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A Compilation of  
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# Credit Risk Management for Indian Banks - A Case Study on State Bank of India

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## Abstract

*Risk is something that creates hindrances in the way in which certain objectives are achieved. Aligning of risk management to a bank's organizational structure as well as its business strategy has become an essential part of the banking business. Credit risk as a concept occurs when the bank's risk of loss arises from a borrower who makes bad debts, i.e.; promises to pay but does not make the payment at all. Effective credit risk management is rather a critical component that has a more comprehensive approach towards risk management and is also an essential part towards the long-term success of any banking and financial organization. India's largest nationalized Bank, The State Bank of India has been chosen to study the credit risk management of the Indian banks so that the various aspects of this risk mitigation measure can be understood. The research shows that credit is the actual activity that should be carried out and managed well to generate profitability by keeping three banking principles in mind such as liquidity, solvency and profitability. Majority of the respondents strongly agreed that modifications are needed in the credit risk management strategies and practices should be carried out in banks and proper vigilance is required to analyse the risk exposure and assessment.*

**Keywords:** Banks, Basel II, Credit Risk Management, Risk

## Introduction

Risk is something that creates hindrances in the way in which certain objectives are achieved. This is so because there are certain internal factors as well as external factors on which the type of risk depends and exists within a particular situation. Risk Management as a measure is useful for identifying, analyzing as well as responding to a particular risk. Credit Risk also known as counterparty risk is defined as the potential that a bank borrower or even the counterparty can fail to meet its obligations as per the agreed terms. The main purpose for which credit risk occurs is that it maximizes bank's adjusted rate of return and this is achieved by maintaining credit risk exposure within the possible parameters. Banks have to manage the credit risk that is inherent in the portfolio and also risk the individual credits or transactions that are in place. Effective credit risk management is rather a critical component that has a more comprehensive approach towards risk management and is also an essential part towards the long-term success of any banking and financial organization.<sup>[4]</sup>

Credit Risk Management is a term that is used to identify the accounting functions that are normally conducted under the ambit of Accounts Receivables. This bunch of collection processes are inclusive of

qualifying the credit as available to customer and monitoring reception as well as logging of payments on outstanding invoices. Credit risk management works well and an excellent way for the business to remain financially sound. Credit risk management initiates its processes with accurately accessing the credit-worthiness of the customers. This step becomes important if the company chooses an option of extending credit to the customer or even revolving credit to certain customers. Executives handling credit risk management department make such calls that helps in determining total credit line as it is extended to a given customer.<sup>[3]</sup>

### *State Bank of India*

State Bank of India (SBI) is the largest commercial bank in India in terms of assets, deposits, profits, branches, customers and employees. The Government of India itself is the largest shareholder of this Fortune 500 company, with 58.60% ownership, and SBI was ranked 152nd in The Forbes list of Global 2000 firms in May 2015.<sup>[5]</sup>

Authorized and regulated by Reserve Bank of India and Prudential Regulation Authority. Subject to regulation by the Financial Conduct Authority (FCA) and limited regulation by the Prudential Regulation Authority. Details about the extent of our regulation

by the Prudential Regulation Authority and Financial Conduct Authority are available from us on request. State Bank of India is a member of the Financial Services Compensation Scheme established under the Financial Services and Market Act 2000. The Financial Services Compensation Scheme protects deposits held with their UK branches. Payments under this scheme are limited to £75,000 of customer's total deposits with the bank in the UK. In practice, this means that each eligible depositor will be compensated up to a maximum of £75,000 of their total deposits.

In 1806, the Bank of Calcutta (later the Bank of Bengal) was founded and, in 1921, it merged with the banks of Madras and Bombay to form the Imperial Bank of India. In 1955, SBI was created by an act of Parliament to succeed the Imperial Bank of India.

The SBI Group, comprising SBI and five associate banks, commands a 22% share of the domestic Indian banking market. Our network boasts over 20,000 branches in India and 191 offices in 36 countries globally.

The State Bank of India with a history of 200 years is the largest commercial bank in India. The group is made up of SBI and five associate banks and a number of banking and non-banking subsidiaries and joint ventures. The group has 191 offices in 36 countries across the world. As on 31st of March 2015, the group had assets worth USD 432.02 billion, deposits of USD 328.47 billion and capital & reserves in excess of USD 25.82 billion. The group commands over 22% share of the domestic Indian banking market.<sup>[1]</sup>

Their non-banking subsidiaries and joint ventures are market-leaders in key sectors, such as life insurance, merchant banking, mutual funds, and credit cards, factoring services, security trading and primary dealership. These diverse retail and wholesale services are delivered by dedicated, highly skilled professional teams. And as you'd expect, we have relationships with thousands of local and international banks through SWIFT – enabling us to securely exchange financial-transaction data and manage trade-related banking business anywhere in the world.

The objectives of this research on credit risk management by banks and specifically State Bank of India are:

- ◆ It helps in identifying risks faced by the banking industry.
- ◆ Traces out the process and system of risk management
- ◆ It also examines techniques as adopted by banking industry for risk management.
- ◆ Suggests appropriate measures to SBI and study those strategies that work towards credit risk management in State Bank of India.

#### *Rbi Expectations from Banks on Credit Risk Management*

RBI has a lot of expectation from the banking organization and banks that it can take specific measure at the Corporate Level as well as implement appropriate credit risk management systems in the bank. This policy includes the following aspects:

- ◆ Policy framework
- ◆ Credit rating framework
- ◆ Credit risk models
- ◆ Portfolio management and risk limits
- ◆ Managing credit risk in inter-bank exposure
- ◆ Credit risk in off-balance sheet exposure
- ◆ Country risk
- ◆ Loan review mechanism/credit audit
- ◆ Risk Adjusted Return on Capital(RAROC) pricing/Economic profit
- ◆ Basel II Accord: implications for credit risk management.

#### *Current Mitigation measures in State Bank of India*

The Bank has strong credit appraisal and risk assessment practices in place for identification, measurement, monitoring and control of the credit risk exposures. The Bank uses various internal Credit Risk Assessment Models for assessing credit risk under different exposure segments. Internal ratings of the Bank are subject to comprehensive rating validation framework.

- ◆ Credit Risk Management Department (CRMD) studies 37 industries, including sectors, such as Telecom, Power, Coal, Aviation, NBFC, Textile, Iron and Steel and disseminates the reports to operating staff for informed decision-making. Specific studies on Companies/ Groups as required are also conducted.
- ◆ RBI has allowed the Bank to participate in the parallel run process for Foundation Internal Ratings Based (FIRB) under the Advanced Approaches for Credit Risk.
- ◆ The CRM project for migration to FIRB is being implemented by the Bank with guidance from an external Consultant appointed for the purpose.

- ◆ The governance structure has been made more robust for effective implementation of the FIRB and new policies related to the same have been approved by the Risk Management Committee of the Board (RMCB).
- ◆ Models for estimation of Probability of Default (PD), Loss Given Default (LGD) and Exposure at Default (EAD) have been developed.
- ◆ Bank regularly conducts Stress Test on its Credit portfolio and Stress Scenarios are regularly updated in line with RBI guidelines, Industry best practices and changes in macro-economic variables.
- ◆ Credit Risk Management Committee (CRMC) and Risk Management Committee of Board (RMCB) meetings were held

*Information about (Market or Credit) Risk Concentrations within the Mitigation Taken:*

The Bank has a well-dispersed portfolio of assets which are secured by various types of collaterals, such as:-

- ◆ Eligible financial collaterals listed above
- ◆ Guarantees by sovereigns and well-rated corporate
- ◆ Fixed assets and current assets of the counterparty.
- ◆ Gold.
- ◆ Securities issued by Central / State Governments
- ◆ Debt Securities rated BBB- or better/ PR3/P3/F3/ A3 for Short-Term Debt Instruments. .<sup>[2]</sup>

**Methodology**

This paper is based on the theoretical knowledge and on the extensive research based model and all information has been gathered from secondary sources particularly. These sources include online publications, books and journals.

The present study is based on both primary and secondary data. The primary data for the study are collected by using elaborate questionnaires for bank managers working in State Bank of India of West Bengal zone. The data on risk management perception and practices relating to the credit risk management, risk control strategies and credit approval process were obtained through responses to questionnaires and in personal interviews with senior credit, treasury executives and bank managers of State Bank of India. The secondary data has been collected through RBI bulletins, SBI monthly magazines, various research articles etc. Data Analysis-In the management of credit risk generally a scientific quantitative model is not available as a

basis or the rating system in most banks. The rating systems do not truly reflect the credit risk because they incorporate weightage for various control and monitoring factors, which do not necessarily convey a credit risk.

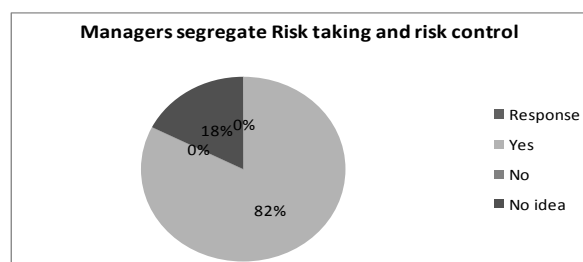
**Results and Discussion**

*Perception on Risk Control Strategies*

Risk control strategies have been laid down by the Reserve Bank of India for the guidance of the banks; Indian banks have not generally enunciated specific internal guidelines.

**Table 1: Manager segregates the risk taking and risk control**

Response	No. of Respondents	Percentage
Yes	33	82.50
No	0	0
Combined	7	17.50
Total	40	100



*Figure 1: Managers Segregate Risk Taking and Risk Control*

From the Table.1 to elicit the respondent’s opinion the present study has been thoughtfully directed to include focus on the segregation of risk taking and risk control. Therefore, there is highest number of respondents (33) with percentage effectiveness of 82.5 was observed with positive response, whereas 7 respondents with percentage of 17.5 was responded negatively. Therefore, the response is described as the SBI positioned both risk taking and risk control separately to make the assessment easily.

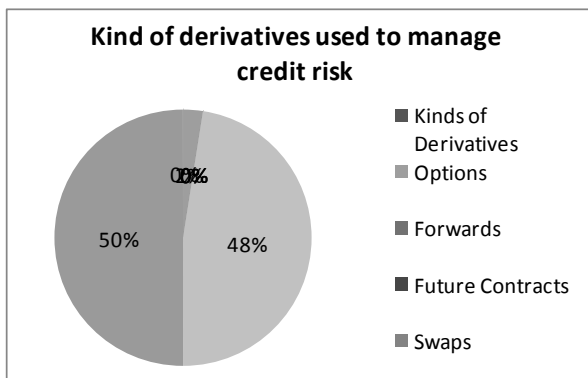
Risk control guidelines should concentrate on specific strategies and procedures. They should consider what the Bank’s specific underlying exposures are and ensure that these are monitored during the entire lifetime of the exposure. Therefore, the approvals were made in accordance with the Bank’s written guidelines.

Financial derivatives are important risk management tools with tangible benefits from their use. However,

like all tools it is important that the user understands the tools and uses it to meet specific risk management objectives based on an analysis and understanding of the risks. While the risks are more complex they are in no way different from those associated traditional instruments such as credit risks, market risks and operating risks etc. Financial derivatives serve the useful purpose of managing risks selectively and even in unbundling risks from traditional instruments and activities. They only need to be understood as their composition, strengths and limitations are well known. Thus, the large banks and corporations are major players in the derivatives market, it is the smaller banks and firms with greater vulnerability to risks who need to protect themselves using derivative products because of their smaller capital base.

**Table 2: The Kind of Derivatives Used to Manage the Credit Risk**

Kinds of Derivatives	Number of Respondents	Percentage
Options	1	2.50
Forwards	0	0
Future Contracts	0	0
Swaps	0	0
All of the above	19	47.50
None of the above	20	50.00
Total	40	100.00



*Figure 2: Kind of Derivatives Used to Manage Credit Risk*

From this conceptual understanding the respondents from the sample organization for the study were contacted to give their perception on the kind of derivatives were used to manage the credit risk in SBI. As per the opinion of respondents it is understood that there are highest number of respondents (20) with percentage of 50 was observed without following derivatives in their risk assessment, whereas there is a slightly lower number

of respondents (19) with percentage of 47.5 are able to follow all kinds of derivatives in their risk assessment and only one respondent with 2.5 per cent is aware of using option kind of derivative in their risk assessment. Thus, the response is analyzed as that not following at maximum level the various kinds of derivatives and at minimum level could be following derivatives approach in SBI to measure and monitor various kinds of risks.

Derivative transactions carry market risk i.e. the probable loss the Bank may incur as a result of adverse movements in interest rates/exchange rates/equity prices and credit risk i.e. the probable loss the Bank may incur if the counter-parties fail to meet their obligations. The Bank's "Policy for Derivatives" approved by the Board prescribes the market risk parameters (cut-loss triggers, open position limits, duration, modified duration, PV01 etc.) as well as customer eligibility criteria (credit rating, tenure of relationship, limits and customer appropriateness and suitability of policy (CAS) etc.) for entering into derivative transactions. Credit risk is controlled by entering into derivative transactions only with counter-parties satisfying the criteria prescribed in the Policy. Appropriate limits are set for the counterparties taking into account their ability to honour obligations and the Bank enters into ISDA agreement with each counterparty.

Ultimately, it is concluded that the performance of State Bank of India at the level of zonal office, head office and branch level is very satisfactory in managing, monitoring, controlling and assessing the risk.

