 2003 = +75

2003 to 2004 = +18

With this, we understand that from 2001 to 2003, gold’s price graph was at a high.

Although as of 2003-2004, the profits were high, the percentage began to fall.

Let's take into consideration a wider concept

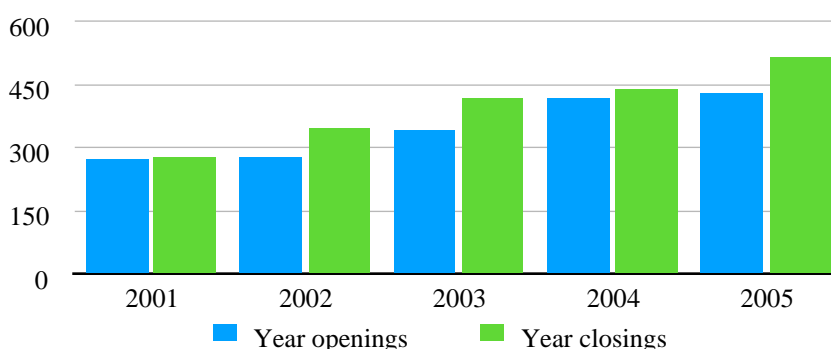
Analysis of the past 20 years of gold:-

Differentiated into 3 aspects

Focusing mainly on prices of gold (in dollars)

1. Before the crisis
2. During the crisis
3. Post-crisis

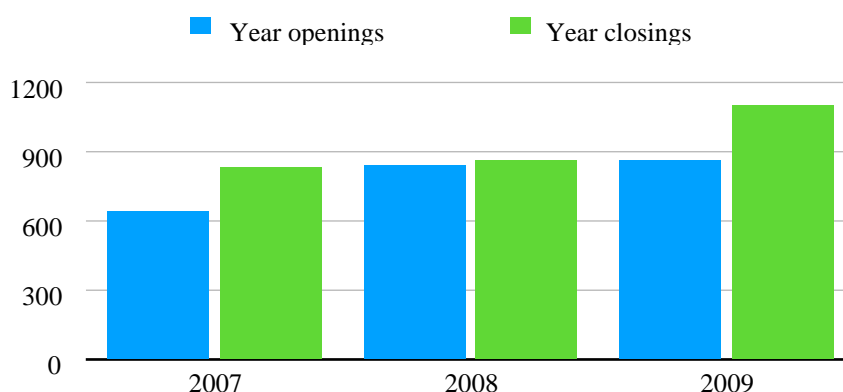
1. Before the Crisis



Before crisis

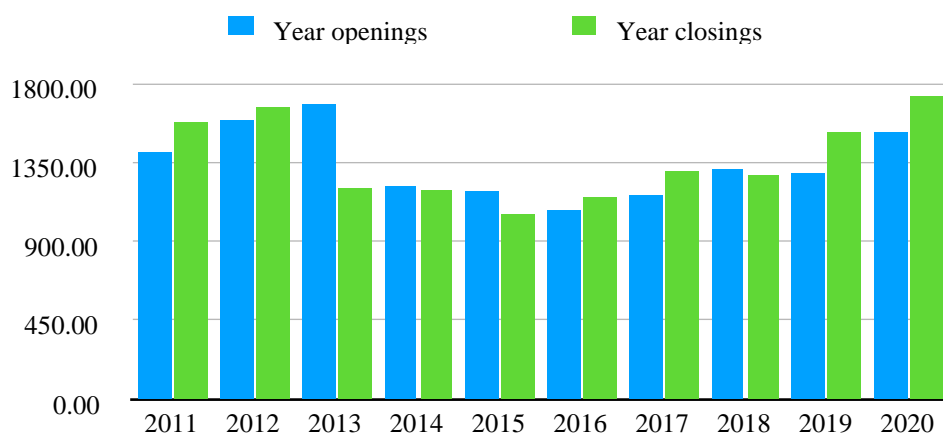
Years	Year openings	Year closings
2001	273	277
2002	278	343
2003	342	417
2004	415	438
2005	427	513
2006	521	636

2. During The Crisis



Years	Year openings	Year closings
2007	640.75	836.50
2008	840.75	865
2009	869.75	1104

3. Post-Crisis.



Post crisis.

Year	Year openings	Year closings
2010	1113	1410.25
2011	1405.50	1574.50
2012	1590	1664
2013	1681.50	1201.50
2014	1219.75	1199.25
2015	1184.25	1060.20
2016	1075.20	1151.70
2017	1162	1296.50
2018	1312.80	1281.65
2019	1287.20	1523
2020	1520.55	1731.90

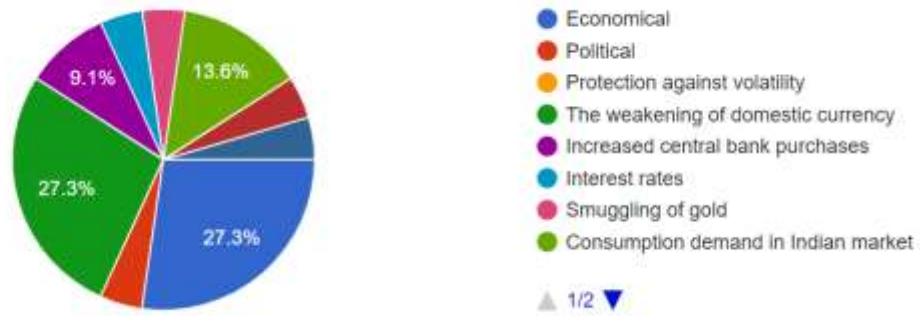
Data analysis and interpretation:

For our primary data, we circulated a Google form amongst people who invest in gold on a regular basis. We received 100 responses for the same. The data was collected via a Google form.

Following were the questions asked:

1. What factors according to you affect the price of gold?

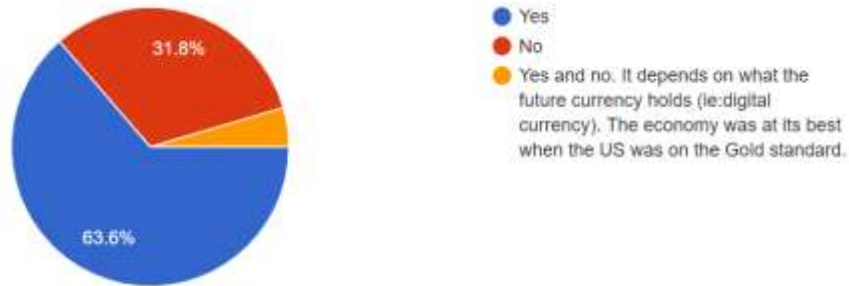
Interpretation - The respondents' opinions were widely spread across the different factors however the major ones constitute the demand and supply affecting the prices of gold which comes to 27.3%. The weakening of the domestic currency is another factor that constitutes about 27.36% which is quite close to the demanding choice. Thereafter the remaining factors are divided across smaller percent groups.



2. Do you consider gold as a long term investment?

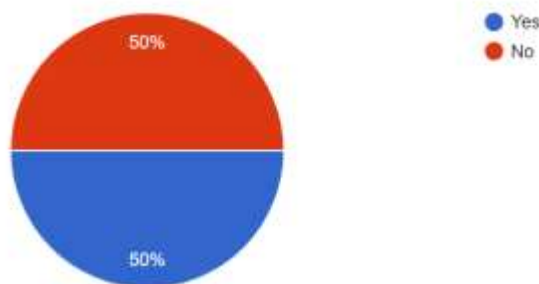
Interpretation - The responses were quite positive.

