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# Measuring Financial Inclusion Through Use of Financial Services: A Study on SHG Members in Tripura, India

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***Abstract***

*Financial inclusion has become a yardstick towards achieving financial well being. The focus of the financial inclusion by various regulators across the world is to bring people under the ambit of formal banking system. The present study assesses the status and position of the financial inclusion among the members of the self help groups. The study is conducted using primary data collected from 384 beneficiary members spreading across 95 SHGs across the state of Tripura. The meaning of financial inclusion used in the study is to emphasize the use of financial services rather than just having a bank account. So, the study investigates the use of various formal banking and other financial services offered by various financial institutions and their use by Self Help Group members across the state of Tripura. The self help groups are basically formed to give financial stability to the destitute section of the society especially the women, who find difficulty in earning a respectable income and remain in the clutches of poverty denying them social empowerment. The investigation reveals that the financial inclusion of SHG members is low because, their use of formal financial services is low when surveyed. Financial services like use of banking transactions, use of formal credit, savings and insurance is found to be low which still makes them vulnerable to informal credit lenders, low standard of living. The study highlights the plight of SHG members who still counts low in their dependence on formal banking system and seek ways to increase the penetration of financial services to the benefit of SHG members.*

***Keywords:*** *Financial Inclusion, Self Help Group Members, Financial Services, Banking Services.*

JEL Code: M2, M5

## 1. Introduction and Literature Review

A well performing financial system that enables the people to use its financial services is essential for reducing poverty levels and bringing sustainable economic development of the country (Levine, 2005) (Claessens, 2006). The dimension of use of financial services emerges from the theory of 'under banked' or 'marginally banked' given by Kempson et. al.(2004). Thus opening a bank account and not using it to their benefit cannot be concluded as an inclusive financial system. The present paper will measure the level of financial inclusion in terms of use of various financial and banking services and products by the members of the self help groups.

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To assess the level of financial inclusiveness, a working definition of financial inclusion is required, based on which the use of financial services implying financial inclusion is measured. There is an utmost need to measure financial inclusion from demand side since supply side factors like the Number of Loans per 1,00,000 people, Average size of the Loan to GDP per capita, Average size of the Deposits to GDP per capita provides an imperfect view of outreach of banking and financial services (Cull & Scott, 2010). The reason for this imperfect view is considered the fact that banks prefer to lend to wealthy people and these wealthy borrowers and depositors represented a big share of banking activity marginalizing the poor participation of the low income people (Beck, Thorsten, & Demirguc-Kunt, 2007). Because of this inequality, the benefit of financial sector that comprises of the financial products and services does not reach to the poor, who tend to lack regular income, collateral, credit score and connections. A recent study has established links between use of financial services and poverty alleviation (Clarke, George, L., & Zou, 2006). Almost all the literature has defined financial inclusion as access to formal financial services like savings, credit, insurance, remittances and host of other banking and financial products and services.

Measurement of financial inclusion can be done through two approaches - supply side and demand side approach. Supply side approach is a top-down approach to measure financial inclusion involving secondary data from regulator regarding outreach of banking and financial facilities among the people residing in both rural and urban areas. It includes parameters like the number of accounts, branches/ATMs, credit disbursed, and deposit collected etc (Beck, Demirguc-Kunt, Soledad, & Peria, 2007). A demand side approach is a bottom-up approach that measures financial inclusion from consumer's perspective that acts as a catalyst to generate demand for financial products and services. Various demand side factors that affect financial inclusion is financial awareness, lower income, asset holding, etc.

The demand side approach makes use of survey methods to collect data from household level/individual level regarding their use of financial products and services. This gives policy maker's information about the obstacles being faced by people while accessing them thus percolating to the rate of use. Demand side survey is sought after by the policymakers to assess the state/level of financial inclusion and develop innovative policy solutions to popularize it.