### Conclusion

The banking industry has come to stay and its activities cannot be undermined given the great role it plays in the economy of every country by receiving savings from the "haves" and making it available to the "have nots" thus boasting productive investments. While carrying out its activity, the banks are faced with a number of risks with credit risk being cited as the most important since its poor management can lead to a total disaster in the bank. Before writing this thesis, I only knew what is credit risk and the importance of its good management theoretically but, after the interviews and the responses I got from the practitioners in the field, I saw the degree to which it is considered important when banks nationally and that too State Bank of India in particular are carrying out their lending decisions.

The following are the conclusions of the study:

- ◆ Risk management underscores the fact that the survival of an organization depends heavily on its capabilities to anticipate and prepare for the change rather than just waiting for the change and react to it.
- ◆ The objective of risk management is not to prohibit or prevent risk taking activity, but to ensure that the risks are consciously taken with full knowledge, clear purpose and understanding so that it can be measured and mitigated.
- ◆ Functions of risk management should actually be bank specific dictated by the size and quality of balance sheet, complexity of functions, technical/professional manpower and the status of MIS in place in that bank.
- ◆ Risk Management Committee, Credit Policy Committee, Asset Liability Committee, etc are such committees that handle the risk management aspects.
- ◆ The banks can take risk more consciously, anticipates adverse changes and hedges accordingly; it becomes a source of competitive advantage, as it can offer its products at a better price than its competitors.
- ◆ Regarding use of risk management techniques, it is found that internal rating system and risk adjusted rate of return on capital are important.
- ◆ The effectiveness of risk measurement in banks depends on efficient Management Information System, computerization and net-working of the branch activities.

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# Branding & Brand Positioning: A Case Study on Shahnaz Husain Group

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## Abstract

Company branding is the most efficient way to show potential customers what your business is about. It is reflected visually via the logo and company design elements as well as through verbiage in marketing materials, slogans and informational copy. According to Fast Company magazine, "The brand is a promise of the value you'll receive." Brand positioning, in its purest form, is all about making the right marketing decisions at the right time. Defining and implementing a successful brand positioning strategy in today's complicated and rapidly changing business environment can be challenging to say the least. By keeping these fundamental principles in mind, you can ensure that the strategy you plan is solid, and the decisions you make and the steps you take will get you to your goal efficiently and effectively. The case discusses the growth of Shahnaz Husain Group, one of the largest producers of ayurvedic and herbal products in the world. It begins with a personal profile of Shahnaz Husain and her idea of producing and marketing ayurvedic products as a substitute for chemical cosmetics, which she believes does more harm than good. It then traces the growth of her brand, from a niche product in the Indian market to a brand retailed in most of the major stores around the world.

**Keywords:** Brand, Brand Positioning, Marketing Decisions, Positioning Strategy

## Introduction

Brand positioning is the process of positioning your brand in the mind of your customers. Brand positioning is also referred to as a positioning strategy, brand strategy, or a brand positioning statement.

Popularized in Reis and Trout's bestselling Positioning: The Battle for Your Mind, the idea is to identify and attempt to "own" a marketing niche for a brand, product, or service using various strategies including pricing, promotions, distribution, packaging, and competition.<sup>[1]</sup> The goal is to create a unique impression in the customer's mind so that the customer associates something specific and desirable with your brand that is distinct from rest of the marketplace. Reis and Trout define positioning as "an organized system for finding a window in the mind. It is based on the concept that communication can only take place at the right time and under the right circumstances." Brand positioning occurs whether or not a company is proactive in developing a position, however, if management takes an intelligent, forward-looking approach, it can positively influence its brand positioning in the eyes of its target customers.<sup>[2]</sup>

### 7-Step Brand Positioning Strategy Process

In order to create a position strategy, you must first identify your brand's uniqueness and determine what differentiates you from your competition.

There are 7 key steps to effectively clarify your positioning in the marketplace:

- ◆ Determine how your brand is currently positioning itself
- ◆ Identify your direct competitors
- ◆ Understand how each competitor is positioning their brand
- ◆ Compare your positioning to your competitors to identify your uniqueness
- ◆ Develop a distinct and value-based positioning idea
- ◆ Craft a brand positioning statement
- ◆ Test the efficacy of your brand positioning statement<sup>[3]</sup>

Firms use perceptual or positioning maps to help them develop a market positioning strategy for their product or service. As the maps are based on the perception of the buyer they are sometimes called perceptual maps. Positioning maps show where existing products and services are positioned in the market so that the firm can decide where they would like to place (position) their product. Firms have two options they can either position their product so that it fills a gap in the market or if they would like to compete against their competitors they can position it where existing products have placed their product.<sup>[4]</sup>

## Results & Discussion

*Shahnaz Husain: From Local to Global*

Shahnaz Husain is the CEO of Shahnaz Herbals Inc.

She is a prominent Indian female entrepreneur, who is best known for her herbal cosmetics, particularly skin care products. In 2006 she was awarded the Padma Shri, a civilian award by the Government of India in 2006 and in 1996 Success Magazine's "World's Greatest Woman Entrepreneur" award.

In a recent interview for Harvard Business School's Creating Emerging Markets project, Husain describes the origins, growth, and development of her business, explaining how her innovative approach to beauty made her products a global success.

The Shahnaz Husain Group has over 400 franchise clinics across the world covering over 138 countries. Also, Shahnaz Herbals Inc is one of the brands that has been producing Skin care products 'without animal testing.

#### *The Shahnaz Husain Herbal Franchise*

Shahnaz Husain Herbal has a large network of over 400 franchise and associate clinics in India and abroad, operating under the Franchise system. The franchise clinics have extended not only to the cities, but even small towns, all over India.

The fast-paced extension of the Shahnaz Husain's Herbal clinics is due to the unique franchise system, by which the franchisee obtains the right to use the Shahnaz Husain's Herbal name and treatments, as well as enjoy a margin of profit on the sale of products. The franchisee, in turn, has to acquire training in specialized treatments in Shahnaz Husain's school of beauty therapy and also satisfy the stringent requirements of a name that has become internationally known.

The franchise system is also the basis for the diversification of Shahnaz Husain's ventures, among which are the Shahnaz Herbal Salons, Just Shahnaz Retail Outlets, Forever Beautiful Shops, Training Academies in Beauty Therapy, Ayurvedic Centres for Panchkarma, Dhara and Kerala Massage, as well as the Shahnaz Husain Ayurvedic Spas.

#### *The Shahnaz Husain Brand Name*

During the last three decades, the Shahnaz Husain brand name has established unquestioned and unwavering brand loyalty. In fact, no other brand has been able to keep the trust and faith of the customer and client like the Shahnaz Husain brand. The Group's commitment to research and development, the highly specialized salon / spa treatments and the

launch of innovative formulations from time to time, are some of the reasons why the brand has developed so strongly. It is ideally positioned in the domestic and international herbal beauty care markets.

#### *The Shahnaz Husain Franchise & Business Model*

Over four decades of leadership in this field generates much goodwill and carries the assurance trust of excellence. Internationally renowned for natural beauty care, based on Ayurveda, Shahnaz Husain has devised salon treatments and formulated more than 375 products. There is a growing demand for Shahnaz Husain products and treatments worldwide. The salons and other ventures have extended through a unique Franchise system and business model. The Shahnaz Husain Group offers the golden opportunity of sharing Shahnaz Husain's global success by starting your own Franchise Salon / Spa, Shop, Retail Outlet or Beauty Training Academy, based on a highly successful business model.<sup>[1]</sup>

#### *Shahnaz Husain: Innovation & Brand positioning*

Known for product innovation, Shahnaz Husain has evolved nearly 375 formulations for general beauty care, treatment of skin and scalp disorders, health and fitness. They have become breakthroughs in Ayurvedic care. The ingredients comprise of herb, flower and fruit extracts, essential oils and other natural substances. State-of-the-art manufacturing and R&D units, as well as long expertise have given the Group an edge over others in the sophisticated formulation of products. Apart from the legendary Shahnaz Herbal range, there are many products for beauty care, based on specific extracts.

A line of Ayurvedic health tonics, medicinal formulations, herbal drinks, herbal teas, herbal capsules and Aromatherapy essential oils have also been launched. Shahnaz Husain has recently launched some revolutionary products, which include the 24 Carat Gold Range, Pearl Cream and Mask, Oxygen Cream, Diamond Collection, Plant Stem Cells, the Platinum Range, the revolutionary Telomere DNA Defence and Black Diamond ranges. Advanced therapeutic products called Chemoline have also been introduced to alleviate the side effects of chemotherapy and radiation on the skin and hair.

It is not only Shahnaz Husain's franchise-based enterprise, but also her marketing strategies and innovations that are truly unique. Even at a time, when the demand for the product is sustained through advertising, Shahnaz has not relied on commercial



advertisements. During the last three decades, the Shahnaz Husain Group has acquired a tremendous global presence, having sold at prestigious stores, as well as exclusive outlets and clinics worldwide. With the professional infrastructure to support the demands of products and publicity, and tremendous goodwill, the Shahnaz Husain Group has also gone global with its other ventures, like the Shahnaz Husain lifestyle shops, Beauty Training Academies, Ayurvedic Centres and Shahnaz Husain Ayurvedic Spas, all based on her franchise system.

Shahnaz extended her base in the U.K., by launching the sale of her products at Lloyds Pharmacy, at Selfridges, the prestigious London store. Recently, Shahnaz Husain products touched record breaking sales at Selfridges where a single customer bought products worth £4,334 in a single transaction. Apart from Selfridges, there is an exclusive Shahnaz Ayurveda Aesthetic Clinic on Harley Street and Edgeware Road in London, along with seven more franchise salons in the U.K.

Currently, the Shahnaz Husain Group operates in more than 100 countries, where it has franchise salons, direct product distributors and beauty institutes. According to Shahnaz Husain, Founder & Chairperson of The Shahnaz Husain Group, “We are expanding our footprints across the globe. We will take Ayurveda and Brand India to more countries within a year.” It is not only her franchise-based enterprise, but also her marketing strategies that are truly unique. Even at a time, when the demand for the product is sustained through advertising, she has not relied on commercial advertisements.

In fact, she was invited to speak at Harvard Business School on how she established an international brand without commercial advertising, highlighting the strategies she adopted to establish her global network of franchise ventures. She also spoke at University of Oxford, to the students of Oxford Business School on Women Entrepreneurs in India – Challenges and Opportunities, as well as the London School of Economics on India’s rising global influence. In April 2013, she spoke to students at MIT on Brand India and woman empowerment. Recently, she achieved the dual honour of speaking at the House of Lords and House of Commons in the British Parliament and also walked the red carpet at the Cannes Film Festival 2013.<sup>[3]</sup>

## Conclusion

Shahnaz Husain’s journey as an entrepreneur is a great inspiration for all the young entrepreneurs and startup ventures. Shahnaz Husain is one of the rare and few first generation women entrepreneur, pioneer, visionary and an innovator, who introduced a totally new concept of Ayurvedic Care and Cure worldwide. She created a brand with universal appeal and application. Shahnaz Husain’s brand found place in the international market for Ayurvedic beauty care.

In a world ridden with environmental degradation, Shahnaz Husain ventured into the world of nature and its healing powers, taking the Indian herbal heritage of Ayurveda to every corner of the globe with a crusader’s zeal.

Ms Husain’s innovations and spirit of enterprise are well matched. Never losing sight of the basic nature principle and Ayurveda, her contribution to her field is unprecedented. Through her career, regular columns and books, she has created an awareness of the dangers of chemical treatments that has influenced minds and market demands. Her career is a portrayal of how she has translated her ideas into reality, living life by her values and unique philosophy. Her profound knowledge of natural care, her rare energy and vitality, as well as her faith in her own abilities, make it a story of a woman who dared to dream and succeeded beyond success. Indeed, Shahnaz Husain has become a legend in her own lifetime, while her organization, Shahnaz Herbals, is a magnificent expression of her dreams, hopes and aspirations.

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# A Comparative Study on Goods and Service Tax: The Biggest Tax Reform in India

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## Abstract

The prevailing tax system in India has been observed by experts that it has been characterized with misallocation of resources and has a lot lowered the level of production. Therefore new tax systems need to be implemented to replace the existing tax system to remove all the prevailing distortions in the economy. Introduction of GST will integrate the Indian market into a single market. A well designed GST system must make sure that both the central and state GST is levied on an identical base and it should not make any distinction between input tax credit on raw materials and capital goods. Imports must be liable to both CGST and SGST but the exports must be kept out of it or the rate must be zero. This will help to reduce the cascading effect or the tax on tax problem. Introduction of GST will not benefit any particular section of the society rather it will benefit the economy as a whole. This change in the tax structure is going to have a huge impact in the currently supply chain of India. A 'flawless' GST is the one that is in context of the federal structure which would optimize efficiency, equity and effectiveness. The 'flawless' GST is designed as consumption type destination VAT based on invoice-credit method.

**Keywords:** Dual GST, Goods and Service Tax, Invoice Credit Method

## Introduction

Goods and Service Tax (GST) was brought in discussion in India in 2006 by P. Chidambaram (Former Union Minister of Finance) and is considered as a major reform in India. GST is a unified tax and will replace all indirect taxes currently prevailing in India like service tax; VAT, Entry Tax, Excise Duty, Central Sales Tax, Customs Duty, etc will be collected by both Central and State Government. In 2006 it was decided to bring GST into action by 1st April, 2010 but due to some or the other reason it kept on delaying and will soon be introduced in India.<sup>[2]</sup>

GST is practically an extension of existing VAT system and will be dual in nature which means that both Centre and State will impose and collect tax on a single transaction of sale goods and services in form of State Goods and Service Tax (SGST) and Central Goods and Service Tax (CGST).<sup>[1]</sup>

CGST and SGST but the threshold limit for CGST is still under question. Interstate Goods and Service Tax will be introduced to control trade between two states in place of currently prevailing Central Sales Tax. Centre is more eager to introduce GST than states because they are expecting higher revenue from the same. GST is expected to be implemented in India by 2017 but the same is still in question. It is expected to reduce the end cost of the product by creating a proper tax system. It will be implemented only if all states agree to it.