Around 63.6 consider gold as a long-term investment. Whereas a chunk of 31.8% believes the opposite. And the remaining lies in between, wherein they yet can't predict the near future understanding.



3. Is gold your preferred choice of investment over the others?

Interpretation - Surprisingly the respondents were quite perfectly divided into two opinions of exactly 50% each stating that they choose gold over other investment options whereas the remaining 50% stating just the opposite.



Conclusion:

Gold as an investment has proved to be of great value over all these years and still continues to. The return on investment has also been more than satisfactory, safe, and reliable for also investors. The global market may see tremendous High and lows in all aspects of the economy and may have experienced loss, but the stability that the gold market

holds has been impressive over the years. Generally, Demand and supply are one of the factors that affect the price of investments. But with gold, there is an additional value that helps retain and grow this particular form of investment. Thus, the volatility continues to exist amongst all markets but what is special with gold is that it carries a sense of belongingness and cultural heritage continues to take the value of gold a notch higher by the day.

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Why Gold Price is Increasing? Factors that Influence Gold Prices

<https://groww.in/blog/why-is-gold-price-rising-factors-that-influence-gold-prices>

All you need to know about gold investments in India

<https://www.cnbc18.com/personal-finance/explained-all-you-need-to-know-about-gold-investments-in-india-8611971.htm>

Gold price history

<https://goldprice.org/gold-price-history.html>

How Does Gold Investment Affect Indian Economy?

<https://www.bankbazaar.com/gold-rate/how-gold-investment-affects-indian-economy.html>

What is the relation between Gold Price and Stock Market

https://www.researchgate.net/post/What_is_the_relation_between_Gold_Price_and_Stock_Market

Digital Disruption in the Indian Financial Sector

Author: Parshad Desai

Guide: Dr. Meena Vazirani

Class: FYBCom

College: SVKM's Narsee Monjee
College of Commerce and Economics

Email: parshaddesai09@gmail.com

Abstract:

This research paper focuses on the Financial Sector. The increased internet penetration in our economy has completely changed the face of finance. The most rapid advancement has turned out to be payment facilitation apps like PayTM, PhonePe and GooglePay. All these QR based platforms are making even plastic money look archaic and redundant. They are gaining colossal traction due to the massive number of active users joining day by day. The ease of payment offered by these applications had a knock-on effect on other digital businesses' including the likes of E-commerce, OTT entertainment, edtech, tourism and online subscription-based services have all flourished due to the ease in payment offered by the UPI system and the tight integration of all the major fintechs have provided.

The COVID-19 Pandemic has further exacerbated the online proliferation of digital alternatives in the financial world, The Fintech Industry has already emerged as a big elephant in the "Unicorn Club". Further progress in big data analytics, AI, 5G and IoT are set to provide an impetus to the online push in finance. These developments will pose a major challenge to legacy institutions in the financial sphere like large banks, stockbrokers and insurance corporations. This paper will cover the dramatic changes that can be expected in the financial sector in the near future and their implications on existing players as well as the consumers.

Introduction:

The onset of the digital transformation in the finance industry is the result of four pivotal moments which have acted as a trigger. The four events have set the base and exemplified the digital drive. They are:

1. Demonetization.
2. Jiofication.
3. COVID-19 Pandemic
4. Digital India Mission

The sudden declaration of Demonetization by the NDA government lead to a cash crunch in the country. The sudden liquidity crisis amongst the populace lead to mass adoption of digital payment wallets. Such applications saw a sudden spurt of active users and gained considerable traction. In figure 1.1, the immediate rise in digital transactions can be observed.

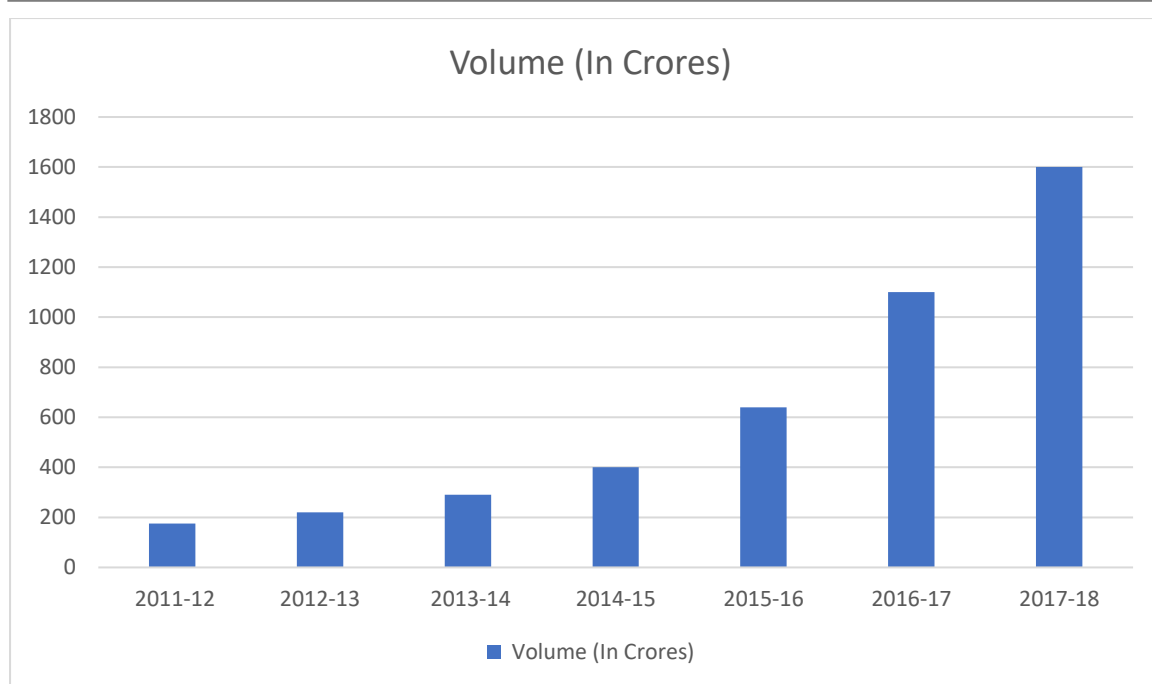


Figure 1 The sudden surge in digital payments in India post demonetization
 Source: *The True Picture*

The entry of Reliance into the Telecom Market suddenly transformed the whole sector. Jio’s play on price rather than network quality redefined the dynamics of the telecom market. The change turned out to be a boon for consumers who availed the lowest per GB cost in the world due to the intense competition. (The Impact Of Jio, 2019). As illustrated in Figure 1.2, India has a big lead in terms of data cost. The sudden fall in internet cost exposed millions of Indians in Tier 2 and Tier 3 cities to robust and swift internet at a very affordable base. Hence, a large target consumer base attracted digital entrepreneurs to all the sectors including finance. Fintechs too enjoyed the fruits of higher volumes and more active users.