Some of the important demand side surveys as mentioned in the guideline note developed by Alliance for Financial Inclusion (AFI) - Financial Inclusion Data Working Group (FIDWG) where it was mentioned about a study conducted by the Bank of Zambia (BoZ) which used demand side survey to analyze both financial product use and institutional reach. The National Bank of Belarus (BoB) used a demand side survey to map the usage of financial products by region, gender and other indicators. Bank of Negara (BoN) Malaysia implemented three major policy reforms based on the results of its demand side survey.

Other demand based surveys include - The Invest India Income and Savings Survey (IISS) that collects household data based on the use of financial products and services like incomes, investment, savings, insurance, credit, across people living in both rural and urban areas. Global Findex, is a comprehensive demand side survey to understand how individuals make use of financial services like savings, credits, insurance, etc. FinScope survey developed by FinMark trust is also a demand side survey conducted in 26 countries to measure financial

inclusion by profiling the level of access to financial products and services by the consumers and how they manage their financial lives. On the basis of the various demand side survey conducted as mentioned above the study zeroed in some variables that form a part of the survey to identify the actual use of financial products and services.

The Global Findex - the financial survey conducted by World Bank to study the depth of financial inclusion of the people uses data collected by way of a primary survey from 147 countries which covers 97% of the world's population. The sampling unit contains 1000 people randomly selected from each country over the age of 15 years. The Global Findex survey contains question on the use of bank account, savings behaviour of the people, whether they have an insurance policy, whether they take loan from formal sources and how they use that loan to ascertain the barriers to the use of bank accounts (Demirgüç-Kunt & Klapper, 2012).

From the study of literature, we can postulate that measurement of financial inclusion can be done from three dimensions that are usage, barriers and access. Empirical studies shows that the access dimension is measured by supply side indicators from a country, state and district level for constructing an index that measures access to financial services from supply side parameters. Regarding the use of financial services, the supply side indicators do not give a true picture so it is measured by demand side data originating from an individual survey of households. On one hand, to measure the inclusiveness, from the banked side, by measuring the actual use of formal financial services, namely, inclusion output of financial systems.

On the other hand, information from the unbanked side is used to assess the barriers to financial inclusion through the hindrances perceived by people that prevent them from using formal financial services (Cámara & Tuesta, 2014). They have also used a composite index which was used for the first time taking demand side data from individual users to measure the level of financial inclusion from the use of financial services. The paper also identified two problems in the current financial inclusion index. First, the existing index depends on supply side data that gives an inaccurate reading because of the presence of inaccurate data on usage side. Second, the exogenous weights assigned to indicators are often considered in lacking scientific rigour because exogenous information is imposed.

Insurance is one of the financial products that are mentioned in the definition of financial inclusion. Access to insurance and use of insurance for securing one's life from loss of income in the event of an unforeseen incident is seen as vital for financial inclusion. Utility theory explains the purchase of insurance by the households. The theory explains that the purchase decision of insurance is based on the cost benefit analysis by the consumers. They compare the advantages of buying and not buying an insurance policy. The purchase decision will be taken by the user if the benefit is greater than the cost (Asgary, Willis, Taghvaei, & Rafeian, 2004). The Government has launched two insurance schemes for the low income household one being the Pradhan Mantri Suraksha Bima Yojana (PMSBY) and the other is Pradhan Mantri Jeevan Jyoti Bima Yojna (PMJJBY). The advantage of insurance is that it protects against unpredictable loss at an annual premium, the cost of which is within the household budget (Brown & Churchill, 1999). The credit facility, savings products and the insurance services help to recover from the volatility of income fluctuations that aids in maintaining consumption level during the lean period. These products offer safeguards to poor households against extreme vulnerability (Akpandjar, Quartey, & Abor, 2013).

The decision to purchase an insurance policy can result in better outcome for the households and would decrease their dependence on the informal source of finance to meet the untimely financial loss. Some previous studies have tried to find out whether households insure or not and how do they take insurance decision. One of the similar studies by (Showers & Shotick, 1994) to analyze the impact of household characteristics on demand for insurance products by using Tobit analysis - found that demand effects are dominated by the marginal impacts from existing purchasers of insurance. Although income and number of earners are positively related to the demand for insurance products, the marginal effect from an increase in income is greater for single-earner households than for multi-earner households. Also, as either family size or age increases, the marginal increase in insurance expenditure diminishes.