Implementation of GST will be difficult, because if GST is implemented, India will become a common market and the states will have to share their powers of taxation with the government. The current Minister of State of Finance Mr. Jayant Sinha said "There has been a broad agreement on most issues related to GST with the states in recent months and the GST rollout is scheduled on 1st April, 2016". Petroleum, alcohol and tobacco are still now expected to be kept out of preview of GST.<sup>[3]</sup>

Some of the features of goods and services taxes are explained below:

### 1. Composition Scheme under GST

The States are also of the view that Composition/Compounding Scheme for the purpose of GST should have an upper ceiling on gross annual turnover and a floor tax rate with respect to gross annual turnover. The first discussion paper suggests that there would be a compounding cut-off at Rs. 50 lakh of gross annual turnover and a floor rate of 0.5% across the States. The scheme would also allow option for GST registration for dealers with turnover below the compounding cut-off. In reference to Composition scheme, the task force has recommended rate of 1% each on account of CGST and SGST for dealers with the turnover between Rs 10 lacs to Rs 40 lacs.<sup>[4]</sup>

### 2. Registration & Tax Payer Identification Number

As per First Discussion paper, each taxpayer would



be allotted a PAN-linked taxpayer identification number with a total of 13/15 digits. This would bring the GST PAN-linked system in line with the prevailing PAN-based system for Income tax, facilitating data exchange and taxpayer compliance.

### 3. Input Tax Credit (ITC) Set Off

Since the Central GST and State GST are to be treated separately, taxes paid against the Central GST shall be allowed to be taken as input tax credit (ITC) for the Central GST and could be utilized only against the payment of Central GST. The same principle will be applicable for the State GST. Further, the rules for taking and utilization of credit for the Central GST and the State GST would be aligned.

### 4. Cross Utilization of ITC

Cross utilization of ITC between the Central GST and the State GST would not be allowed except in the case of inter-State supply of goods and services under the integrated goods and service tax (IGST) model.

### 5. GST on Imports

Imports will be brought under the scope of GST with necessary Constitutional Amendments. They will treat at par with inter-state transactions and integrated goods and service tax (IGST) will be levied on imports. The incidence of tax will follow the destination principle and the tax revenue will accrue to the State where the imported goods and services are consumed. Full and complete set-off will be available on the IGST paid on import on goods and services.

### 6. Administration of GST

The administration of the Central GST to the Centre and for State GST to the States would be given. As per the recommendation of Task force report on GST, The Central Board of Excise and Customs (CBEC) shall be responsible for implementation of CGST and state tax administrations will be separately responsible for implementation for SGST.

### Advantages of GST

Apart from full allowance of credit, there are several other advantages of introducing a GST in India:

- ◆ Reduction in prices: Due to full and seamless credit, manufacturers or traders do not have to include taxes as a part of their cost of production, which is a very big reason to say that we can see a reduction in prices. However, if the government seeks to introduce GST with a higher rate, this might be lost.

- ◆ Increase in Government Revenues: This might seem to be a little vague. However, even at the time of introduction of VAT, the public revenues actually went up instead of falling because many people resorted to paying taxes rather than evading the same.
- ◆ Less compliance and procedural cost: Instead of maintaining big records, returns and reporting under various different statutes, all assesses will find comfortable under GST as the compliance cost will be reduced. It should be noted that the assessee are, nevertheless, required to keep record of CGST, SGST and IGST separately.
- ◆ Move towards a Unified GST: Internationally, the GST is always preferred in a unified form (that is, one single GST for the whole nation, instead of the dual GST format).

### Dual GST

India is planning to implement a dual GST system. Under dual GST, a Central Goods and Services Tax (CGST) and a State goods and services Tax (SGST) will be levied on the taxable value of a transaction. All goods and services, barring a few exceptions, will be brought into the GST base. There will be no distinction between goods and services.

India is a federal country where both the Centre and the States have been assigned the powers to levy and collect taxes through appropriate legislation. It has been proposed that there would be a “Dual GST” model in India, taxes will be levied by both centre (Central GST) and state (State GST) on Goods and Services. Hence, a dual GST would be according to the Constitutional requirement of fiscal federalism.<sup>[5]</sup>

The positive impacts are dependent on a neutral and rational design of the GST, balancing the conflicting interests of various stakeholders, full political commitment for a fundamental tax reform with a constitutional amendment, the switchover to a “flawless” GST would be a big leap in the indirect taxation system and also give a new impetus to India’s economic change. It is also noted that, buoyed by the success of GST, more than 140 countries have introduced GST in some form to other and is fast becoming the preferred form of indirect tax in the Asia Pacific region.<sup>[1]</sup> GST is the most logical steps towards the comprehensive indirect tax reform in our country since independence. GST will create a single, unified Indian market to make the economy stronger. Experts say that GST is likely to improve tax collections and Boost India’s

economic development by breaking tax barriers between States and integrating India through a uniform tax rate. Under GST, the taxation burden will be divided equitably manufacturing and services, through a lower tax rate by increasing the tax base and minimizing exemptions.<sup>[3]</sup>

Taxation is an important instrument in the hand of government to perform their duties of economic civilization and check the economy. Taxation is not new concept; it has old philosophy at national and international level Tax is a compulsory payment and divided into two parts — Direct and Indirect Tax. So, to fulfill the requirement of expenditure, Government made amendments in tax laws and taken initiative in way to tax reform. GST is one of them. There are several reasons are responsible for new tax reform.<sup>[4]</sup>

### Methodology

- ◆ To understand the concept of Goods and Services Tax;
- ◆ To know the benefit of Goods and Services Tax to economy, business and industry and consumer;
- ◆ To understand the perception of people towards implementation of GST on various related variables.

### Result and Discussion

*Hypothesis Testing: Table 1*

$H_0$ : Implementation of GST is not dependent on minimization of tax evasion.

$H_A$ : Implementation of GST is dependent on minimization of tax evasion.

**Table 1: Relation between Implementation of GST\* Minimize Tax Evasion Cross Tabulation**

Implementation of GST * Minimize Tax Evasion Cross tabulation					
Count					
		Minimize Tax Evasion			Total
		0	1	2	
Implementation of GST	0	0	0	3	3
	1	3	30	14	47
Total		3	30	17	50

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.195a	2	.045
Likelihood Ratio	6.853	2	.033
Linear-by-Linear Association	5.042	1	.025
N of Valid Cases	50		

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .18.

In this case both the variables are categorical in nature. At the level of significance of 0.05 it has been found that  $p=0.045$  which means  $p<0.05$ . Hence we would reject the null hypothesis and accept alternative hypothesis i.e. implementation of GST is dependent on minimization of tax evasion.

*Hypothesis Testing: Table 2*

$H_0$ : Implementation of GST is not dependent to inter-state complication.

$H_A$ : Implementation of GST is dependent to inter-state complication.

**Table 2: Chi Square Testing**

Implementation of GST * Remove Inter-state complication Cross tabulation					
Count					
		Remove Inter-state complication			Total
		0	1	2	
Implementation of GST	0	0	0	3	3
	1	7	20	20	47
Total		7	20	23	50

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.747a	2	.154
Likelihood Ratio	4.885	2	.087
Linear-by-Linear Association	2.906	1	.088
N of Valid Cases	50		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is .42.



In this case both the variables are categorical in nature. At the level of significance of 0.05 it has been found that  $p=0.154$  which means  $p>0.05$ . Hence we would not reject the null hypothesis and would not accept the alternative hypothesis, i.e. implementation of GST is not dependent to inter-state complication.

*Hypothesis Testing: Table 3*

$H_0$ : Implementation of GST is not dependent on increase in price of goods.

$H_A$ : Implementation of GST is dependent on increase in price of goods.

**Table 3: Chi Square Testing**

Implementation of GST * Increase in Price of Goods Cross tabulation					
Count					
		Increase in Price of Goods			Total
		0	1	2	
Implementation of GST	0	0	3	0	3
	1	21	7	19	47
Total		21	10	19	50

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.766a	2	.002
Likelihood Ratio	10.479	2	.005
Linear-by-Linear Association	.006	1	.937
N of Valid Cases	50		
a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is .60.			

In this case both the variables are categorical in nature. At the level of significance of 0.05 it has been found that  $p=0.002$  which means  $p<0.05$ . Hence we would reject the null hypothesis and accept alternative hypothesis i.e. implementation of GST is dependent on increase in price of goods.

*Hypothesis Testing: Table 4*

$H_0$ : Implementation of GST is not dependent on easy tax payment.

$H_A$ : Implementation of GST is dependent on easy tax payment.

**Table 4: Chi Square testing on GST implementation and Easy Tax Payment**

Implementation of GST * Tax payment will be easier Cross tabulation					
Count					
		Tax payment will be easier			Total
		0	1	2	
Implementation of GST	0	1	0	2	3
	1	1	31	15	47
Total		2	31	17	50

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.846a	2	.007
Likelihood Ratio	7.609	2	.022
Linear-by-Linear Association	.012	1	.913
N of Valid Cases	50		
a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .12.			

In this case both the variables are categorical in nature. At the level of significance of 0.05 it has been found that  $p=0.007$  which means  $p<0.05$ . Hence we would reject the null hypothesis and accept alternative hypothesis i.e. implementation of GST is dependent on easy tax payment.

**Conclusion**

The variables used in the study were categorical in nature so the Chi-Square test was applied to see whether the two variables are dependent on each other or not. Chi Square Test of association was used to find out the relationship between Implementation of GST and minimization of tax evasion, Implementation of GST and inter-state complications, Implementation of GST and increase in price of goods and between Implementation of GST and easy tax payment.

Among the 4 test applied we could see that only there is one test in which the variables are not dependant on each other i.e. since the significance level was more than 0.05 we accepted the null hypothesis i.e. Implementation of tax is not dependent on inter-state complication. In all the other three testing done the variables are dependent on each other i.e

implementation of tax is dependent on minimization of tax evasion, increase in price of goods and easy tax payment since in all these cases the significance level is less than 0.05.

The taxation of goods and services in India has, hitherto, been characterized as a cascading and distortionary tax on production resulting in misallocation of resources and lower productivity and economic growth. It also inhibits voluntary compliance. It is well recognized that this problem can be effectively addressed by shifting the tax burden from production and trade to final consumption. A well designed destination based value added tax on all goods and services is the most elegant method of eliminating distortions and taxing consumption. Under this structure, all different stages of production and distribution can be interpreted as a mere tax pass-through, and the tax essentially 'sticks' on final consumption within the taxing jurisdiction.

A 'flawless' GST is the one i.e. in context of the federal structure which would optimize efficiency, equity and effectiveness. The 'flawless' GST is designed as a consumption type destination VAT based on invoice-credit space method. Goods and Services Tax, which is to subsume all indirect taxes like excise duty and service tax into a single GST rate, was to be implemented from April 1, 2016 but opposition from Congress over key clauses including cap on the tax rate had stalled its passage in the Upper House.

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# The Comparative Study on Youth's Brand Preference of Samsung or Apple Phones

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## Abstract

The study investigates the brand preference among the youth of Kolkata. On this basis, this report deals with various concepts of brand that influence the youth to choose among the two competing brands Apple or Samsung. With the use of a 15 questions among 60 persons followed by a survey, it finds that Apple Smart phone is the most preferred brand among the youth. The study further notifies that quality, features, durability, warranty, guarantee and other factors plays a very important role while choosing a brand. The research also reflected that brand preference is independent of age and gender. This has been proved by applying the Chi Square Test.

On the analysis of personal criteria suggest that youth that they choose branded smart phones because they believe branded mobile reduce the unexpected kinds of risk that may occur. The report also says youth prefer those brands which has the capacity of satisfying their maximum expectations with the smart phone. To sum up technical criteria and economic criteria plays a very important role to prefer brand. Finally Apple is the most preferred brand among the youth of Kolkata with the highest level of satisfaction too.

**Keywords:** Brand Preference, Consumer's Perception, Mobile Phones

## Introduction

Brand preference reflects a desire to use a particular company's product(s) or service(s) even when there are equally-priced and equally-available alternatives. In fact, brand preference indicates a desire to seek out a specific product or service even when it requires paying more or expending more effort to obtain it! Brand preference is important to companies because it provides an indicator of their customers' loyalty, the success of their marketing tactics, and the strength of their respective brands.<sup>[4]</sup>

### *Apple Company Profile*

Apple Inc. is an American multinational technology company headquartered in Cupertino, California, that designs, develops, and sells consumer electronics, computer software, and online services. The Company is committed to bringing the best user experience to its customers through its innovative hardware, software and services. The Company's business strategy leverages its unique ability to design and develop its own operating systems, hardware, application software, and services to provide its customers new products and solutions with superior ease-of-use, seamless integration, and innovative design.<sup>[2]</sup>

### *Samsung Company Profile*

Samsung was founded in 1938 by Lee-Byung-Chull and was originally called Samsung Sanhoe. Samsung

responded well to this need in technology with competitive products and constant innovation by releasing products like PDA phone, LCD TV, First Solar powered mobile phones and created world's thinnest TV at 6.5 mm. They currently specialize in digital appliances, media, phones, semiconductors etc.<sup>[1]</sup>

The research is intended to describe and analyze brand preference between Apple and Samsung brands of Smart phone. The prime objective of this report is to compare between Apple and Samsung Smart phone on the basis of their brand components and how different components of brand equity and identity influence youth in choosing a particular brand of Smart phone. A good knowledge of youth brand preference in Smart phone would help in understanding how brand shape youth buying decision and preferences.<sup>[5]</sup> The conclusions will deal with youth preference between Apple and Samsung Smart phone, how youth are influenced by brand name, and how brand identity plays in youth brand preference.<sup>[3]</sup>

## Methodology

To achieve the objectives of the study, researcher used primary as well as secondary data. Both primary and secondary data were collected and were used in analyzing the research study. Given the nature of the research topic, it is most suitable to employ

both primary and secondary data collection method. Primary data were obtained through questionnaires given to respondents while the secondary data were gathered through journals, articles, internet and other published materials.