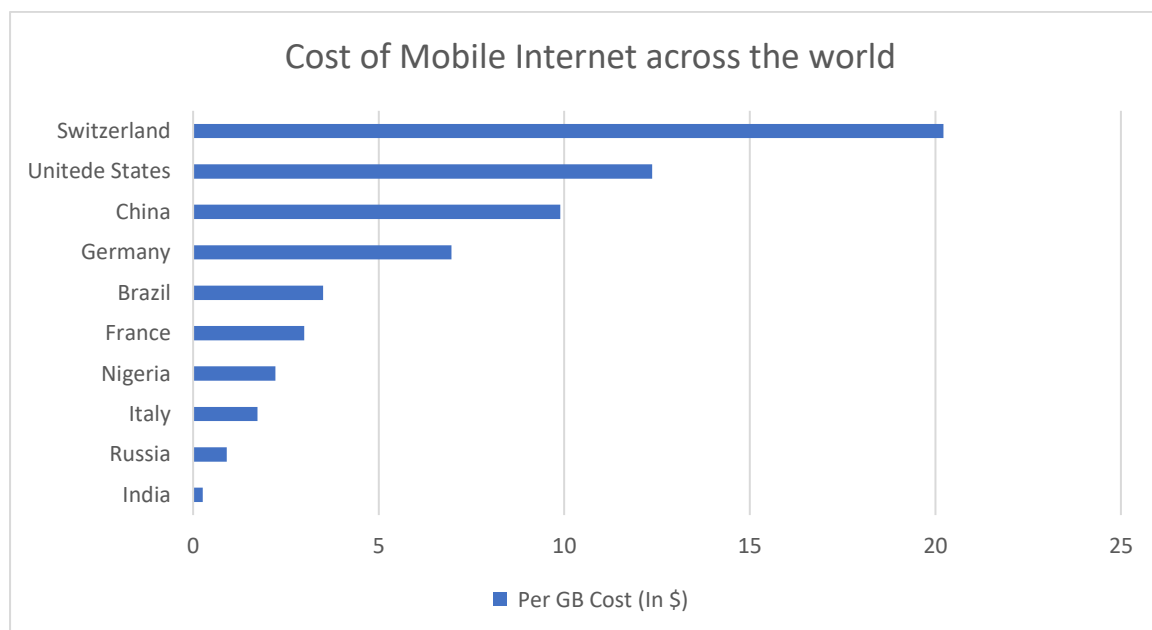


Figure 2. India has the lowest per GB cost around the globe
 Source: *Forbes and Statista*

The COVID-19 Pandemic put the economy on a freeze for months. Initially, the financial sector nosedived for a few weeks. But it recovered quickly as the government introduced a slew of reforms to get the finances back on track. After the initial havoc, users will willing to embrace contactless and remote monetary transactions. Since then, digital transactions have risen steadily and there has also been a substantial rise in active users of neobanks, digital stock brokers and insuretech companies as consumers strive for a source of passive income in such turbulent times.

Inter alia, the introduction of the Digital India Mission in the year 2015 indicated a positive signal to technopreneurs, investors as well as all the parties involved in the Indian startup ecosystem with regards to digital transformation. Such open government policy support egged on the digital drive.

Research Objective:

This research seeks to examine the oncoming digital disruption in the Indian Financial Sector and assess the impact of the same on consumers, existing legacy institutions and the new tech players. For this, the financial sector has been divided into different segments like banking, investment analysis, insurance and affiliated services. All these segments have been examined in minute detail and their resultant synergies have also been explained in the conclusion.

Methodology:

This section clarifies the various methods which have been used to create a main body of this research paper. The methodology used in the paper is Secondary. The paper is based on secondary data collected from a variety of government publications, corporate reports and research institution research. The reason for selecting the method is the ease with which secondary data can be connected to explain several predictions and assumptions made in the main body and conclusion. The data was collected from several prominent databases like Statista, Jstor, World Bank Findex, and CB Insights.

Limitations:

The research paper has been written with the utmost caution and care. However, the paper is not free from biases that might have crept in while the secondary data was being collected in the first instance. Due to insufficient resources, some of the data has been collected from corporate research and authors. Hence, the data may favor certain institutions and companies. The conclusion of the paper is qualitative and based upon my own perspective about the future of the finance industry. Due to its qualitative nature, it cannot be supported by data and lacks numerical validity.

Indian Financial Sector: An Overview

The Indian Financial Sector has long been under the shadow of its more acclaimed peers like the pharma and IT sector. However, forces within and outside the country seem to align towards one goal: To digitally supercharge the sector. The COVID-19 pandemic may have created a small dent in its current prospects but the sector is poised to bounce back with year on year (YOY) growth of 11.6% in 2021 when compared to 2019.

(Overview of Indian Financial Sector, 2020)

The Asset Under Management (AUM) is considered to be a standard barometer to gauge the health of the financial sector. The Indian market's AUM stands at a historic Rs. 30 Lakh Crore (US \$407 billion) powered by increased retail participation through digital channels. (Overview of Indian Financial Sector, 2020) For a better understanding of the online proliferation of business in the financial sector, the sector has been divided into four segments:

1. Banking
2. Insurance
3. Investment Management
4. Auxiliary Services

Each of the segments mentioned above has been profoundly affected by changing digital trends and consumer behavior. The same shall be examined in minute detail henceforth.

Banking: Under all-out assault

Banking is the most ubiquitous component of the financial sector. Under the NDA government's Jan Dhan Yojana of 2014, the percentage of Indian adults having a bank account increased from 53% in 2015 to 80% in 2018. (Global FIndex Database, 2018) The exponential rise of bank account holders has attracted entrepreneurs to the field who aim to convert these new entrants to digital assets. The reason for citing "under all-out assault" in the sub-title is due to the simple fact that efficient digital alternatives have emerged for every basic function of a commercial bank.

The main function of monetary transactions is now only a tap away, Payment aggregator applications like PayTM, PhonePe, GooglePay and WhatsApp Pay have gained traction amongst the masses and have emerged to gain a substantial active user base. This implies a drastic change in consumer behaviour who are now willing to dabble with digital-first products (at least in the financial sector). The second function under threat is loan disbursements. Historically, interest on loan advanced has been the main source of income for commercial banks of varying sizes. (Wagner, 2020). But micro lender applications are slowly gnawing at the bank's dominant market share in loans advanced. These micro lenders are specifically targeting MSMEs and emerging e-commerce entrepreneurs, which have been largely ignored by legacy institutions. Such focus on the underbanked will lead to a moderately successful YOY growth of 15% in a pandemic wrecked financial year of 20-21. (the financial express, 2020). The Micro Finance Industry (MFI) is slowly getting prominence in financial circles. In figure 1.3, a positive growth trend across India can be witnessed. The next major function under threat is that of savings. A new trend called "micro-investing" has captured the public imagination. Under this new trendsetter, people invest their spare change from digital transactions into an asset class of their choice (ETF or mutual funds) through another application. Startups like Spenny have emerged to be pioneers in India. Admittedly, the amount invested may pale in comparison to a classic Savings A/C but the financially literate have become aware of the power of compounding and the benefits of investing from an early age.