## 2. Objective of the Paper

- To assess the level of financial inclusion of SHG members in terms of use of banking and financial services.

## 3. Research Question

- What is the status/level of financial inclusion in terms of usage of banking and formal financial services of Self-Help Groups members in Tripura?

## 4. Results and Discussions

### 4.1 Development of Study Variable

A structured questionnaire is prepared to collect the primary data. The questionnaire is prepared after due deliberation and taking into consideration the comments and suggestions given by the expert from the respective field. A pilot study was conducted with selected members belonging to various SHGs to test the validity and reliability of the questionnaire. The literature suggests 17 items to measure financial inclusion from the demand side. These items contain various dimensions through which the usage of various financial/banking products and services are measured. The dimensions that were taken into considerations are, use of credit, savings, insurance, pension, internet banking, remittances, overdraft facility, etc. The level of financial inclusion based on the below-mentioned parameters are framed and the frequency of usage is measured on a five-point scale, from always to never and the value assigned to always is '5' and never implies '0'. Higher the score, higher is the level of financial inclusion. This will determine the level of financial inclusion of each SHG members and rate them in five levels of financial inclusion from 'very low to very high'.

### 4.2 Items Used to Construct the Level of Financial Inclusion

**i. Items Showing - Use of Banking Transaction**

- Item 1 is related to using of Cheques for payment purpose
- Item 2 is related to using of ATM/Debit cards for withdrawing money
- Item 3 use of savings account for withdrawing money
- Item 4 using of Mobile banking services
- Item 5 using internet banking for doing basic banking transaction
- Item 6 using of Remittances for sending money

**ii. Items Showing - Use of Formal Credit**

- Item 7 using of bank for taking loans when in need of money
- Item 8 using of MFIs for taking loans when in need of money
- Item 9 using of Group Lending for taking loans when in need of money
- Item 10 using of overdraft facility/KCC facility through bank account

**iii. Items Showing - Use of Savings**

- Item 11 using of savings account for depositing money
- Item 12 using of savings account for availing Govt. Scheme money
- Item 13 using Banks/Post-Office account for Recurring Deposits
- Item 14 investment in Mutual Fund
- Item 15 savings in SHG group account
- Item 16 saving money in Micro Pension schemes

**iv. Item Showing - Use of Insurance**

- Item 17 using of Life-Insurance to reduce risk

### 4.3 Reliability of the Scale

**Table-1: Reliability Statistics**

| *Scale reliability* | *Value of Cronbach's Alpha* | *No of Items* |
|---|---|---|
| Measuring level of Financial Inclusion in terms of usage of financial products and services | 0.825 | 17 |

Source: Compiled from questionnaire

The scale used in the study to measure the level of financial inclusion in terms of usage of financial products and services contains 17 items. All the items as mentioned above are measured on a 5 point Likert scale. The Cronbach's Alpha for the items used to measure the level of financial inclusion is found to be 0.825, which indicates the scale to be of reliable and it also shows that the items are highly correlated. The alpha coefficient developed by Cronbach to test the reliability of the scales where alpha coefficient value greater than 0.70 as indicated by Nunnally (Nunnally, 1978) is considered as acceptable in most research work.