In this research structured questionnaire were distributed among 100 persons. Out of which 40 persons got rejected because 20 did not belong to the Apple and Samsung smart phone category and other 20 did not filled the survey correctly. All these persons were contacted face to face and were requested to fill the questionnaire if they used any one brand out of the two popular brands. Finally 60 respondents were able to fill the questionnaire and this was the size of the sample. The questionnaires were collected after the respondents filled them and it did not have any missing values. The data was collected from the youth between the age of 18-30 and 25-30. Students, businessmen and others were the person. The study was conducted during the period of 25th April 2016 to 5th may 2016.

The project includes statistical analysis and various tools that were used to analyze the data which are Chi Square test, Pie chart and Bar chart.

## Results and Discussion

### Chi Square Test

**Table 1: Chi Square Tests**

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.995 <sup>a</sup>	2	.082
a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .18.			

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.995 <sup>a</sup>	2	.082
Likelihood Ratio	5.052	2	.080
Linear-by-Linear Association	2.019	1	.155
N of Valid Cases	60		
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 8.23			

H<sub>0</sub>: Brand Preference is independent of age group

H<sub>1</sub>: Brand Preference is dependent of age group

To prove this the researcher has applied the Chi Square Test.

Here, both the variables age and brand preference are categorical in nature and a chi square test is applied on the variables at a significance level of 0.05. The test revealed Pearson Chi Square 4.995 corresponding significance level 0.082. Therefore,  $p > 0.05$  hence we cannot reject the null hypothesis. It can be said brand preference is independent of age group.

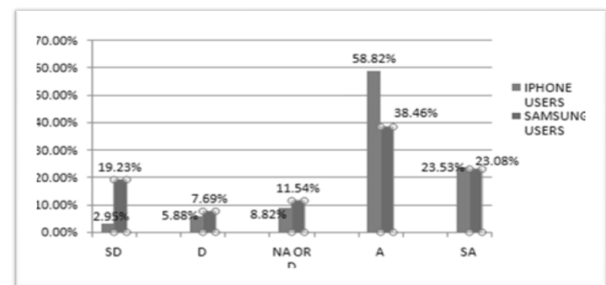


Figure 1: Iphone and Samsung Users Brand Loyalty

As shown in figure1, Apple commands a high brand loyalty. 58.82%of the respondent agreed and 23.53% strongly agreed that they would stick to Apple despite the fact that Samsung might have the same functionality as Apple As illustrated in figure1, 38.46% and 23.08% of Samsung users agreed and strongly agreed that they would not change Smart phone brand even if the other brands has the same functionality as my current Smart phone. The scores of Samsung are fairly high but not higher than Apple. The analysis of the empirical findings suggests that Apple Smart phone commands a price premium more than Samsung Smart phone.

Smartphone users	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total Respondents
Iphone	3	4	5	15	7	34
Samsung	5	4	8	6	3	26

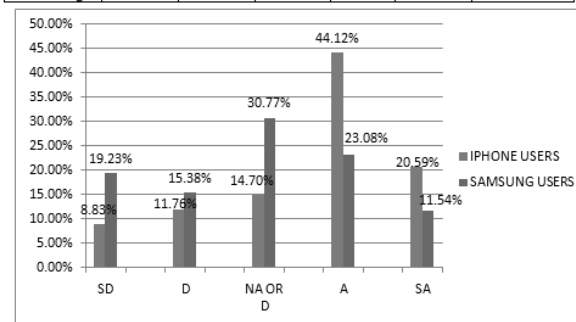


Figure 2: Iphone and Samsung Users Brand Association

In the aspect of personality which is one of brand association component, Apple user sees the product as a reflection of their personality. When the respondents were asked if others judge them by the kind of Smartphone they use the response were 20.59% of Apple respondents strongly agreed, 44.12% agreed, 14.70% neither agreed nor disagreed, 11.76% disagreed, 8.83% strongly disagreed. While those of Samsung users response were 23.08% agreed, 11.54% strongly agree, 30.77% neither agree nor disagree, 15.38% disagreed and 19.23% strongly disagree. The Apple scores are higher that the scores for Samsung. The significances of this is that Apple users see it that having it is a way of showing ones social status.

Smartphone users	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total Respondents
Iphone	3	4	5	15	7	34
Samsung	5	4	8	6	3	26

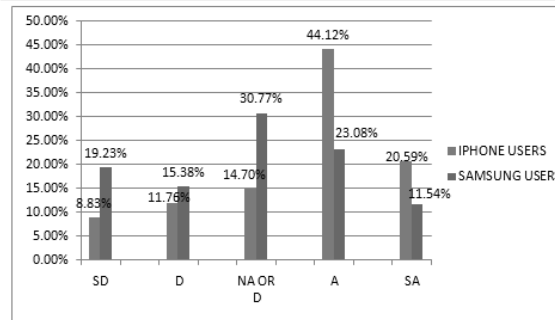


Figure 4: Iphone and Samsung Users Perception regarding the price

Smartphone users	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total Respondents
Iphone	1	2	3	20	8	34
Samsung	2	1	6	13	4	26

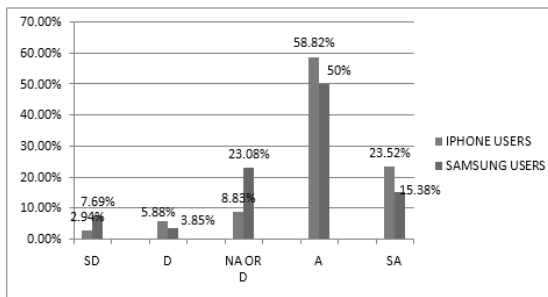


Figure 3: Iphone and Samsung Users Perceived Quality

Regarding this dimension, both Apple and Samsung respondents were asked if the quality of their Smartphone is good in order to ascertain the perceived quality of their Smartphone 50% agreed, 15.38% of Samsung respondent strongly agreed, 23.08% neither agree nor disagree 3.85% disagree and 7.69% strongly disagree. Apple score higher with 58.82% of the agreed, 23.52% strongly agree 8.83% neither agree nor disagree, 5.88% disagree and 2.94% strongly disagree. The scores disclose that Apple has a leading score when compare to Samsung regarding this dimension. Samsung also commands a high perceive quality among its customers but not as high as Apple.

Regarding this dimension, both Apple and Samsung respondents were asked if they were aware about all the product ranges available in their smart phone brand 15.38% of Samsung respondents strongly agree, 30.77% agree, 34.62% neither agree nor disagree, 11.54% disagree and 7.69% strongly disagree. Apple score higher with 55.89% agreed, 20.59% strongly agree 14.70% neither agree nor disagree, 2.94% disagree and 5.88% strongly disagree. The scores disclose that Apple has a leading score when compare to Samsung regarding this dimension which reflects that Apple brand awareness strategies are better than Samsung brand awareness strategy. One of the reasons for Samsung lacking in this dimension could be that Samsung deals in varieties of mobile phones with different price ranges so it might not be possible for these respondents to recall all its mobile phone categories.

No. of Respondents	Agreed	Disagreed
60	50	10

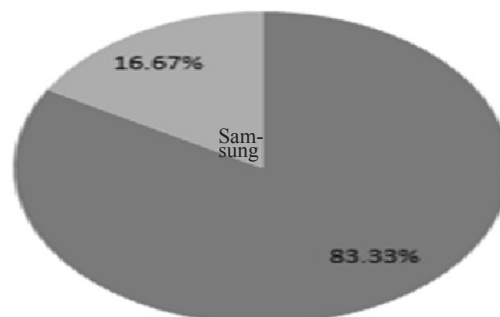


Figure 5: Price and Status Relation with Brand



In the above figure we see that out of 60 total respondents almost 50 respondents agreed that Samsung phones are cheaper than Apple which gave a score of 83.33% and only 10 respondents disagreed with it which gave a score of 16.67% In this aspect, Samsung smart phone is no doubt a leading brand in this category because it offers a wide range of mobile products with different price ranges starting from Rs 15000 up to Rs 60,000 and above. Thus, this brand targets all type of consumer's high class, low class and the middle. While on the other hand, if we talk about Apple Smart phone it only targets the upper class people of the society thus it charges a premium price from its consumers.

No. of Respondents	Agreed	Disagreed
60	56	4

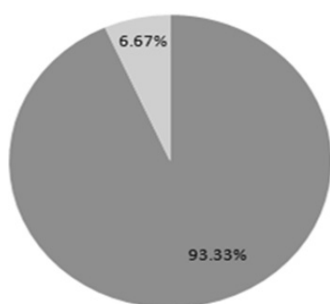


Figure 6: Brand Preference

In the above figure we see that out of 60 total respondents 56 respondents voted for Apple Smart phone as a brand reflecting the status of the consumers and 4 respondents voted for Samsung smart phone. In this aspect, of course Apple Smart phone got the highest with a score of 93.33% and Samsung Smart phone scored 6.67%. Thus, we see that the youth choose Apple for high status symbol as it gives them a proud feeling among their friends. Though Iphones are costlier than Samsung but when it comes to choosing a brand on the basis of status Apple Smart phone is the leading brand.

### Conclusion

This research study explores brand equity and brand identity by comparing Apple and Samsung Smart phone brand, having analyze the empirical data obtained using the theories employed in this research study, the following conclusions were drawn:

Each of the brand equity and identity dimensions of Apple Smart phone when compared to Samsung brand equity and identity dimensions reveals that Apple has relatively high strong brand equity and brand identity than Samsung.

The youth choose Smart phone on the basis of its brand. The brand loyalty is high among Apple users; hence Apple has a strong brand preference over Samsung because Apple has built it various brand components resulting in strong brand equity.

Secondly comparison between Samsung and Apple Smart phone in the dimension of perceived quality scores Apple Smart phone higher than Samsung owing to the fact that Apple is innovative. The score for Apple perceive quality is higher than Samsung perceived quality and so is the score for loyalty.

Youth chose brands that reflect their personality, hence their brand preference between Apple and Samsung are based on the Smart phone brand that reflect their personality. This shows how important brand personality is in Smart phone.

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# Study on Consumers' Perception towards online Grocery Stores

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## Abstract

The study was undertaken to understand the attitude of customers towards online shopping and then tries to determine the factors which influence the consumer to purchase grocery items. The project looks into the attributes of online shopping influencing the purchase decisions of the respondent. The groceries segment holds a share of 60% out of the total market value of Indian retail market as food is the basic requirement of all. The major players in the market that lead from the front are Grofers, Big Basket, Snapdeal, Pepper Tap and Sasta Sundar. The study also tries to provide suggestions from the consumers' perspective which might help this sector to increase their operational efficiency.

**Keywords:** Brand, Consumers' perspective, Grocery stores, Influencing factors

## Introduction

Internet is changing the way consumers shop and buy goods and services and has rapidly evolved into a global phenomenon. Groceries sell irrespective of the state of the economy. You can stop going to the cinema and restaurants, but there's no way you can live without toothpaste, soap and, well, vegetables. Caught in the city's fast pace, tedious commuting and long working hours, many consumers don't have the time to buy groceries or would like to avoid the chore.<sup>[2]</sup>

1. Retail Opportunity- With a large customer base and increasing penetration of Internet connectivity (partly through smart phones) and growing popularity of online shopping, some entrepreneurs have seen the potential in creating e-stores for groceries. Most of the existing e-tailers offer their service in metros and major urban centres.
2. Free Software- There are several open source content management systems, such as Magento (community edition), Presta Shop, Cube Cart, OS Commerce and Zen Cart, available.<sup>[3]</sup>
3. Frequent Buyers- Grocery e-tailing is challenging, but it also has the advantage of high percentage of repeat orders. All you need to do is impress a customer with the first order. Once a customer is satisfied, you can have one more regular in your clientele.
4. Creative Networks - Given the nature of the business, online grocers are in a different league from other e-retailers. Most grocery e-stores cater to a specific city or certain areas due to the logistics constraints.
5. Gauging Competition- Many e-groceries have come up, but the segment is far from saturated.

Most of such ventures are catering to a few metros and many cities are yet to have such e-stores. The potential market size also ensures that there would be room for multiple players, even within cities

6. Improving Margins - Given the low operating margin in the segment and the challenge of offering better deals, it is important for online retailers to optimize their supply network.
7. Wise Risks - Online groceries offer ample opportunities, but not without risks. Many online stores have been shuttered after operating for a few months to a few years.<sup>[1]</sup>

## Methodology

Online questionnaires were used i.e.; a free service website, Qualtrics, used for the survey and allows participants to answer the questionnaire online. Moreover, selective ranking questions, yes/no questions, filter questions and open ended questions have been used to generate the questions. There were 80 respondents out of which 60 responses could be accepted for analysis (20 inappropriate and incomplete responses have been eliminated).