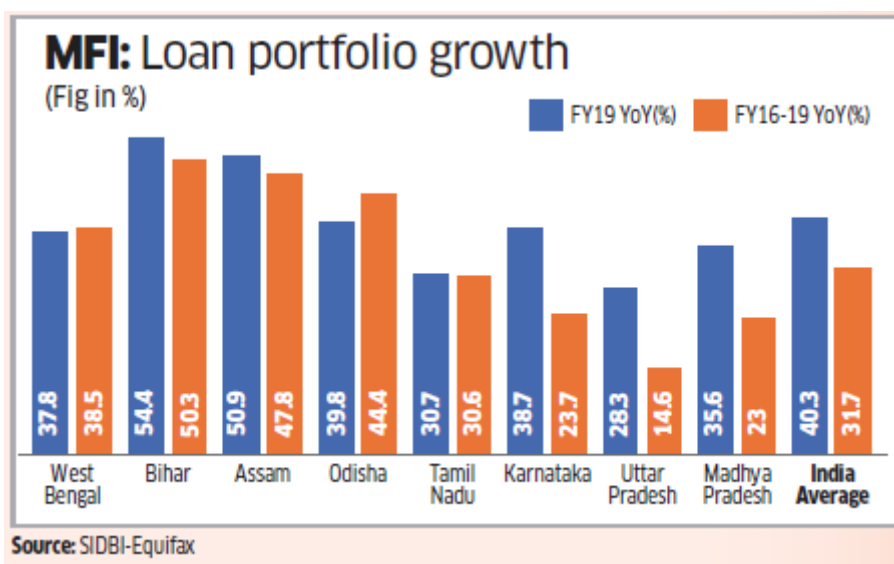


Figure 3 Positive growth trend in MFI loan portfolio across the country
 Source: *The Economic Times*

Even if all these startups are discarded, the emergence of neobanks can pose an existential threat to banks. Neobanks replace the digital counterpart to traditional banks. They have no physical infrastructure and the operations are completely digital. Hence, the costs of running neobanks are extremely low in comparison to a traditional bank. The target consumer of such businesses are the more tech savvy Gen Z users between the age of 16-25. India has the world’s largest youth population so future prospects look better for such endeavours. (Raghav Aggarwal, 2020)

Insurance: Caught in an influx

The Insurance segment in India has for years been dominated by a handful of domestic players. However, recent government reforms are set to change the narrative. In the Union Budget 2021, the government lifted the FDI limit in the insurance segment from 49% to 74% (Insurance reform proposed by FM, 2021). These reforms are set to provide an impetus in an industry that has been historically devoid of foreign investment. India’s first unicorn for the year 2021 also emerged to be an insurtech called Digit.

Interestingly, startups in this segment have capitalized on behavioural economics to vie for more active users. (Olano, 2021) A new strategy that involves flipping the channel is being adopted. Essentially, the startups are tying up directly with manufacturers instead of going after individual consumers. This strategy of the Point of Sale (POS) has the potential to substantially enhance the insurance holders in the country. A second innovative approach is the confluence of digital tools with a consumer mindset. To make insurance hassle-free and more user friendly, Artificial Intelligence (AI) is being used on a larger scale. By using AI, companies are drawing up “smart contract” which do on the spot underwriting, risk assessment and rapid claim processing to reduce processing inefficiencies and quicken the pace at which claims are passed. Finally, a “smartphone first” approach is being configured with regards to the user interface (UI) of their digital offerings according to a survey conducted by Smart Insights. (Chaffey, 2020).

All these emerging trends are set to exacerbate the digital divide between current insurance market leaders and burgeoning insurtech startups may expand if the incumbent

fails to pivot towards the incoming digital era. The main opportunity for all the major players is the low penetration in the market. As a percentage of GDP, Insurance premium stands at 3.71% which indicates a grossly underserved market. The share of private sector in life and non-life insurance has risen exceptionally from 2% and 15% in 2003 to 31.30 and 55.80% respectively in 2020. This statistic indicates that the consumer in India is ready to buy insurance from non-public companies (be it digital or traditional). (Overview of the Indian Insurance Industry, 2020).

Investment Management- A Consumer Oriented Approach

Due to increasing awareness and removal of the stigma associated with investing, retail investor participation in India has steadily risen over the years. Figure 1.4 illustrates the steady rise in the number of retail investors in the Indian Equity Market between FY 2012 and FY 2017. As more and more people of the populace dabble in investing, services designed to assist and educate them have also started sprouting up. These digital applications are created to ride the retail wave and monetize the same.

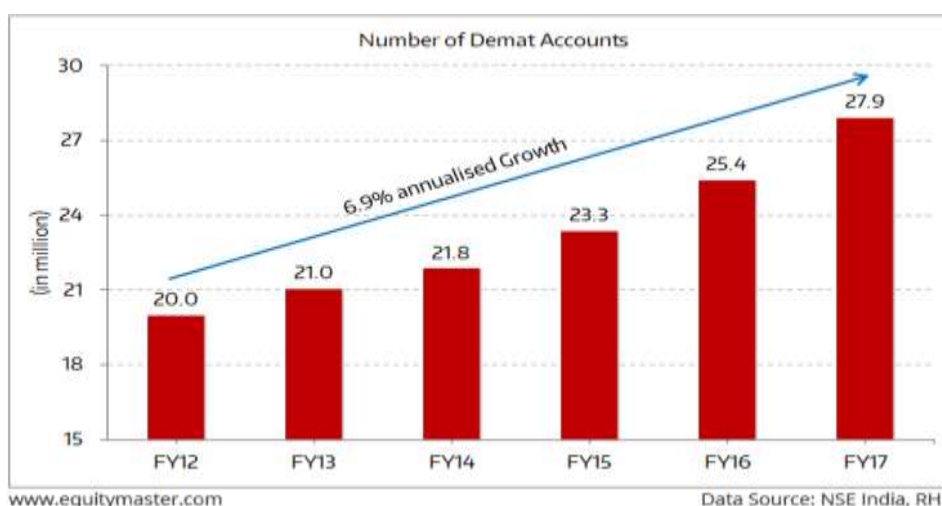


Figure 4 Increase in participation of retail investors in Indian Stock Market
Source: NSE India

The emerging fintechs have a distinct advantage over traditional brick and mortar advisors because of their extensive usage of digital tools. By first understanding the customer's risk appetite, capital allocation, expected return and tenure of investment, the fintech use high-end AI algorithms to find the best-suited investment portfolio. The trend of roboadvisors in the investment world is also catching up rapidly. Roboadvisors refer to investment suggestion processes that require minimal human intervention. It is an end to end process starting from the analysis of user preferences to suggesting a final portfolio keeping in mind the various market dimensions. (Rise of Robo Advise, 2019)

Artificial Intelligence (AI) is also heating up the flow of venture capital into the fintech industry. With further augmentation and polishing of various related algorithms and exposure of AI systems to chunks of real-world data, it is expected that their efficiency will expand drastically. In figure 1.5, a CB Insights chart highlights the threat faced by various jobs due to further advancement in AI. With a lion's share of 38% and 46% respectively, wealth managers and investment managers are on the cusp of an existential crisis.