### 4.4 Measuring Levels of Financial Inclusion

**Table-2: Item Statistics**

| *Items* | *Mean* | *Std. Deviation* |
|---|---|---|
| Frequency of using of Cheques for payment purpose | 1.71 | 1.145 |
| Frequency of using of ATM/Debit cards for withdrawing money | 2.66 | 1.586 |
| Frequency of using of bank cash counter for withdrawing money | 3.26 | 1.160 |
| Frequency of using of bank for taking loans when I am in need of money | 1.77 | 1.160 |

| *Items* | *Mean* | *Std. Deviation* |
|---|---|---|
| Frequency of using of MFIs for taking loans when I am in need of money | 2.84 | 1.418 |
| Frequency of using of Group Lending for taking loans when I am in need of money | 2.96 | 1.471 |
| Frequency of using of Life-Insurance to reduce risk | 3.33 | 1.785 |
| Frequency of using of my savings account for depositing money | 3.14 | 1.406 |
| Frequency of using of my savings account for getting Govt. Scheme money | 2.68 | 1.361 |
| Frequency of using Banks/post office Recurring Deposits | 2.57 | 1.732 |
| Frequency of savings in my SHG group account | 4.78 | 0.546 |
| Frequency of using of internet banking for doing basic banking transaction is | 1.30 | 0.800 |
| Frequency of investment in mutual fund | 1.59 | 1.271 |
| Frequency of using of Mobile banking services | 1.29 | 0.798 |
| Frequency of paying money for Pension Schemes | 2.42 | 1.889 |
| Frequency of using of Remittances for sending money | 2.04 | 1.389 |
| Frequency of using of overdraft facility from my bank account | 1.51 | 0.981 |

Source: Compiled from questionnaire

From the above table no-2 describing the item statistics containing the mean and standard deviation of 17 items used in the present study is calculated and the highest mean value is 4.78 and the lowest is 1.29. The range is 3.49. Dividing the range by 3 gives 1.163, adding 1.163 with 1.29 we get the interval of 1.29-2.453 which is categorized as the item having very low level of financial inclusion. Standard deviation shows the dispersion of the values from the mean. If the standard deviation is large it means that there is some higher side variability within the test scores of the group. Based on the above calculation the following levels are obtained.

**Table-3: Interpretation of Individual item Mean Value**

| *Mean Value* | *Interpretation of Mean Value* |
|---|---|
| 1.29-2.453 | Relatively lower impact on measure of Financial Inclusion |
| 2.453-3.616 | Relatively Moderate impact on measure of Financial Inclusion |
| 3.616-4.78 | Relatively Higher impact on measure of Financial Inclusion |

Source: Compiled from questionnaire

From the table no-3 showing the mean value interpretation of individual item responsible for overall financial inclusion, three levels of mean value are identified that are contributing to the different levels of financial inclusion. The items falling under these categories are given in the below table no-4.

**Table-4: Variables Contributing to Low Level of Financial Inclusion**

| *Items* | *Mean* | *Std. Dev* |
|---|---|---|
| Frequency of using of Cheques for payment purpose | 1.71 | 1.145 |
| Frequency of using of bank for taking loans | 1.77 | 1.160 |
| Frequency of using of internet banking for doing basic banking transaction | 1.30 | 0.800 |
| Frequency of investment in mutual fund | 1.59 | 1.271 |
| Frequency of using of Mobile banking services | 1.29 | 0.798 |
| Frequency of paying money for Pension Schemes | 2.42 | 1.889 |
| Frequency of using of Remittances for sending money | 2.04 | 1.389 |
| Frequency of using of overdraft facility from my bank account | 1.51 | 0.981 |

Source: Compiled from questionnaire

The above table no-4 with mean and standard deviation depicts the items that contribute to the low level of financial inclusion. The items like use of cheques, internet banking, mutual funds, mobile banking, remittances, overdraft facility and pension scheme. These items are not frequently used by the respondents. They are important with regard to financial inclusion and these items have the potential to provide banking services especially formal credit to the poor in rural areas.