The sample consisted of individuals residing in Kolkata, India.

The information gathered is analyzed by using the following appropriate tool:

Percentage Analysis - It is used to make comparison between two or more series of data.

Percentage (%) = (No. of respondents/ Total respondents) \*100

Bar charts and Pie charts are used to explain the tabulation clearly and for easy interpretation of the results derived.

Chi-Square Test: The chi-square test was first used in testing statistical hypothesis by Karl Person in the year 1900. The test was done using SPSS 20 software.

*Foundation of Hypothesis*

Keeping in view the objectives of the study, the following hypotheses were created:-

1.  $H_0$ 1: Online grocery shopping preference is independent of gender.
2.  $H_0$ 2: Online grocery shopping preference is independent of age
3.  $H_0$ 3: Online grocery shopping preference is independent of occupation.

**Results and Discussion**

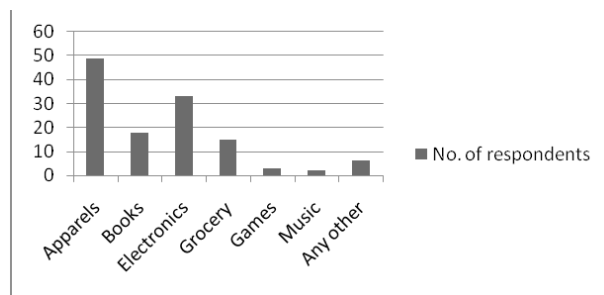


Figure 1: Items Shopped Online by the Respondents.

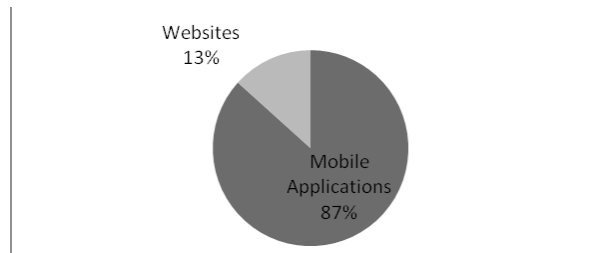


Figure 2: Respondents' Preferred Mode for Online Shopping

87% of the total respondents find mobile application more convenient as compared to websites which can be viewed on laptops or computers or even on mobile phones.

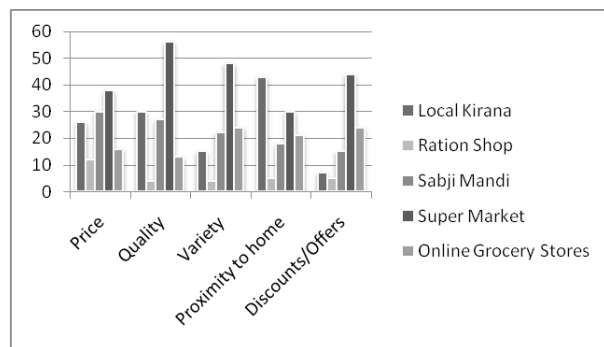


Figure 3: The parameters affecting respondents' choice of grocery shops.

The above graph depicts that, most of the respondents shop mainly from supermarkets as the products and services provided by them is satisfying as compared to the options available.

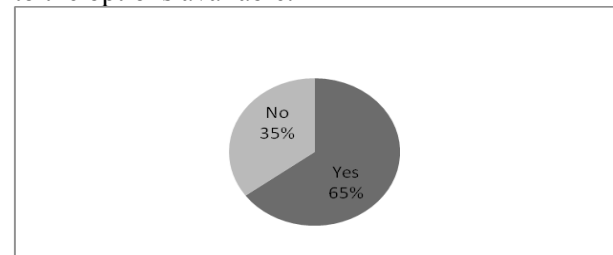


Figure 4: Online Grocery Shopping Beneficial or Not

The above diagram depicts that most of the respondent think buying grocery is beneficial.

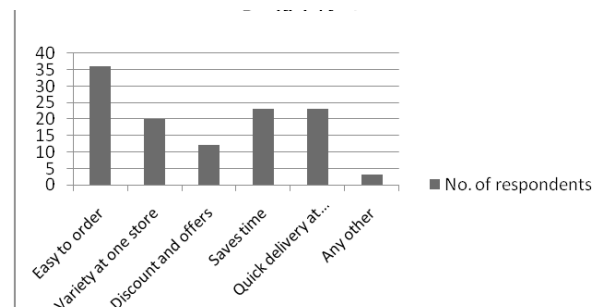


Figure 5: The Benefits of Shopping Grocery Online.

The above graph depicts that online shopping will be beneficial because of the ease to order as it will allow the user to avoid long queues resulting in reduction in time spent in shopping.

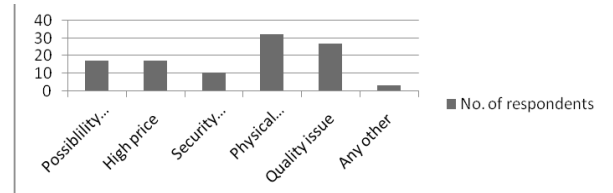


Figure 6: Issues Regarding Online Grocery Shopping

The above graph depicts that the major issues are physical examination and the pricing of products. The other issuing factors are possibility of duping i.e. defraud or mislead or fake products, security issues etc.

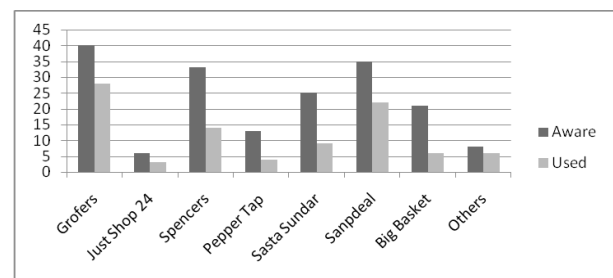


Figure 7: Online Grocery Shopping Sites that the Respondents are Aware of and Have Used at Least Once



From the above chart it is concluded that Grofers is the most preferred online grocery store in Kolkata, this is because 40 out of 60 respondents are aware of this shopping app and as its awareness level and have even made purchase.

**Hypothesis Testing**

In this case both the variables are categorical in nature. At the level of significance of 0.05 it has been found that  $p = 1.341$  (Table-1), which means  $p > 0.05$ . Hence we cannot reject the null hypothesis i.e. online grocery shopping preference is independent of gender.

**Table 1: Chi-Square Test of Online Grocery Shopping Preference and Gender.**

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.341a	1	.247

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.460a	2	.482

In this case both the variables are categorical in nature. At the level of significance of 0.05 it has been found that  $p = 1.460$  (Table-2), which means  $p > 0.05$ . Hence we cannot reject the null hypothesis i.e., online grocery shopping preference is independent of age.

**Table 2: Chi\_Square Test of Online Grocery Shopping Preference and Occupation.**

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.499a	3	.321

In this case both the variables are categorical in nature. At the level of significance of 0.05 it has been found that  $p = 3.499$  (Table-3), which means  $p > 0.05$ . Hence we cannot reject the null hypothesis i.e., online grocery shopping preference is independent of occupation.

**Conclusion**

From the above data analysis it can be conclude that consumer buys goods from the online shopping website on the basis of factors like easy return, offers and discounts, variety of product available, free home delivery, website user friendliness and cash of delivery payment option.

The data depicts that supermarkets are the most preferred shopping destination. Thus, supermarkets are giving tough competition to online grocers. Now-a-days they have both physical and virtual existence like Spencer’s and Reliance Fresh.

From the hypothesis testing it was found that online grocery shopping is independent of all the three demographic variables. Thus, online shopping for grocery is preferred by all age groups, occupation and by both male and female. From the above data analysis it can be concluded that most of the respondents are open to the idea of online grocery shopping. Physical examination is an important issue when it comes to grocery shopping. For now, online grocery shopping seems best suited for the organized and aware customers who prefer hassle free shopping.

**Limitations of the study**

The study is limited to the residents of Kolkata city and the results cannot be generated for the entire country. Some of the respondents may have provided biased opinions since online buying is relatively new phenomenon. Further researchers can extend the study in the future by cluster of geographical locations. Studies can be conducted to look at specific distribution problems faced by online grocery stores and strategies to manage supply chain efficiently. Studies can be done to look at how digital marketing can impact online grocery sales.<sup>[4]</sup>

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# Performance Evaluation of Private Sector and Public Sector Mutual Funds in India

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## Abstract

*Mutual fund provides a readymade option to households for portfolio diversification as well as relative risk aversion through collecting and investing their savings in different risk-return profile instruments. Its performance depends on the performance of underlying portfolio. If one or more schemes perform badly in the portfolio, that can effect or hurt the investment decisions of investors and may get them out from the scenario of wealth creation process. For saving investors' money from such a hazard, it becomes necessary to evaluate the performance of mutual fund portfolio so that investors can take/judge their investment decisions rationally. This evaluation would help in checking the prime idea of "putting all eggs in different baskets" behind mutual funds and guessing that how far this idea is doing well for investors.*

*This paper has evaluated the performance of Indian Mutual fund equity scheme of 3 years past data from 2012 to 2014. To examine the funds sensitivity to the market fluctuations in terms of beta. To appraise investment performance of mutual funds with risk adjustment the theoretical parameters as suggested by Sharpe, Treynor and Jensen.*

**Keywords:** Public and Private Sector Portfolio, Return, Risk

## Introduction

The securities and Exchange Board of India (Mutual Funds) Regulation, 1993 defines a mutual fund "a fund established in the form of a trust by a sponsor, to raise monies by the trustees through the sale of units to the, public, under one or more schemes, for investing in securities in accordance with these regulations".<sup>[1]</sup>

The financial system comprises of financial institutions, instruments and markets that provide an effective payment and credit system that facility the channeling of funds from savers to the investors of the economy. Indian Mutual Funds have emerged as strong financial stability to the financial system. Mutual Funds have opened new vistas to investors and imported much needed liquidity to the system.<sup>[3]</sup>

Mutual Funds are dynamic financial institutions, which play a crucial role in an economy by mobilizing savings and investing in the capital markets savings and the investing in the capital markets. Therefore, the activities of Mutual Funds have both short and long term impact on the savings and capital market and national economy. Mutual Funds provide households an option for portfolio diversification and relative risk aversion through collection of funds from the households and makes investments in the stock and the debt market.<sup>[2]</sup>

Mutual Funds are financial intermediaries concern with the mobilizing savings of those have surplus income and channels lavation of those avenues where there is demand of Funds. The purpose of this study of performance evaluation of mutual funds is to see that these mutual funds employ the resources in such a manner as to afford for the investors combine benefits of low risk, steady returns, high liquidity and capital appreciation through diversification and expert management. Therefore, activities of mutual funds have short and long term impact on the savings and capital markets and national economy; mutual finds thus assist the process of financial deepening and intermediation.<sup>[5]</sup>

## Methodology

The data was collected from Past Records, Books, Journals, Magazines, Internet and all other types of published data.

*Statistical tools:* The simple statistical techniques like percentages and growth rates are calculated. Sharpe Index is applied.

## Results and Interpretation

### *Measuring Mutual Funds Return*

In order to determine the risk adjusted returns of investing portfolio, several eminent authors have worked since 1960's to develop composite performance indices to evaluate a portfolio by

comparing alternative portfolio within a particular risk class. The most important and widely used measures of performance of Mutual Funds are:

The one period rate of return,  $r$ , for a mutual fund may then be defined as the change in the per unit net asset value (NAV), plus its per unit cash disbursements (D) and per unit capital gains disbursements (C) such as bonus shares, it may be calculated as.

$$R_{ap} = \frac{NAV_t - NAV_{t-1} + DT + C}{NAV_{t-1}}$$

Where

$NAV_t$  = NAV per unit at the end of the holding period

$NAV_{t-1}$  = NAV per unit at the beginning of the holding period

$D_t$  = Cash disbursements per unit during the holding period

$C_t$  = Capital gains disbursements per unit during the holding period

This formula gives the holding period yield or rate of return earned on a mutual fund. This may be expressed as a percentage.

Risk adjusted returns

$$\text{Sharpe's index} = \frac{(R_p - R_f)}{\sigma_p}$$

Where,

$R_p$  = Portfolio return over a period

$R_f$  = Risk-free return over a period

$\sigma_p$  = Total risk, standard deviation of portfolio return

Higher value of Sharpe's index indicates better performance of portfolio and vice versa. The Sharpe's measure of portfolio performance is also relative measure that ranks the funds in terms of risk (total risk) and return. The ratio is also termed as reward to variability ratio.

### Performance Measurement

In this section, an attempt is made to measure the performance of selected mutual funds. For this purpose the models developed by Sharpe were used. Before taking up this, the details about returns of selected funds are presented. In addition, to have an idea about volatility of funds to market return, the Beta values and standard deviation values are calculated.<sup>[4]</sup>

**Table 1: Equity Fund Dividends**

Year	Percentage of return				
	SBI	UTI	HDFC	JM Financial	Market Index
2012	9.70	6.65	13.25	4.18	9.60
2013	9.15	2.35	5.00	0.692	11.41
2014	12.93	10.70	8.70	11.40	10.10
AVG	10.40	6.57	8.98	5.43	10.37

Source: [www.mutualfundsindia.com](http://www.mutualfundsindia.com),  
[www.bseindia.com](http://www.bseindia.com)

The average return of SBI is 10.40% and highest is 12.93% and lowest is 9.15% it is concluded that the return is increased trend.