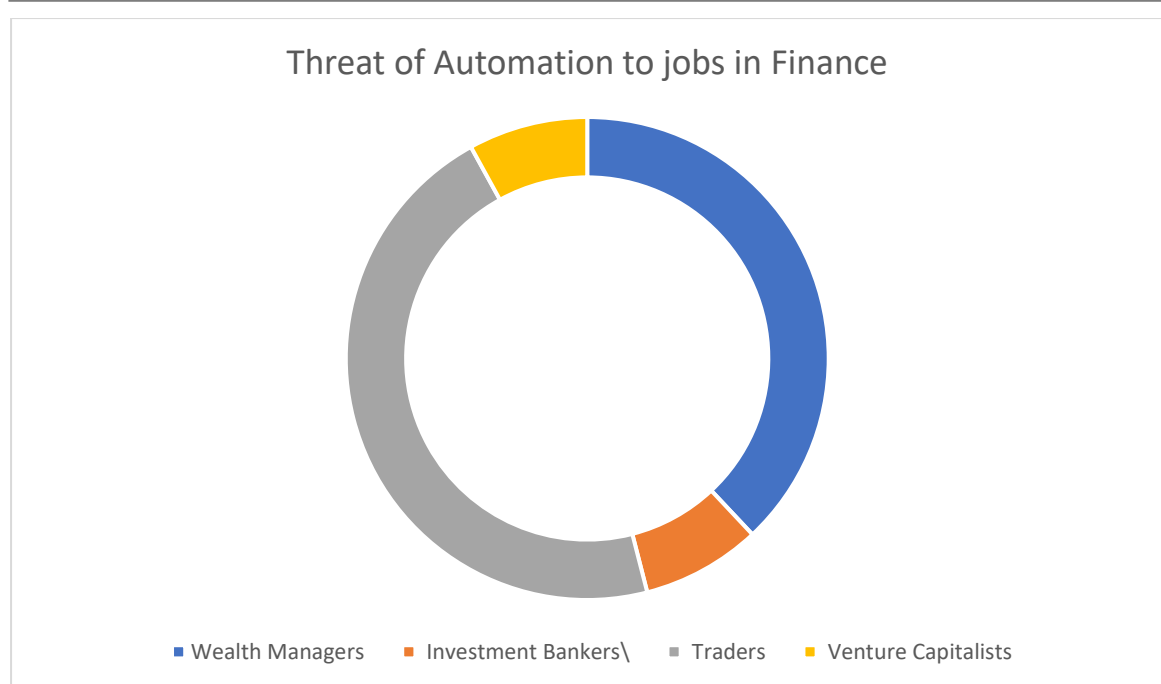


Figure 5 Threat of AI replacing various professions in the wealth management industry
 Source: CB Insights

Auxiliary Services: Cashing in on the financially literate

Shifting focus onto the auxiliary sector, the sector includes a diverse variety of services offered to the ever-increasing bourgeoisie middle class of the nation. Demographic trends indicate a sharp ascent in the number of the middle class and upper-middle-class families around the world with India contributing substantially to the same as shown by Figure 1.6. The rise in per capita income will have a positive impact on discretionary income for savings. This will pump in more money into India’s financial system thereby also having a knock-on effect on demand for “other” financial services like credit management, tax compliance, micro-investing and tax management.

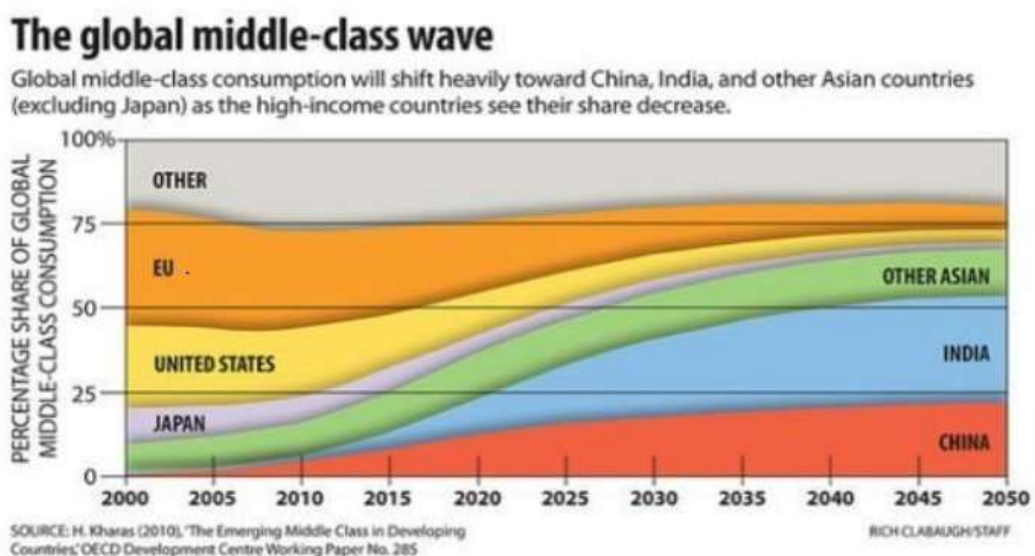


Figure 6 Rise in middle-income families
 Source: World Economic Forum (WEF)

Such a certain business opportunity can be grasped better by companies that can provide the best solution to solve common financial problems. And fintechs are poised to be the frontrunners due to the simple fact that they utilize digital tools better than legacy financial service providers. This gives them an edge over their archaic competitors. Digital companies have a slicker User Interface (UI) which makes their platform more attractive and increase user screen time. To conform to the notion, a mere glance at the Cred App and HDFC Net banking App will prove sufficient. The second reason is the simplicity of fintech apps. The main functions are a tap away and extremely efficient. Last but not least is the hyper-personalization offered by such applications. By analyzing the user data, such apps can deliver a very personalized experience based on the taste and preference of the user. Hence, the ability of fintechs to leverage digital tools make them stand out against their more conservative counterparts.

The digital boom has increased retail participation in Indian markets across asset classes. As mentioned before in figure 1.4, there has been a sudden spurt in the number of retail investors in India. One of the main reasons for the same has been the democratization of investing made possible by digital brokers like Zerodha, Groww and Upstox. Zerodha has emerged to be the largest stockbroker in India (The Economic Times, 2019). As shown by Figure 1.7 , the Pandemic turned out to be a game-changer for digital brokers as many of them gained lakhs of new users after the lockdown,

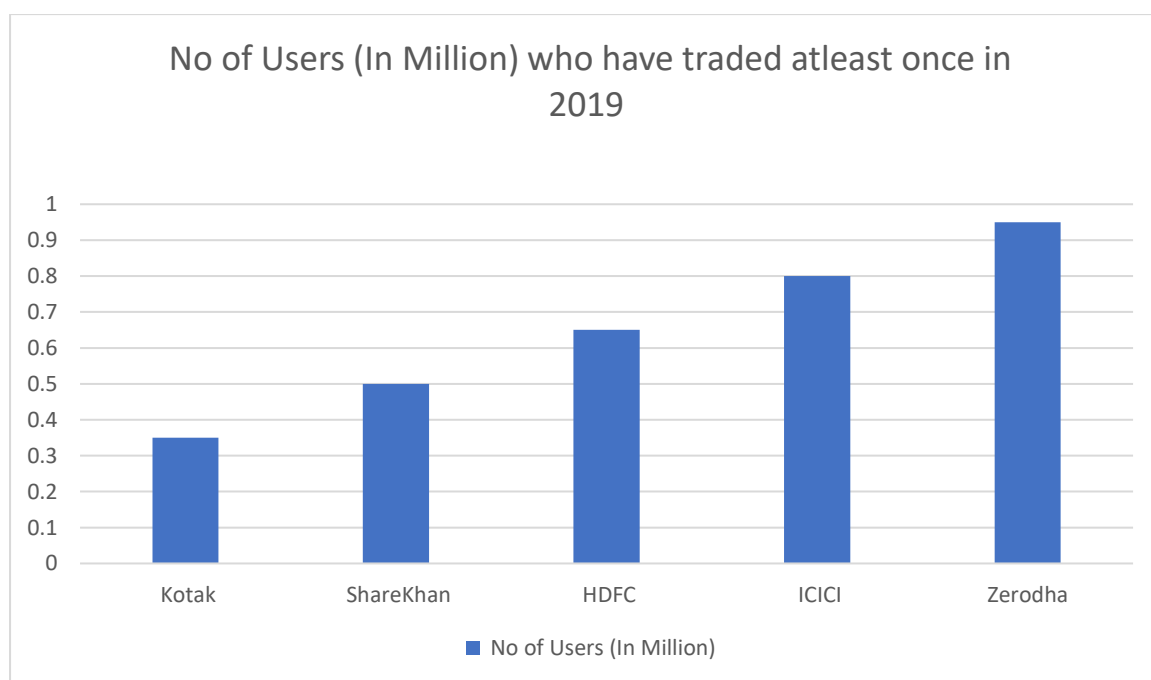


Figure 7 Increase in the user base of digital brokers after the Pandemic
 Source: Bloomberg

Apart from investing, the American trend of buying goods on credit is also gaining traction in India. An increasing number of people are now willing to buy now and pay later. Figure 1.8 Implies the continuous ascent in credit card transactions in the country. Such changes in consumer behavior are attracting startups who specialize in the task of credit management. Startups like Cred, Creditwatch, and InstaCred are notable examples of the same. These companies focus on detecting user patterns, analyzing data, using behavioral economics and suggesting users improve their short term debt.