**Table-5: Variables Contributing to Moderate Level of Financial Inclusion**

| *Items* | *Mean* | *Std. Dev* |
|---|---|---|
| Frequency of using of ATM/Debit cards for withdrawing money | 2.66 | 1.586 |
| Frequency of using of bank cash counter for withdrawing money | 3.26 | 1.160 |
| Frequency of using of MFIs for taking loans when I am in need of money | 2.84 | 1.418 |
| Frequency of using of Group Lending for taking loans when I am in need of money | 2.96 | 1.471 |
| Frequency of using of Life-Insurance to reduce risk | 3.33 | 1.785 |
| Frequency of using of my savings account for depositing money | 3.14 | 1.406 |
| Frequency of using of my savings account for getting Govt. Scheme money | 2.68 | 1.361 |
| Frequency of using Banks/post office Recurring Deposits is | 2.57 | 1.732 |

Source: Compiled from questionnaire

**Table-6: Variables Contributing to High Level of Financial Inclusion**

| *Items* | *Mean* | *Std. Dev* |
|---|---|---|
| Frequency of savings in my SHG group account | 4.78 | 0.546 |

Source: Compiled from questionnaire

4.5.5 Scale Statistics of Level of Financial Inclusion

The scale statistics of 17 items that is used to measure the level of financial inclusion as mentioned above is given in table no-6. The level is measured in five point scale with a maximum score of 5 in each of the item and 85 (17*5) for overall maximum score. Similarly, based on the response, a respondent can score a minimum of 1 in each of the item and 17 (17*1) as the overall minimum score. The range between the intervals (85-17) i.e. 68 is divided into 3 (three) equal classes to stand for 3 (three) different levels of financial inclusion. So a respondent score lying between 17 to 39.66, will be considered as having a low level of financial inclusion. Based on the above framework, 3 (three) levels of financial inclusion is developed and interpretation is given in the below table no-7.

**Table-7: Interpretation of Levels of Financial Inclusion**

| *Scale Value* | *Levels of Financial Inclusion* |
|---|---|
| 17 - 39.6 | Low level of financial inclusion |
| 39.6 - 62.3 | Moderate level of financial inclusion |
| 62.3 - 85 | High level of financial inclusion |

Source: Compiled from questionnaire

The mean value of the level of financial inclusion index as shown in Table 8 is 41.85, this value falls within the range of 30.6-44.2, which corresponds to low level of financial inclusion. This indicates that the self help group members in Tripura have a low level of financial inclusion. The interpretation of the level of the financial inclusion is given below.

**Table-8: Scale Statistics**

| **Scale Statistics** | | | |
|---|---|---|---|
| *Mean* | *Variance* | *Std. Deviation* | *N of Items* |
| 41.85 | 114.896 | 10.719 | 17 |

Source: Compiled from questionnaire

The summary statistics of the level of financial inclusion among self help group members given above shows a mean value of 41.85, the standard deviation of the items 10.719, and variance of 114.896. The usage of various banking and financial services especially the use of formal credit for mitigating loss is very low among the self help group members. The self help group members belonging to economically backward classes are lacking in use of formal banking services to meet their credit requirement which is evident by looking at the figure where 65.1 percentages of the members are below low level of financial inclusion. The self help group members belonging to economically backward classes are lacking in use of formal banking services like credit, savings, insurance, and other banking transactions like the use of internet/mobile banking, attending financial counseling camp, taking help of business correspondents, etc. The percentage of members as per their level of financial inclusion spread across various SHGs in the state of Tripura is given in the below table no-9.

**Table-9: Levels of Financial Inclusion Based on Survey**

| Levels | Number of Members | Percent |
|---|---|---|
| Low Level of Financial Inclusion | 250 | 65.1 |
| Moderate Level of Financial Inclusion | 84 | 21.9 |
| High Level of Financial Inclusion | 50 | 13 |
| Total | 384 | 100 |

Source: Compiled from questionnaire

The percentage of members with high level of financial inclusion is 13 percent representing a nominal number of members in the high level of financial inclusion. This means that the percentage of members in the self help groups using various banking and financial services is very low and so is their level of financial inclusiveness in terms of use of financial services is less. The majority of members that is, 65.1 percent fall under the low level of inclusion and 21.9 percent fall under moderate level. The result is not satisfactory in terms of usage of financial services which portrays low reach of basic financial services among the self help group members. The level of financial inclusion is envisaged on the primary level data collected from self help group members to complement the supply side data. The demand side data based on the usage of financial services collected at an annual frequency of use. The same strategy has been recommended in the World Bank Report on financial access and used in a number of surveys like FinScope survey on individual usage of financial services, Consulting Group to Assist the Poor (CGAP) survey 'measuring access to financial service around the world' etc.