Average return of HDFC is 8.978% and the highest in 2012 is 13.25% and lowest is in 2013 is decreased 5.00%.

**Table 2: Equity Fund Growth**

Year	Percentage of return				
	SBI	UTI	HDFC	JM Financial	Market Index
2012	9.70	11.20	13.22	11.25	9.60
2013	10.83	3.33	5.10	10.05	11.41
2014	11.68	7.07	11.65	11.65	10.10
AVG	10.73	7.20	9.99	10.98	10.37

Source: [www.mutualfundsindia.com](http://www.mutualfundsindia.com),  
[www.bseindia.com](http://www.bseindia.com)

The above table reveals that SBI made a highest return of 11.68% on its investment year 2014 and lowest is in 2012 is decreased 9.70%. However it has earned on an average 10.73% return on investment for the period 2012-14.

Market return fund also following same trend it has made highest return of 11.41% it investment in year 2013 and lowest return of 9.60% in year 20012. The fund hewer AVG return of 10.37% during the period.

The comparative analysis this four funds shows that JM finance fund made a highest average return 10.98% and on its investment for the period 2012-14, followed by SBI and UTI and HDFC fund that order,



**Table 3: Balanced Fund Dividend**

Year	Percentage of return				
	SBI	UTI	HDFC	JM Financial	Market Index
2012	6.3	8.93	-1.73	11.43	9.60
2013	8.13	19	3.375	5.65	11.41
2014	9.45	5.58	12.42	10.30	10.10
AVG	7.98	11.17	4.69	9.13	10.37

Source : [www.mutualfundsindia.com](http://www.mutualfundsindia.com),  
[www.bseindia.com](http://www.bseindia.com)

For the above can be concluded that SBI fund made highest return of 9.45% on it investment for the year 2014 and lowest return of 6.30%, in 2012. However the fund made on an AVG 7.98% for period 2012-14.

The return of UTI fund shows that it has earned a highest return of 19.00% on its investment in year 2013 and lowest return of 5.58% in 2014. It has on an AVG a return of 11.17% for period 20012-14.

In this fund also the return of HDFC fund also following the same trend. It has made highest return 12.42% on its investment in the year 2014. it has also incurred lose of 1.73% in year 2012. it has on an average generated a return of 4.69% for the period 2012-14.

The return of JM finance fund show that has earned a highest return of 11.43% on investment in the year 2012 and lowest return of 5.65% in year 2013.the fund however AVG of 9.13% during period.

The return of market return fund also following the same trend it has made highest return of 10.41% and lowest return of 9.60% in year 2012.the fund however AVG of 10.37% during period, the average return UTI more than other mutual funds.

**Table 4: Balanced Fund Growth**

Year	Percentage of return				
	SBI	UTI	HDFC	JM Financial	Market Index
2012	10.60	5.78	6.48	6.59	9.60
2013	7.78	5.85	6.43	9.55	11.41
2014	10.78	8.28	6.70	10.38	10.70
AVG	9.74	6.64	6.53	8.84	10.37

Source: [www.mutualfundsindia.com](http://www.mutualfundsindia.com),  
[www.bseindia.com](http://www.bseindia.com)

Its can observed from the above table that The JM financial fund has made a highest return of 10.38% on its investment for the year 2014 and lowest return of 6.59% in 2012. Fund made an AVG return of 8.84% in the period from 2012-2014. The average return of 10.37% market index more than other mutual funds.

**Sharpe Measurement Ratio Tables****Table 5: Equity Fund Dividend**

Fund Name	R <sub>p</sub>	R <sub>f</sub>	$\bar{a}_p$	Sharpe Ratio	Rank
SBI	10.59	6.50	9.81	0.416	I
HDFC	8.98	6.50	11.32	0.219	II
JM financial	5.42	6.50	15.43	-0.0069	IV
Market Index	10.38	6.50	7.29	0.532	-

Source: [www.mutualfundsindia.com](http://www.mutualfundsindia.com),  
[www.bseindia.com](http://www.bseindia.com)

The table shows that SBI fund as per Sharpe measurement is ranked one whereas HDFC fund getting II nd rank. The UTI fund is getting III rd rank. JM financial getting IV th rank in the Sharpe evaluation, As compared a market index SBI fund is earning good return and UTI fund is getting better returns where as HDFC fund is better return where JM financial fund is getting whereas returns.

**Table 6: Equity Fund Growth**

Fund Name	R <sub>p</sub>	R <sub>f</sub>	$\bar{a}_p$	Sharpe Ratio	Rank
SBI	10.73	6.50	12.09	0.34	I
UTI	7.19	6.50	7.60	0.090	IV
HDFC	9.99	6.50	11.56	0.301	III
JM Financial	11.00	6.50	11.94	0.376	II

Source: [www.mutualfundsindia.com](http://www.mutualfundsindia.com),  
[www.bseindia.com](http://www.bseindia.com)

As per sharpe measurement, SBI fund is ranked Ist, JM financial fund is ranked IInd and HDFC fund is III ranked, and UTI fund is IVth ranked. By comparing with market return all the funds are getting low return.

**Table 7: Balanced Fund Dividend**

Fund Name	R <sub>p</sub>	R <sub>f</sub>	$\bar{a}_p$	Sharpe Ratio	Rank
SBI	7.96	6.50	9.39	0.155	II
UTI	9.26	6.50	17.90	0.154	III
HDFC	4.69	6.50	15.67	-0.115	IV
JM Financial	9.12	6.50	7.95	0.329	I

Source: [www.mutualfundsindia.com](http://www.mutualfundsindia.com),  
[www.bseindia.com](http://www.bseindia.com)

According to sharpe model, JM financial fund is placed First ranked SBI fund and UTI fund sharpe IIIrd and IInd ranked, HDFC fund is placed IVth ranks respectively company with market return all the funds one performing well.

**Table 8: Balanced Fund Growth**

Fund Name	$R_p$	$R_f$	$\bar{a}_p$	Sharpe Ratio	Rank
SBI	9.71	6.50	8.68	0.369	I
UTI	6.63	6.50	6.75	0.019	III
HDFC	6.52	6.50	8.37	0.003	IV
JM Financial	8.88	6.50	8.45	0.281	II

Source: [www.mutualfundsindia.com](http://www.mutualfundsindia.com)  
[www.bseindia.com](http://www.bseindia.com)

According to sharpe model, SBI fund is placed first rank JM financial and UTI fund share IIIrd and IInd rank HDFC fund is placed IVth ranked. Respectively comparing with market return all fund are performing well.

By comparing all the four schemes i.e. SBI, UTI, and HDFC and fund it can be found that the balanced fund growth is getting good return than the any schemes the balanced dividend scheme is bearing more risk them the any other schemes.

### Conclusion

It is hopeful that this study creates awareness that the mutual funds are worth investment practice. The various schemes of mutual funds provide the investors with a wide range of investments options according to his risk bearing capacities and interest. Besides they also give a handy return to the investors. The paper analyses various schemes of Different Companies.

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# Effectiveness of Microfinance in India

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## Abstract

*Microfinance emerged as a noble substitute for informal credit and an effective and Powerful instrument for poverty reduction among people, who are economically active, but financially constrained and vulnerable in various countries. Microfinance covers a broad range of financial services including loans, deposits and payment services and insurance to the poor and low-income households and their micro enterprises. Microfinance institutions have shown a significant contribution towards the poor in rural, semi urban or urban areas for enabling them to raise their income level and living standards in various countries. The focus of the study is to find out how effective these Micro Finance Institutions (MFIs) are to micro and small enterprises in and around India to provide capital loans and services and utilize it for their growth and development.*

**Keywords:** Loans and Services, India, Microfinance

## Introduction

NABARD has defined microfinance as “provision of thrift, credit and other financial services and products of very small amounts to the poor in rural, semi urban and urban provided to customers to meet their financial needs; with only qualification that transactions value is small and customers are poor.”<sup>[1]</sup>

### Channels of Microfinance

- ◆ SHG – Bank Linkage Programme - This is the Bank-led microfinance channel which was initiated by NABARD in 1992. Under the SHG model the members, usually women in villages are encouraged to form groups of around 10-15. The members contribute their savings in the group periodically and from these savings small loans are provided to the members. <sup>[2]</sup>
- ◆ In the later period these SHGs are provided with bank loans generally for income generation purpose. The group’s members meet periodically when the new savings come in, recovery of past loans are made from the members and also new loans are disbursed. This model has been very much successful in the past and with time it is becoming more popular. The SHGs are self-sustaining and also get support from NGOs.<sup>[4]</sup>
- ◆ Micro Finance Institutions-Those institutions which have microfinance as their main operation are known as micro finance institutions. A number of organizations with varied size and legal forms offer microfinance service. These institutions lend through the concept of Joint Liability Group (JLG). A JLG is an informal group comprising of 5 to 10 individual members who come together for the purpose of availing bank loans either

individually or through the group mechanism against a mutual guarantee.<sup>[3]</sup>

To study the effectiveness of Microfinance in improving the standard of living for poorer sections of society.

1. To analyze the performance of two microfinance institutions in India.
2. To obtain an understanding about RBI Guidelines in respect of MFIs in India.

## Methodology

The research methodology helps to build the project on the basis of data collected. My research is based on the secondary data and the data is collected from various secondary sources. It is an exploratory type of search.

A review of performance has been done between two micro financing institutions in India. Data has been analyzed to find the impact of microfinance in rural areas.

Performance of two microfinance institutions:

1. Annapurna Microfinance Private Limited
2. Grameen Financial Services Private Limited

*Annapurna Microfinance Private Limited*  
Annapurna Microfinance Private Limited (AMPL) has been considered as one of the fast growing and potential microfinance institutions.<sup>[2]</sup>

The main purpose of AMPL’s microfinance program is to provide diversified financial products and



services to the poor and rural households who are deprived of such services and have been exploited at the hands of local money lenders since ages. AMPL adopts SHG channel while providing the financial services for its clients.

**Table 1: Key Performance Indicators**

Key Performance Indicators (Progress Up-Dates)			
Particulars	Mar-12	Mar-13	Mar-14
No of Districts	12	18	26
Total number of Active Clients	30062	86445	158684
Total Loan outstanding (Rs. in Lakhs)	2378.55	9200.52	17039.24

Source: Code of Conduct Assessment Report

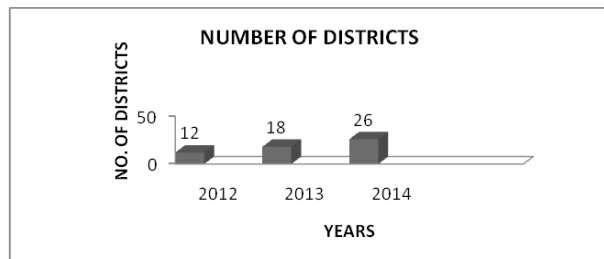


Figure 1: Number of Districts

Initially in 2012, AMPL could cater to the financial needs of 12 districts. As seen from the above graph it has extended its business in 14 more districts as of 2014. This has not only helped AMPL to be effective as an MFI but has also eliminated the financial issues of the additional districts.

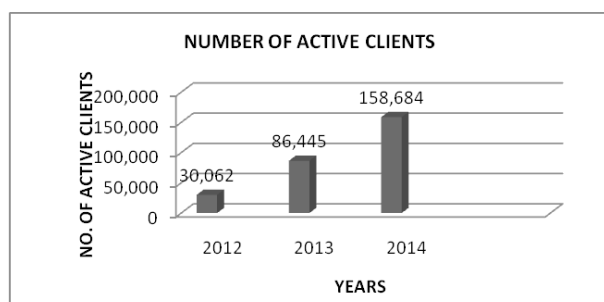


Figure 2: Number of Active Clients

It's reasonable to say that the survival of a company depends on its customers. The percentage of increase in number of active clients since 2012 has been approximately 415%, which is tremendous. This indicates that AMPL is paving its way towards growth and soon would be among the top MFIs in India.

### Loan Outstanding

The loan asset base of AMPL stood at Rs. 2,378 lacks in the year 2012. Over the next 2 years, it has increased by Rs. 14,661 lacks which are approximately 6 times. This reflects the surmount expansion the company has been able to achieve. Such an expansion has been possible due to steady increase in the number of clients as indicated in the graph above.

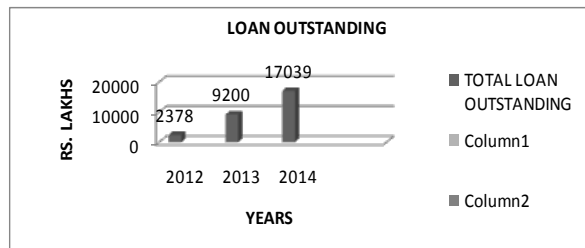


Figure 3: Loan Outstanding Status

### Grameen Financial Services Private Limited (Grameen Kota)

It was established in the year 1999 by Mrs. Vinatha. M. Reddy for timely and affordable credit to India's poor and low-income households. GFSPL, popularly known as Grameen Kota (GK) steadily groomed a class of mature and financially literate women entrepreneurs, who began to outgrow the group lending model. Anticipating the increased credit requirements of their growing livelihoods, an individual lending program-Marag-was begun in May 2008 as a pilot project. The organization soon transformed from NGO to a well-regulated a governed Non-Banking Financial Company (NBFC-MFI) under the name Grameen Financial Services Private Limited. And currently offers a wide variety of financial products and social developments services.