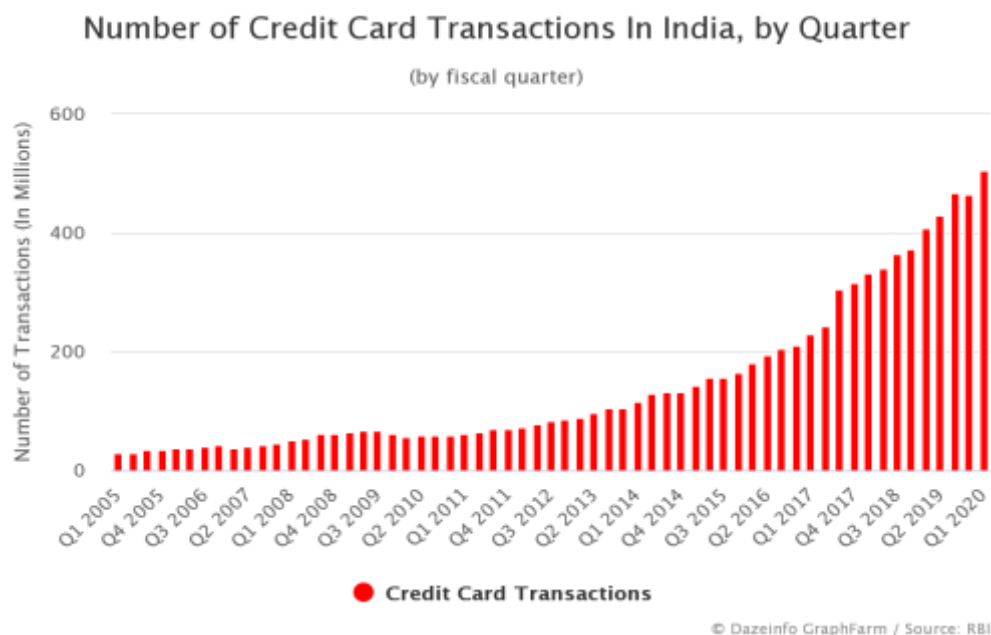


Figure 8 Increase in the number of credit card transactions in India
 Source: Reserve Bank of India

The last component of Auxiliary services is tax compliance startups that aim to simplify and ease the irksome process of filing taxes. By using pre-coded algorithms, the startups aim to make the process hassle-free and swift. ClearTax and Taxjar have emerged as pioneers in this segment in India.

Conclusion:

Digital disruption has the potential to revamp the financial sector in favour of the more tech-savvy fintechs. However, the legacy brick and mortar institutions still have certain strengths which can help them in lambasting the challengers in the short to mid-run. The financial resources available at the behest of these old institutions total billions of dollars. The notion of emerging fintechs being acquired by them may not seem outlandish due to the same reason. After all, these companies can leverage the fintech’s dynamic platform, rich consumer insights, the skill of their tech-savvy workforce and the vision of the founders. Hence, the strategy of acquiring an emerging fintech at an early stage can pay rich dividends for the future.

The legacy companies have woken up to the digital threat and all the major banks as well as financial institutions have a digital iteration that provides all the offline services to their loyal consumers. Admittedly, the user experience may not be as seamless and glitch-free as the one offered by fintechs but the same can be improved easily by hiring leading digital designers. By recognizing an imminent threat, the incumbents have already taken a step in the direction. A more in-house strategy would be to alter and upgrade the existing systems and processes within the organization. Doing so would make the organization as a whole more efficient and more in tune with the changing dynamics of the external business environment. For instance, banks can use Blockchain instead of NEFT or RTGS to execute monetary transactions around the country. By using Blockchain, transactions would be more secure as well as quicker. Another move could be to hire more data analysts and data scientists to seek insights from the data already in possession by such

firms. These steps would make the organization leaner and better suited to the changing dynamics in the industry.

One area in which legacy institutions are leaps and bounds ahead is the longevity of their operations. Most of the older organization have been established for decades. Due to this, they at least have a large historical data on the activity of their customers. They only need to integrate this data into modern big data analytics systems which can give them hidden and unknown insights about their consumers. By leveraging their massive consumer base, they can get ahead of the curve through this strategy. Such vast financial powerhouses also have credible brand loyalty. Brand Moats have always been the hardest to breach. (Analyzing moats, 2017) Taking advantage of the same, companies can focus more on showcasing their brand and throwing the spotlight on their past credibility. Such a strategy would help in retaining existing customers and would repel mass migration to digital challengers. The incumbents also have the human advantage. Their management comprises industry veterans who have witnessed and learnt from the countless business cycles. On the contrary, startups have young entrepreneurs who lack the necessary foresight and experience essential in the conservative and pragmatic financial world. Hence, the incumbents can bank on their rich human capital to face the incoming metamorphosis in the industry. Moreover, established banks across the nation have the resources to take the “hybrid” approach wherein facets of both online and offline banking are integrated to give a comprehensive service to all types of users.

The future beckons to a more vibrant, prosperous and active financial industry, India is on the brink of a maelstrom with an increase in retail investor participation, positive global outlook, sector friendly government policies, a bubbling middle class and most importantly, a digital transformation which can make the sector more accessible to all. On the other hand are the financial behemoths who have ruled the industry with aplomb for decades and on the other are upstarts powered by visionary founders and digital assets. Whatever the fate of this corporate battle, the future of the sector remains optimistic.

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An Investigation of Role of Agriculture in Rural Development.

Author: Shrishti Jatkar

Guide: Dr. Ravishri Mishra

Class: SYBA

**College: Royal College of Arts,
Science and Commerce.**

Email: myselfshri6@gmail.com

Abstract:

Being an Agrarian Country, India has witnessed the ups and downs in its agriculture. Whether it is unusually heavy monsoon or sometimes not a single drop, personal problems, economic problems or by political concerns. Over the years, agriculture has undergone many changes. It has transitioned from a traditional method and a way of life for farmers to modern methods and has become more or less a business venture. Many programmes, reforms, acts and developments have entered and altered the life of farmers, their livelihood and rural infrastructure.

Agriculture, certainly plays an important role in rural development as it has managed to cater to needs of its people and created a positive impact. But with development, comes great responsibility of maintaining it and availing its benefits for the welfare of all, which is hardly visible as in case of India.

The paper investigates the role of agriculture in rural development, how it transformed the villages with new advancements and its impact not only in the primary sector but also in other sectors too. It provides an insight into the agricultural advancements and changes in rural areas, its impact on rural and urban areas and on the tillers of the land – the farmers.