### 4.7 Conclusion

It was necessary to know the status of financial inclusion of the self help group members because the depth and extent of financial inclusion of the group members will help to understand the reason behind it so, the present study tried to explore the status of financial inclusion of self help group members. The result of the level of financial inclusiveness constructed with 17 variables categorizes total financial inclusion into three categories. They are - low level, medium level and high level of financial inclusion. The objective of this study is to assess the status of financial inclusion of self help group members in the state of Tripura. The definition of financial inclusion has different dimensions and the present study has taken into account financial inclusion from demand side considering those who are not using these banking and financial products and are considered outside the purview of the formal banking system. On the basis of study, it has been found that the level of financial inclusion of self help group members is low depicting the fact that they are not using formal banking and other financial services in spite of them having a bank account.

### References

Akpandjar, G. M., Quartey, P., & Abor, J. (2013). Demand for financial services by households in Ghana. International Journal of Social Economics , 40 (5), 439-457.

Arunachalam, R. (2008). Scoping paper on Financial Inclusion, Considerations and Recommendations for UNDP. United Nation Development Program , 52-85.

Asgary, A., Willis, K., Taghvaei, A., & Rafeian, M. (2004). Estimating rural households willingness to pay for health insurance. The European Journal of Health Economics , 209-215.

Basu, P. (2015). A Financial System for India`s Poor. Economic & Political Weekly , 40 (37).

Beck, T., & De la, T. A. (2006). The Basic Analytics of Access to Financial Services. World Bank Economic Review , 297-327.

Beck, T., Demirguc-Kunt, Soledad, M., & Peria, M. (2007). "Reaching Out: Access to And Use of Banking Services Across Countries". Journal of Financial Economics , 234-266.

Beck, Thorsten, & Demirguc-Kunt, A. (2007). Finance, Inequality and the Poor. Journal of Economic Growth , 27-49.

Brown, W., & Churchill, C. (1999). Providing insurance to low-income households: a primer on insurance principles and products. paper prepared for the Ford Foundation, Calmeadow .

Cámara, N., & Tuesta, D. (2014). Measuring Financial Inclusion: A Multidimensional Index. BBVA Research Working Paper No-14/26 , 1-39.

Chattopadhay, S. K. (2011). Financial Inclusion in India: A case study of West Bengal. RBI working paper series 8/ 2011 , 1-27.

Census (2011). National level Census. New Delhi: Registrar General and Census Commissioner.

Claessens, S. (2006). Access to financial services: a review of the issues and public policy objectives. The World Bank Research Observer , 21 (2), 207-240.

Clarke, G. R., L. C., & Zou, H.-F. (2006). Finance and Income Inequality: What Do the Data Tell Us? Southern Economic Journal , 72 (3), 578-596.

Cull, R., & Scott, K. (2010). Measuring Household Usage of Financial Services: Does it Matter How or Whom You Ask? World Bank Economic Review : Policy Research Paper , 199-233.

Cull, R., Senbet, L., & M.Sorge. (2005). Deposit Insurance and Financial Development. Journal of Money, Credit, and Banking , 43-82.

Demirgüç-Kunt, A., & Klapper, L. (2012). Measuring Financial Inclusion: The Global Findex Database. World Bank Policy Research Working Paper 6025 , 387-411.

Fernández de Lis, S., Llanes, M. C., Moctezuma, C. L., Rojas, J. C., & Tuesta, D. (2014). Financial inclusion and the role of mobile banking in Colombia : developments and potential. BBVA Working Paper No. 14/04 , 1-37.

Lamb, L. (2016). Financial Exclusion and Financial Capabilities in Canada. Journal of Financial Economic Policy , 8 (2), 212-227.

Levine, R. (2005). Finance and Growth: Theory and Evidence. In Handbook of Economic Growth (pp. 865-934). Amsterdam: Elsevier.