**Table 3: Key Performance Indicators (Progress Up-Dates)**

Key Performance Indicators (Progress Up-Dates)			
Particulars	Mar-12	Mar-13	Mar-14
No of Districts	41	41	42
Total number of Active Clients	313,610	346,519	504,688
Total Loan outstanding (Rs. In Lakhs)	38126	52390	80952

Source: Code of Conduct Assessment Report

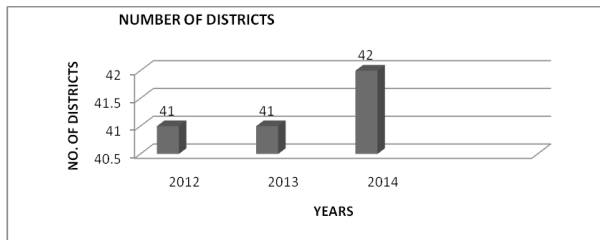


Figure 4: Number of Districts

Grameen which is among the top MFIs in India has not undertaken much of an expansion as one would have expected. Over a span of 2 years, Grameen has just extended its business into one additional district which raises worries about its future growth plans even though it caters to a total 42 districts.

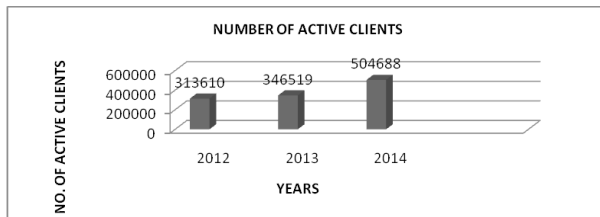


Figure 5: Number of Active Clients

Grameen has been able to achieve a mere 60% growth rate in its number of active clients as of 2014. This is obviously guided by addition of only one district in its business portfolio. Though these figures reflect a steady performance by Grameen but are less effective in terms of growth and expansion.

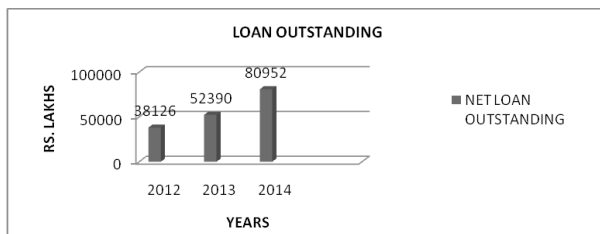


Figure 6: Loan Outstanding

There has been a steady increase in its loan portfolio by Rs. 42,826 lacks from 2012 to 2014. The percentage increase is a mere 112% as compared to 2012.

## Results and Discussion

Overall analysis of Annapurna Microfinance Private Limited and Grameen Financial Services Private Limited in compliance to RBI Guidelines and Code Of Conduct Assessment Report.

### Annapurna Microfinance Private Limited

1. Lending to borrowers whose household income does not exceed Rs. 60,000 (in rural areas) and Rs. 120,000 (in urban areas)
2. Total indebtedness of borrower not exceeding Rs. 50,000

3. Interest on loans: Post the RBI guidelines, AMPL have reduced its interest rates on the products to 26% per annum on a reducing basis.
4. 85% of MFI assets being under agriculture, micro and small enterprises
5. Tenure of loan not being less than 24 month

### Grameen Financial Services Private Limited

1. Lending to borrowers whose household income does not exceed Rs60, 000 (in rural areas) and Rs. 120,000 (in urban areas)
2. Total Indebtedness of the borrowers should not exceed to Rs. 50,000
3. Minimum 75% of the MFIs portfolio should be given for income generation activities
4. Minimum 75% of the MFIs portfolio should be given for income generation activities

### Further findings

1. Micro finance organizations (MFOs) can provide financially self-sustaining services to the poor and otherwise 'unbanked' clients.
2. From the current situation we can understand that today the main focus of micro finance industry is to empower the woman that's why more loans are provided to woman and on easy terms.
3. From the total SHG, more SHG are coming in which only women are member because women can better run a business and his family.
4. It was observed that only 20% of the SHG-Banks are formed and financed by banks while most of them are formed by NGO and other formal agencies. So more of the banks must enter in this sector in linking SHG-Bank. However the linkage is found to be inadequate.

## Conclusion

A conclusion that emerges from this account is that micro finance can contribute to solving the problems of inadequate housing and urban services as an integral part of poverty alleviation programs. The challenge lies in finding the level of flexibility in the credit instrument that could make it match the multiple credit requirements of the low income borrower without imposing unbearably high cost of monitoring its end use upon the lenders. A promising solution is to provide multipurpose loan or composite credit for income generation, housing improvement and consumption support. Consumption loan is found to be especially important during the gestation period between commencing a new economic activity and deriving positive income.

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# Gold Price Fluctuations and its Impact on Indian Economy

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## Abstract

*“Gold has been mesmerizing humankind ever since its discovery. It is one of the most precious metals found till date and also the most liquid asset too. Gold is backbone of all economies since its inception. It is the best investment for common people. In present era also it is used by investors as an instrument to hedge their portfolio investment. The monetary demand of gold has been on roll during last decade as well as non-monetary demand. All the countries in the world use gold as their mode of transaction during international trade. It has also been observed that countries with large gold backing to their currency also have their currency internationally acceptable. Gold prices are on steep rise during the last decade and still rising.”*

*What were the factors that lead to this historical rise in the prices of Gold during this specific period of time in India? This research paper studies the various factors contributing towards the continuously escalating prices of gold in India and how factors like international business environment, political environment, market conditions, its induction in commodity market, buying behavior of consumers, and inflation have affected prices of gold during last decade. The paper specially focuses on rise in gold prices and its impact on inflation in Indian context during the period from the years 2000 to 2015.*

**Keywords:** Commodity Market, Currency Fluctuations, Inflation, Geo-Political concerns, Global crisis

## Introduction

There is no need to explain the importance of gold in India. Everyone from the economist to common people have the same interest in the gold and the price of gold. Conventionally gold has been extremely deep-rooted in the Indian communal consciousness. From its discovery Gold has well thought-out one of the most valuable metals, and its value has been used as the standard for many currencies (known as the gold standard) in history. Gold has been used as an emblem for purity, value, royalty, and above all roles that come together these properties. Conventionally Gold had world-wide acceptance as exchange medium in international business transactions. Consumption of gold experienced a sharp increase of rate during the mid 1990s. There was Liberalization of gold import policy, strong economic growth and favourable movements business in gold prices. Gold is now being used as an alternative for dollar since its collapse (Turk and Rubino, 2008). Monetary and Non-Monetary demand for gold is steeply rising. It has been demanded by individual buyer, institutional buyer as well as the countries too.<sup>[1]</sup>

There has been drastic increase in the prices of gold since 2003. Conventionally people of India thought that gold had been a safe and sound investment choice, but its role has changed with the time. Gold is now being traded and forecasted as a commodity (Greely & Currie, 2008). Gold has entered in to

secular bull market, since then the prices are on rise. Gold unlike any other commodity has been continuously providing ample yield to its investors. In India Gold has been commonly used in ornaments, but it was long consideration as an investment option by associates prevarication financial risks. The demand for the gold will rise and will surpass \$ 2500/oz in future. This will also impact the prices of gold in India too. It is believed that gold prices will steeply rise in coming period of time. The role of gold in investment has drawn more attention since this transformational economic crisis began to unfold in 2008.<sup>[4]</sup>

## Significance of Gold in Indian Economy

Indians are irresistibly attracted to gold; either they buy it as ornaments or investments. Their fascination with gold jewellery has roots in the culture, tradition and also the economic realities at the rural and grass root levels of the society. Most of the gold that the entire world holds lies in India. There are many investment areas such as stock markets, mutual funds, fixed deposits and government bonds amongst others, but people still prefer to invest in gold.

As an investment, gold has been an easier bet to hedge against inflation and other risks. Indians have been buying and trading in gold since time immemorial, and continue to buy even now, at a time when it is more expensive than ever. A shining



fact about gold is constituting the most desirable and precious metal used in exchange. But these days the meaning of gold totally changed in current paradigm gold is became a best mode of investment, which can say save mode of investment in the fluctuate market. The price of gold increases and notice many drastic changes which effects on the whole economy.<sup>[2]</sup>

The impact of the rise in international gold prices is reflected in its domestic prices as well. Despite the sharp recent price rise, in India, demand for gold has sustained, not only as a component of safe savings but also due to its social and cultural importance. The government and experts believe that high gold imports are fatal to the economy. If India reduces gold imports, it could solve the country's economic problems, erase the current account deficit, appreciate the rupee and boost growth. Experts say the country's balance of payment (BOP) is negative because of the gold imports. When India purchased 200 tonnes of gold under the International Monetary Fund Limited gold sales programme, it was interpreted by experts that it may further inflate the gold price when the price was already ruling high.

#### Market Trends in Gold Prices

The gold rate in the market depends on the demand and availability of the metal. The gold price has become unpredictable but those in commodities market seem to have a better grip on this. <sup>[5]</sup> Due to its appeal, gold has been historically priced above other commodities most of the time. There has been a steep rise in the prices of gold during last few years.

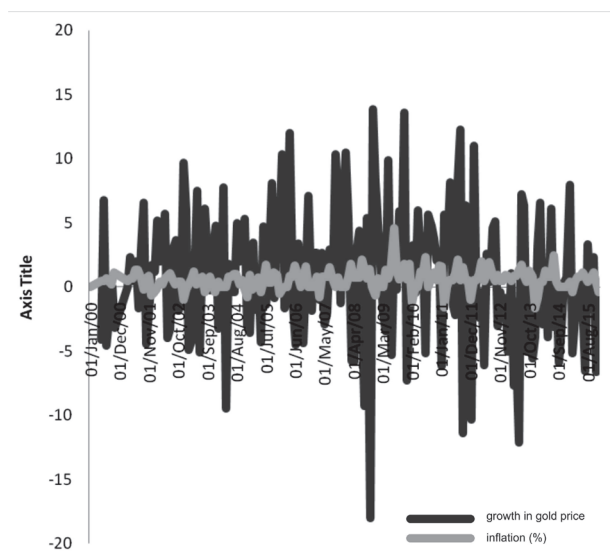


Figure 1: Growth in Gold Price and Inflation Rate in India

Gold price is highly volatile during the entire period of analysis. However, it exhibited a serious down trend in 2008. the reason may be the advent of US sub-prime crisis which started in the second half of 2007. However, in this period itself, the growth exhibited an upward trend as well, which was very close to % per month. However, this trend continued after 2010 as well where the growth rate in gold price was very close to 10% in some months. However, some other months exhibited down ward trend in growth of gold price which was even less than 10% during the second half of 2011.<sup>[3]</sup>

If we look into inflation, then it is very clear from the graph that inflation rate is less volatile than golden gold price. Throughout the period of analysis, the inflation rate was more or less stable with maximum inflation of 4.58% experienced in July 2009.

#### Factors Influencing Fluctuation in Gold Prices

The price of gold is influenced by numerous factors, key among them being the production cost because gold producers always intend to maintain profitability. Most of the gold traders and investors value gold stocks based on existing market values as well as future gold prices. They buy or sell gold stocks based on speculation on the gold price movement leading to constant fluctuations. Some contributing factors to the change in gold prices include supply and demand, where there is not enough gold being produced to meet demand. With a rise in demand comes a rise in price. Another factor is inflation, where people find safety in gold when currency rates are low. Other than this, the following factors are also responsible for gold price fluctuations.

#### Demand and Supply:

Supply and demand is often cited as the most common reason for price fluctuations. According to a number of financial experts the demand for gold is exceeding the available supply. As more countries emerge into industrialized nations this pressure and increased demand may cause the price to fluctuate even further. There is a limit to the amount that can be produced each year and the demand for the available metal continues to rise even though production numbers are staying stable.

Decrease in the supply of gold: The mining of the gold ore has been on the lower side from the past few years. There has been decrease in of nearly 40% in production of gold. Gold behaves less like a commodity than like long-lived assets such as stocks

or bonds. That characteristic makes expectations particularly important because, like the stock market, gold prices are forward-looking, and today's price depends heavily on future demand and supply (Haubrich J. 1998). There also has been increase in monetary and non-monetary demand of gold thus pushing price of gold.

#### *Inflation and Interest Rates:*

Gold is also commonly believed to be a hedge against inflation. Researchers define inflation as the general rise in the price level (rather than an increase in the money supply) and use changes in the Consumer Price Index as the measure of monthly inflation. To be a hedge against inflation as the idea is most commonly understood. So gold has always been considered as a good hedging instrument against inflation. As gold pegged to the US Dollar, US interest rates affected gold prices. Whenever interest rates fall gold prices increase and when inflation is on the rise so the gold prices also increase. Gold's most natural relationship to the general price level is what one might expect for any good or asset: A higher general price level should be associated with higher gold prices ((Michael F. Bryan 1997). A closer relationship exists between gold prices and inflation, that is, the rate of change in the general price level (d Wayne Angell 1998). The most recent decrease in the inflation rate also corresponds to a drop in gold prices, although the relationship is much more synchronous, without a clear lead or lag time (Haubrich J 1998). By the help of a decade periods particularly stand out that higher gold prices also lead to the rate of inflation with reference to Indian country.

#### *Currency Fluctuation:*

Economists have long recognized the role of currency valuation in pricing commodities, particularly imported commodities, such as oil and gold. The material commodities however which possess these qualities in the highest degree are gold and silver. For these very grounds they've been chosen by common consent for use as money, to symbolize the value of other things: the world market for them is most highly organized (Marshall, 1920). There is a negative relationship between the value of the dollar and gold and suggests that as the dollar loses value the price of both commodities increases, as is consistent with recent experience in those markets (Kim and Dilts, 2011). Gold has inverse relationship with the dollar, recently in USA in great financial turmoil the dollar has weakened against many currencies, thus it is

expected that there will be increase in the gold prices. Dollar is de-facto currency exchange all around the world. But now USA on financial depression gold has been substituted as a safe haven for investment.