Keywords: Farmers, Agriculture, Development, Rural, Reforms.

Introduction:

India has its roots in agriculture. Agriculture has always been an integral part of our culture and nation. From ploughing the field to using tractors and other techniques, India has undergone many changes especially in agricultural sector. The strength of an agricultural sector is the base for all other sectors progress. Agriculture is the starting point for everything. After 1991, globalization brought in many policies, reforms and acts which changed the shape of agriculture and developed rural areas. One such reform was the green revolution emerging in 1960s, but continued to develop the rural economy. Another reform has been in agricultural marketing – contract farming. It made transaction seamless and protected the farmers from getting exploited from the traditional money lenders and other unorganized sector. Agriculture's contribution to GDP increased after 1991 around 29% but in recent years it contributes only 15% in GDP. With new reforms and development agriculture did changed the rural infrastructure and improved its economy but it is witnessing a downfall after the expansion of industries and service sectors. More or less it is now a ignored sector rendering many problems in rural areas owing to the new reforms and their adaption by farmers. We have hardly come to a stage where we can ignore class

distinctions and inequality within rural areas. It is at this juncture that farmers' organizations and open movements on price and related issues have dominated the Indian scene. They have been relatively a new phenomenon compared to the anti-feudal peasant movements. Farming is a prominent and key factor for the economy of developing countries.

Therefore, it is necessary to understand the importance and role of agriculture and how it developed the rural economy. And how the development needs to be maintained and to further its benefits to the farmers and nation at large.

Scope of Research:

The scope of our study is limited but gives information collected from many resources in a detailed and systematic manner.

Objective:

The objective of this paper is to investigate the role of agriculture in rural development. How it has changed the rural livelihood with impact on their socio-economic life and its impact on farmers. It also investigates the contribution of rural development in villages as well the nation's economy.

Methodology / Materials:

The method used to collect data is both primary and secondary.

Group Discussion interview was taken via zoom platform. With sample size 50, 30 respondents were from rural areas practicing farming and other allied activities. 20 respondents from urban areas engaged were mailed a interview questionnaire.

Secondary Data was collected from online websites available on internet.

(The names of the respondents have been changed to maintain confidentiality)

Data Analysis and Interpretation:

A group discussion interview was conducted of people from rural areas, particularly practicing farming and allied activities. Some of them were contract farmers, others were engaged in agro-tourism. With the help of mailed interview questionnaire, information was collected on our topic from urban areas as well, respondents were mostly from service sector.

When asked about the development in agriculture and its impact felt in rural industry, It was found that contract farmers benefitted the most. Since they had connected farming with business and thus streamlined the process.

One of them said, "It is the traditional method principle and modern methods ease of technology which had helped us gain great profits. You can say that the farmer is now no less than a business man." said *Pranay Rao (a contract farmer)*.

It was also found that most of them used hybrid seeds technology, hybrid cattle

farming and even several machines and sensors were used by them.

“I imported cow’s embryo from Brazil and through surrogacy, a new cow of Brazilian-Indian breed was born. It has more qualities than the local ones. Also, there are sensors which help in collecting milk from cows.” said *Pranay Rao*.

When asked about the benefits of contract farming compared to traditional one, and the new emerging organic farming it was found that farmers benefitted a lot from contract farming.

“Yes it is beneficial, as you can expand your production not only in villages but also in cities. Contract farming is actually beneficial if farmers are availed with proper knowledge of it. Also, Organic farming is a good way to earn profits and to maintain the eco-system. Though, the process of organic farming involves mostly traditional methods and there are chances of low productivity which tends to reduce profits or sometimes no profit at all. If you compare traditional farming to contract and then both of them to organic; you may find that a mix of all of these can help in developing agrarian economy and benefit to rural people.” said *Ravikant Jadhav*.

One new and striking feature of agriculture found today is agro-tourism. Many farmers, particularly affluent ones started their own vacation stays with farming as a means to earn money. In our interview those practicing agro-tourism (*Konkan side*), said that agriculture is nature’s gift to them and they want to share it with everyone.

“We started our agro-resort some 30 years ago, it was just an empty land. All of us ploughed, Reared animals, planted trees especially *coconut* and *betelnut* (*which is quite in use in Konkan areas*). And then will built holiday rooms all made with the help of *cowdung*. It is certainly a very proud moment for us when tourists visit out place and benefit from nature. Everything available here is natural. Which is why we do not use any tech-based device here. But due to power-cut issues we have now started using generators and solar panels which provide direct energy from the nature. Parents who come with their small children found that our place us not only nature-friendly but also quite educating their kids about how the nature is, the environment and its benefits if utilized properly. Also, such places are a rare site in this *cement-jungle* dominated world.” said *Abhishek Jadhav*.

It was also found that these farmers were quite familiar with agro-technologies and reforms introduced. Some of them made use of E-Choupal and E-NAM without any difficulty. Some said that the reforms in agriculture supported them more with KCC (*Kissan credit card*) facilities, Micro-credit facilities, agricultural marketing, employment schemes etc. One of them even said that the new farm bill introduced is also beneficial for all farmers. As they had been practicing contract farming since a very long time, they find the new law legalising their business and also if all farmers are provided with proper knowledge and loopholes involved therein, it will be beneficial.

“The new farm bill is beneficial. But it is introduced at a wrong time. Farmers should be benefitted about the new reforms and its facilities should be catering their needs. As seen, there is raging protests regarding the same in north side because they fear that new reform will rule the existing MSP facility. But in Maharashtra such an effect is not seen as we already practiced contract farming outside the APMC (*Agriculture product market committee*) market and sold our produce directly to the consumers. Also, government has

not provided much of the MSP facility in Maharashtra as provided to them on crops like rice and wheat. They fear that new reform will reduce their autonomy and they have to rely on private companies, middle men and traders, despite benefits availed to them.” said *Jayant*.

There is not only a gap between rich and poor but also affluent and marginal farmers. With the pandemic affecting the whole population, farmers were not an exception. Small farmers, who because of *seasonal unemployment (an indispensable feature of agriculture)*, forced them to migrate to urban areas for employment. But the pandemic effect caused reverse migration to their natives which created shortage of labour, post-harvest problems and even harvest abandonments in both rural-urban areas, with drastic impact on urban population.

But conditions were different for affluent farmers. They did not face any food crisis as everything was grown on their land and also they their connection of agriculture with business never proved a loss for them, though sometimes managed with low profits.

“We face man-power problem in contract farming. All the work, from RandD to HR dept., accounts etc. Everything is done by two of us. Now-a-days, people are not interested in agriculture. They think this work is easy, it is risky (*as it is dependent on natural resources*), not much profit is involved and for some it is boring. New agricultural students study our system but work in either high salaried jobs or in foreign countries as researchers. Even people previously engaged in agriculture now shifted to urban areas for high paid jobs. This sector, though gradually is loosing its importance.” Said *Pranay Rao*.

“Atleast these affluent farmers earn something, my wife has to migrate to city for employment. But she is not literate so she is engaged in house-keeping work. I did not migrate to city. I cannot leave my farming, though practiced on a leased land, where I have to pay more than I could earn. And this is the reason I could not educate my kids. My wife, though worked in city faced exploitation from the upper class, she was paid less compared to her work. She returned to village and now she started making *papads and pickles*. We sell these and earn a living now, but sometimes we do not get the right price. A farmer’s life has become very difficult in this globalised world.” said *Arun*.