Maimbo, S. M. (2004), The Regulation and Supervision of Informal Remittance Systems: Emerging Oversight Strategies, paper presented at the IMF Seminar on Current Developments in Monetary and Financial Law, Washington D. C.

Mohan, R. (2006). Economic Growth, Financial Deepening and Financial Inclusion . Reserve Bank policy research working paper .

Nunnally, J. (1978). Pshychometric Theory. New York: McGraw-Hill.

Najarzadeh, R., Reed, M., & Tasan, M. (2014). Relationship between Savings and Economic Growth: The Case For Iran. Journal of International Business and Economics , 2 (4), 107-124.

NABARD. (2017). Status of Microfinance in India - 2016-17. Mumbai: Micro Credit Innovation Department, NABARD.

Pikkarainen, T., Pikkarainen, K., Karjaluoto, H., & Pahnila, S. (2004). Consumer Acceptance of Online Banking: an extension of the technology acceptance model. Internet Research , 14 (3), 224-235.

Sharma, M. (2007). Index of Financial Inclusion (A concept note). Indian Council for Research on International Economic Relations, New Delhi, 1-7.

Showers, V. E., & Shotick, J. A. (1994). The Effects of Household Characteristics on Demand for Insurance: A Tobit Analysis. Journal of Risk & Insurance , 61 (3), 492-502.

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# A Study on Exchange Traded Funds in India -A Special Reference to Gold ETFs

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***Abstract***

*Gold has a deep rooted significance in Indian history, alluring people from different parts of the world with its beauty and charm. Over the years India's infatuation with gold has grown stronger and stronger, with Indian accounting for most of the gold consumed globally. Gold, in Indian history is more than has found a place in Indian hearts and homes alike. Gold has been considered the safest investment. Gold ETFs are more profitable than other gold based investments if you plan to invest large sums or indulge in regular trade. Gold prices do not usually fluctuate very heavily. Even if returns on equities decrease, gold ETFs could prevent from sustaining big losses. Gold ETFs are a good way to add diversity to portfolio. This paper is going to deals with the performance of Gold ETFs and making comparison with physical gold and Gold ETFs.*

***Keywords:*** *Exchange Traded Funds, Gold ETFs, Portfolio, Physical Gold, ETFs Market.*

## Introduction

The product Exchange Traded Funds is an investment fund traded on stock exchange much like a stock "Exchange Traded Funds" [ETFs] hold the assets such as stock, commodities or bonds and trade close to its Net Asset Value over the course of trading day. ETFs have so many features (like low cost, tax efficiency, easy conversion in to cash and stock like attributes) which make it most attractive.

Exchange Traded Funds are Mutual Funds which can be bought and sold in the stock market, just like any other stocks or shares. As far as investment is concerned an Exchange Traded Funds, it is just a mutual fund and as far as buying or selling the Mutual Fund is concerned.

The ETFs has its special product in the name of "Gold ETFs". The Gold ETFs provide investors with exposure to gold by tracking the price changes of gold. This allows investors to profit from gold price changes without having to own the physical asset. Even, the Gold ETFs are the exchange traded funds based upon the net asset value of the underlying asset gold.

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The Gold ETFs are divided into units representing physical gold. Here, the best research study of an investment goes with Mutual Funds, Exchange Traded Funds and Gold ETFs.

**Need for the Study**

Here, the study enumerates the concept of Gold Exchange Traded Funds. The need for the study is that majority of the investors are not ready to invest in Gold Exchange Traded Funds, but they are ready to buy physical gold. The physical gold is attractive, but the value after buying- it consider as liability. The need is to start investment in Gold or Gold related securities.

**Objectives of the Study**

1) To study the characteristics of Gold Exchange Traded Funds in India.
2) To study the difference between physical gold and Gold ETFs
3) To evaluate the performance of Gold ETFs in India
4) To understand the findings and suggestions by a respondents of the survey.