#### *Geo-Political Concerns:*

Whenever there is a geo political trouble, investors around the world rush to prevent attrition to their investment and gold attracts one and all. For example: 9/11 attack in US lead increase in the demand of the gold.

#### *Weakness in Financial Market:*

Gold is negatively correlated with the stock, bonds and real-estate. During any of the financial and non financial crisis investors like to invest in gold. In a specific country, the gold market may be both supply driven due to ample domestic production or demand driven due to huge import demand. In countries like India, which depend completely on gold import are price-takers, relying upon London fixes of gold prices, entailing for an exogenous impact of gold price on physical gold demand. The domestic gold price is determined by global gold price, exchange rate, transaction cost, import duties etc.

#### *Demand from Central Bank:*

With dollar losing its value, Reserve bank of India and Central Banks of most of the developed countries started to increase their share of gold in the storage to prevent excessive. From the time global financial crisis got off, there seems to be a perceptible boom in gold prices. There has been increase in the demand of gold from central banks all over the world and from Reserve bank of India (Karunagaran, 2011). This is confirmed by the gold investment digest (WGC, 2010) which reported that after two decades, a steady source of supply to the gold market, in 2010, central banks become 'net buyers of gold'. India had also officially purchased 200 tonnes of gold from IMF in October 2009, which placed its position ahead of Russia to ninth place (Bloomberg, 2009). This was mainly due to RBI's strategic move to diversify its FOREX and also to strengthen the currency.<sup>[3]</sup>

#### *Impact of Fluctuations in Gold Prices on Indian Economy:*

The price of gold increases and notice many drastic changes which effects on the whole economy. The impact of the rise in international gold prices is reflected in its domestic prices as well. Despite the sharp recent price rise, in India, demand for gold has sustained, not only as a component of safe savings but

also due to its social and cultural importance. Indians may be the biggest buyers of gold in the world with the country also holding the prime position as the largest importer of the precious metal. But when India purchased 200 tonnes of gold under the International Monetary Fund's limited gold sales programme, it was interpreted by experts that it may further inflate the gold price when the price was already ruling high. A new study in India has attempted to throw more light on this. The report has indicated that there has been an almost unabated rise in the international gold prices in recent months. As gold is an integral part of savings of a large number of savers, the report has noted that it has raised apprehensions whether any correction in gold prices would have a destabilizing effect on the financial markets. Fluctuations of the gold price have a significant impact in world financial markets, especially the dollar. Gold sometimes takes the role of leader in the currency markets, and sometimes it has the role of the follower, but generally the dollar specifies the direction of gold prices, because gold is valued in dollars in the global market. Economic and financial experts believe that due to the severe fluctuations in the value of the dollar during the past months, gold is considered the best tool for international investors. World gold prices are usually determined on the basis of real interest rates in the world, the value of the dollar and the amount of reserves held by central banks; thus any change in these factors will have significant impact on the price of gold.

In recent months, due to increasing international concern over government debt and the continued decline of the dollar, global demand for buying gold has increased drastically. While the growth of gold demand in India and China has in recent years had a significant impact on gold price developments, now the entire world's central banks are turning to the gold market, which is a major factor behind the increased gold price. The fall in gold prices could not have come at a better time for India. Lower crude oil and gold prices will help bring down the current account deficit (CAD) -excess of imports over exports plus remittances -which will improve the country's investment rating. A wide CAD is a sign of economic weakness as it means the country is a large debtor.

#### *Gold Locked in Temples:*

The potentially large but dormant source is the gold locked up with the temples across India. Larger holdings of gold are estimated to be with Tirupati

temple in Andhra Pradesh, Sree Padmanabhaswamy temple, Guruvayur temple and Sabarimala temples in Kerala, as well as scores of religious places in southern states, with substantial gold holdings. The Sree Padmanabhaswamy temple is estimated to have gold holdings valued at more than Rs.1000 billion. The Tirupati temple could have gold holdings of almost 1700 tonnes. Even if the government borrows 500 tonnes from Tirupati and pays it two percent interest, the temple authority could earn Rs. 30 billion a year in interest.

Now Prime Minister Narendra Modi's government is looking to monetize India's vast hidden wealth. The government plans to begin a program that will allow temples to deposit their gold into banks to earn interest and circulate in the economy, rather than sit idle in musty vaults. The gold, officials say, would be melted down and sold to jewellers.

The present study tries to analyse the impact of growth in the gold price on inflation in Indian context by certain economic tests such as Descriptive Statistics, Unit Root Test and Regression Analysis.

#### **Methodology**

The study is entirely based on secondary data considering the variables growth in Gold Price and Inflation Rate. The objectives of the study are examined by using monthly time series data covering the period from 2000 to 2015. Relevant data for the study are obtained from the website- [www.inflation.eu](http://www.inflation.eu) (worldwide inflation rate) and that of gold price from the website-[in.investing.com](http://in.investing.com)<sup>[5]</sup>

The study has used the following specifications in order to evaluate the effects of growth in gold price on inflation rate of Indian economy. The following mathematical model is used for analysis:

$$\Delta GP = f(INF)$$

Where  $\Delta GP$  is the growth of the gold price and INF is the inflation rate.

In order to fulfill the objective of the study certain statistical tests are applied.

#### *Descriptive Statistics*

The present study tries to find out the Descriptive Statistics of  $\Delta(GP)$  and INF considering the overall period analysis. The parameters such as mean growth in gold price and inflation rate, standard deviation (in percentage), skewness (asymmetry), kurtosis (peakedness), Jarque-Bera test of normality are

applied to find out the stochastic properties of the data series. The last three parameters are used in order to find out the presence of normality in the frequency distribution. The calculation of p-values for hypothesis testing typically is based on the assumption that the population distribution is normal. Hence, it is essential to test for the normality in population distribution. Various tests of normality have been developed.

Skewness is a measure of asymmetry of the distribution of the series around its mean. The skewness of a symmetric distribution, such as the normal distribution, is zero. A positive (negative) skewness suggests that there is a chance of higher (lower) than mean of the concerned variables. Kurtosis measures the peakedness or flatness of the distribution of the return series. A normal distribution has a kurtosis value equal to three. If it exceeds three, the distribution is peaked relative to normal. On the other hand, if it is less than three, the distribution is flat relative to the normal. Hence, it captures the excess probability of abnormal returns, regardless of the sign of the returns. Under Jarque-Bera test of normality, the null hypothesis to be tested is the presence of normal distribution. The null hypothesis of normality is rejected if the estimated J-B test statistic exceeds the critical value from chi-square distribution. However, this test of normality is valid for large samples.

#### *Non-Stationarity in Time Series Data:*

A stationary time series is one whose statistical properties like mean, variance and autocorrelation are time-invariant, i.e. the statistical properties will be the same in future as they have been in the past. These statistical descriptors are useful to determine the future behaviour of any data series provided the series is stationary. Hence, non-stationary time series data give certain misleading results. If the series is consistently rising overtime, then the sample mean and variance will also rise with the sample size and hence, will always underestimate the mean and variance in future periods. If these descriptors are not well-defined, then its correlation with the other included variables will also be not well-defined. Also when the two time-series data are non-stationary, then while running simple regression, the estimated t-statistic turns out to be very high such that the null hypothesis of statistical insignificance of the explanatory variables is often rejected though it is not true. This leads to committing Type-I error which is called the problem of spurious regression.

Further, non-stationary data series violates the standard assumptions of asymptotic analysis, i.e. the 't-ratios' will not follow standard t-distribution. Thus, the hypothesis testing about the regression parameters cannot be validly undertaken. Further, when a data series is non-stationary, the effect of an external shock (favorable/unfavorable) will persist in the system and never die away. On the other hand, for a stationary data series, the effect of the shock will gradually diminish and after certain time period, it will die away. Hence, for all these reasons it is essential to make a non-stationary data series stationary before going for any statistical tests, otherwise the latter would give misleading results.

If the series has a stable long run trend and tends to revert to the trend line following a disturbance, it may be possible to stationarise it by de-trending (i.e. fitting a trend line and subtracting it out prior to fitting a model, or otherwise, including a time index as an independent variable in a regression). Such type of series is called a trend-stationary series. However, de-trending does not always lead to stationarity of a non-stationary data series. Hence, under that situation it is necessary to transform the series into difference form. After differencing, the descriptors like means, variances and autocorrelation will be time-invariant. Such series is said to be difference-stationary. The first difference of a time series is the difference of a time series is the difference between two consecutive periods. If the first difference is stationary, then it is said that the series is integrated of order one [I (1)] and hence, the original data series is called random walk model. If after first difference, the series still remains non-stationary, then we further go for second difference. This process continues until the transformed data series turns out to be stationary.

#### *Unit Root Test/Statistical Test for Non-Stationarity in Time Series Data:*

To avoid such problem of non-stationarity in data series, we first subject the data to stationarity test by using Augmented Dickey Fuller (ADF) test in order to confirm stationarity of the series.

The following null hypothesis is tested:-

H0:  $\mu = 0$  (non-stationarity) against

H1:  $\mu < 0$  (stationarity)

In order to find test the above hypothesis, a computed t-statistic has been formulated as  $ADF\tau = \mu / SE(\mu)$  where  $\mu$  is the estimated  $\mu$ .

If the absolute value of the computed ADF test statistic turns out to be greater than that of its critical



value at 5% level of significance, null hypothesis is rejected. If the original series turns out to be non-stationary then we again go for unit root test at first difference. This process will continue until and unless the series turns out to be stationary.

*Hypothesis Testing*

$H_0$ : There is no significant impact of growth in gold price on inflation rate.

$H_1$ : There is significant impact of growth in gold price on inflation rate.

Model Specification:

$$INF = \text{constant} + \beta (\Delta GP) + \text{error term}$$

$\beta$  is the slope co-efficient which we are going to estimate by applying T-test. Hence the  $H_0$  in this case is  $H_0 : \beta = 0$  is a null hypothesis.

If the absolute value of the computed T-statistic turns out to be greater than the critical value of the T-statistics then we reject the null hypothesis and claim that the concerned explanatory variables ( $\Delta GP$ ) is statistically significant in explaining variations in the explained variables which is here, INF.

**Table 1: Descriptive Statistics**

	Gold Price	INF
Mean	0.820792	0.559843
Std. Dev.	5.058173	0.759521
Skewness	-0.116468	0.581946
Kurtosis	3.557294	6.756599
Jarque-Bera	2.903484	123.089
Probability	0.234162	0
Observations	191	191

Skewness should be equal to 0 then it will be normal distribution

If Kurtosis = 3 – it will be normal distribution Jarque-Bera is applied for testing the normality.

For gold price p-value for Jarque-Bera is 0.23 i.e. it is more than 0.05 and 0.01 so we accept the null hypothesis of presence of normal distribution. INF p-value = 0, so we reject the  $H_0$

**Table 2: Unit Root Test**

	$\Delta GP$	INF
ADF Estimated Test Statistics	-15.97	-7.98
p-value	0.00	0.00

If  $p < 0.05$  – we reject  $H_0$  at 5 % level of significance

If  $p < 0.01$  – we reject  $H_0$  at 1 % level of significance

$p = 0.00 \rightarrow 1(GP)$	[we reject $H_0$ at both 1% and 5% level of significance claiming that both the data series are stationary at level]
$p = 0.00 \rightarrow INF$	

Both the data series are tested for the presence of unit root. The study applies Augmented Dickey-Fuller test for the presence of non-stationarity in the data series. However, for both the data series, the absolute values of the estimated t-statistic exceed 2 such that the null hypothesis of the presence of unit root is rejected. Moreover, the p-values also turn out to be lower than 0.01 and 0.05 such that the null hypothesis of the presence of unit roots at both 5% and 1% levels of significance. Thus,  $\Delta GP$  and INF are turning out to be stationary at level itself. The reason is that  $\Delta GP$  and INF are calculated as the first difference of the gold price and Consumer Price Index (CPI) of the two consecutive months. Hence, it is integrated of order zero [I (0)] such that any empirical analysis can be done on the initial return series itself. Hence, the transformation of the data series is not required.

**Conclusion**

It is a fact that the real price of gold is very high compared to historical standards. Indians love gold. More than 18,000 tonnes of the metal is lying in Indian households. As we know that India’s domestic production of gold is very limited, the rising demand has to be sourced from outside the country.

Moreover, Gold as a commodity on its own does not add much to the productive capacity of the economy. When one buys gold, it either is stored in lockers or gets converted into jewellery. In both the cases, money spent on purchasing gold gets blocked since gold is not a productive asset. There are many factors contributing to the change of gold price. Among all the factors, inflation rate and US dollar draw the most attention. Gold prices keep changing as the precious metal is used in hedging against inflation. This is based on the theory that paper money may lose value leaving gold with the real purchasing power. Gold has acted as a safe haven for investors, especially at the wake of the global financial crisis

that hit markets all over the world. This has led to an emerging trend where traders and investors set aside substantial amounts of their funds into the gold portfolio. This is a key factor in the fluctuation of gold prices. However, the government needs to take strict measures to control the increasing prices of gold and help investors overcome the losses due to uncertainties in other markets.

India's passion for gold is not new. However, what has happened over the last few years is that rising gold imports have also led to a rise in its prices and a weakening of the rupee against the dollar. The combined impact has served to widen the CAD. The government has tried to tackle the problem by raising import taxes and considering changing regulations so that less gold comes into India.

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