The farmers believe that agriculture marketing is lacking facilities. Even though they are well-versed with the procedures, market conditions sometimes does not support them or those who are not aware with the facilities and ways to avail it are exploited by private traders.

In all, they found agriculture playing an important role in their lives. By interlinking tourism with agriculture they earned profits as well as continued their traditional farming practices. They said that foreign tourist also come and stay in their agro-resort. But there are seasons when they don’t earn much profit. Contract farmers benefitted the most. They had the support of technology giving a boost to agriculture and local economy. Though they faced technical problems including depreciation of machines, rising cost adapting to new technology and man-power problems, still they earn more than most of the farmers.

The condition is converse for small and marginal ones. They can hardly make their ends meet. Even if they started on small scale, they lack all the facilities and government reforms hardly reach such remote areas.

India is the largest producer of spices, 2nd largest producer of sugar, is also a leading country in selling pearls and food grain production is India's speciality. Agricultural reforms in India proved beneficial for some but mostly did not produce an effect on farmers. It is deteriorating in terms of GDP, seasonal and disguised unemployment. Small agricultural and landless labourers are suffering the most because of low wages and earn hardly anything. Women, especially tribal ones, face exploitation in all forms. Though technology has helped in developing agrarian economy but has reduced the role of agriculture to subordinate with its traditional principles.

Information was collected from urban areas too. It was found that they consider agriculture to be the backbone of our economy. "It is the starting point of everything. Each sector is dependent on it. If raw materials are not provided, goods cannot be processed. And if they are not processed they cannot reach to consumers. Though technology has entered such as irrigation facilities, sugar, cotton harvesters, pump sets, sensors, etc can only work if they have a medium on which they can use their power to turn it into a finished product or if those natural materials are not provided, the whole mechanism will be affected." said one of our respondent.

When asked that could agriculture alone boost our GDP, considering the loss in other sectors in this pandemic? "No. Agriculture is a medium. A process, depending on natural resources. It is subject to uncertainty and hence cannot boost the GDP alone. But if outside force is applied, such as technological, it can reap good results." one of our respondent answered.

It was also found that some people had negative perspective on agriculture. "Farmers should learn to adapt to new things. We should learn from developed countries. Their agriculture is much developed. We need many years, to develop it. And half of the rural population are illiterate. Benefits are known but not understood clearly." answered one of our respondent.

"Agriculture is backward and forward linkage. It supports other sectors and other sectors support it. We work in a hybrid seeds firm. Our team research on it and exports these seeds with exceptional qualities to foreign countries. We have linked our system with farmers, some of them are given training in new emerging technologies and in return they provide us with their good efforts." answered one of our respondent.

When asked how agriculture links rural urban sector? Is there any sector dominating the other one? "Yes, there is a link. We urbanites are highly dependent on agriculture. The most essential element Food, is a product of agriculture and farmers effort. From chocolates, juices and even a desi *thali*, all is provided by the rural area. They are also dependent on us- their efforts result in monetary benefits to them but less than what they should actually earn. It is difficult to say which is dominant. Instead who is exploited is the probing question. We have taken it for granted. Humans have this belief that resources are unlimited and can be consumed as per our wishes." answered one of our respondent.

A striking feature was found and most of the answers matched. When asked about the future of agriculture and will it boost our economy and reap exceptional benefits to both rural urban areas without creating a divide?

The result was that most of the respondents answered that agriculture can only boost

the economy if there is freedom to farmers without any political pressure. It is taken for granted just because it provides in abundance. And urban people are not to be blamed. Even rural people regard it as secondary and migrate to urban side in the wake of making profit. Sometimes, educated farmers (*affluent/contract farmers*) serve to other country or state creating a rural brain drain effect. Exceptional benefits can never be attained without placing one at the top and other as the bottom. It is no doubt, agriculture will be at the bottom despite it providing all the necessary things on which other sectors enjoy their boom in economy.

Agriculture has assumed a new position in rural areas. They have achieved economic self-dependency through micro-credit schemes with main focus on self-help groups (SGHs).

Some even say that where in cities people work hours to make their basic ends meet and esire for luxury, Rural people are contended and surely got all the basic needs, sure they work hard for it but they got all the mother nature's gift. Things are available to them at minimum cost and maximum output. That can be the reason why they are taken for granted for their work. Recent pandemic saw reverse migration of many urban people to their native place, simply because they find the cost of standard of living easy for their pockets. And this certainly showed a growing inclination towards farming activities. Agriculture not only benefits the rural areas but all the other sectors that are linked to it for its ultimate flow in cities. *As said by our interviewee, that when we go to a shop to buy a furniture we see varieties of it. All the materials that has been used in making of it say wood, comes from the primary sector- Agriculture.* Villages are the backbone of our country and farmer never fails its motherland. Earlier only men dominated this area, but now a good percentage of women are engaged in it because of the introduction of women agricultural policies. Traditional principals along with modern techniques ease has transformed the farmer from a producer to business man. There is no doubt that India, is fortunate to have abundant resources and hence came out as largest supplier of food grains round the world. This has generated lot of revenue in our country. But as said that 'A candle consume itself and give light to others.' The same is the case with India. Self-sufficiency is far from achieving. Being the largest producer, many times India faces shortage of food and hence demand for imports increases leading to imbalance balance of payments and huge debt burden which is carry forwarded to future generations.

A new way ahead:

India, an agricultural country is not learning new methods of agriculture but is only going back in time in the name of organic farming. One such example is seen in the village of Andhra Pradesh. One such article of National Geographic showed that India is going back to sustainable farming. The method they use in Non-Pest management. They use natural deterrents like 'chilli pepper' and 'neem' to manage insects and also trap crops like (marigold and castor). They believe that pesticides kill insect but also cause a harm to our consumption. But their non-pesticide management tries to balance the eco-system. The farmers there not only earned profits but also the health issues improved. Their village – Punukula, In 2004, became the first village in India to become pesticide free. Many farmers in the village practice organic farming and sell their farm produce directly in the market.

Andhra Pradesh, plans to become India's first 'Zero budget natural farming' state by 2027. (In zero budget farming the costs of growing a primary crop are offset by income

generated from inter-crops. All crops are grown without using pesticides and other chemicals.

Conclusion:

Agriculture holds a vital position in the history of India. Ever since man evolved, he started using varied farming techniques to benefit himself and the society. It is agriculture which provided a strong foundation to all other occupations. But in the wake of advancement and so called development we have ignored its role. No doubt, machines made rural people's lives easy but it reduced the labour force and also made agriculture subordinate with its traditional features. We, an agrarian country are fortunate enough to have abundant of resources. And that only makes the villages richer than most of them living in a 'cement jungle.' Agriculture and its people, the farmers, never failed us. Beginning from providing employment to vast population and catering its huge demand along with adapting new changes is a striking feature of primary sector. It is time, that we go back to our roots, understand its very significance, develop it more with adequate opportunities and most importantly, support our farmers and its occupation. Likely said, Agriculture, farmers and consumers has a strong bond. And when we as vigilant citizens and government come together and work in a systematic manner, will surely reap benefits for all of us.

We should respect the food we have in our platter, as it is the hard work of farmers that makes it possible.

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**SVKM's Narsee Monjee College of Commerce and Economics
(Autonomous)**

JVPD scheme, Vile Parle (W), Mumbai 400 056.

Tel.: 022- 4233 8000 / 4200 8001

E-mail: nmconfer@gmail.com, info@nmcollege.in

Website: www.nmcollege.in