**Review of Literature**

1) **Author: Chintan Karnani March 2008**

   Here the author discussing, in 2008 & 2009 gold prices will fall â and when inflation expectations fall due to higher base effect and the chances of US economy moving away from recession rise. Gold Exchange Traded Funds [GETFs] are backed by investment in physical gold. Instead of purchasing physical gold from the market and storing it, an investor can invest in Gold ETFs and indirectly own gold. However, Gold ETFs will not replace the investment in equities. Gold ETFs offer a means of diversification for the retail investor. Investments in Gold ETFs will be dependent on returns in other financial instruments such as equities, bonds and future markets. If other investments offer better and less risky return than gold, investor could withdraw from Gold ETF and invest elsewhere.

2) **Author: Manshu April 2010**

   Here the author have done a more recent comparison on gold ETFs and that data can be found here. The methodology is the same as well. which is the best gold ETFs in India. The author compare the expense ratios of all existing Indian gold ETFs and see which are the ones with the lower expenses. The author have already done that research earlier on this blog, and know that Gold BeeS ETF from Benchmark Funds has the lowest expense ratio of 1%. Quantum Funds comes second with 1.25%. All the other funds charge higher expenses.

3) **Author:Ritesh Jain July 2010**

   Gold throughout history , has been considered rare and precious. Some five to ten years back, it was difficult to invest directly in gold. Either, an investor had to buy gold bullions or trade gold futures. ETFs are essentially mutual funds listed on the stock exchange. In other words, gold ETF is just like any other mutual fund scheme, the only difference being that instead of investing in equity shares..

**4) Author: Adnan Ahmed July 2010**

ETFs are extremely successful form of basket securities, which enable investors to trade a portfolio easily and quickly in a single transaction. The major data of the world seven largest Gold ETFs indicates that, the total holdings of world's seven largest golden ETFs are 1383.8 tons. The purpose of this study was to analyze the development of ETFs in Chinese financial market. Further, the study also helps in relising the level ò competition other actively managed mutual funds will face due to these ETFs.

**Scope of the Study**

The study consist the research work of primary data in South Bangalore City of particular area. The scope of the study relates to the investors on Gold ETFs and physical gold which they shared their opinion with the researcher.

**Research Methodology**

The methodology is the plan and organized structure and the tactics of the investigation process that sets out to obtain answer to the study. The methodology followed for collection of information is as follows

- **Sources of Data:**

  For the purpose of this study data from two sources such as data of primary and secondary have been gathered or collected.

- **Primary Data:**

  Here primary data has been collected through a structured questionnaire. The selection of respondents is based on simple random sampling. The survey was conducted questionnaire is set you with a view to understand the respondents opinion on Systematic Investment Plan.

- **Secondary Data:**

  These are the sources containing data which has been collected and complicated for another purpose. The secondary sources, consisting of the readily available resources and already compiled the strength able information. Secondary data for the present research have been collected from several sources. The major sources of secondary data are given below.

Websites, Broachers of Private Companies etc

- **Field Work:**

  As stated earlier in the scope the sample size selected to study is 20 respondents a sample to study in Indian Context. Research has personally interviewed all the respondents chosen for survey and gathered primary data for the purpose of analysis and interpretation.

**Limitation of the Study**

Here the study is restricted to the location of South Bangalore city. Due to the time constraint the survey sampling size are 30 respondents. The study limits to the survey of performance of Gold ETFs in Indian market.

Gold Exchange Traded Fund is a financial product that is listed on a stock exchange and

represents ownership of underlying gold assets. Gold ETF can allow investors to easily participate in the gold market and the basic investment objective is designed to offer investors a simple, cost-efficient and secure equivalent to movements in the gold spot price less the relevant management fees. All Deposit based Members of Bombay Stock Exchange can participate in trading of ETF through BSE Equity Segment. Gold has been a safe haven for investors for decades of all the precious metals, gold is the most popular as an investment and during uncertainties and economic crises gold is considered more stable than any other asset classes.

**Characterstics of Gold Exchange Traded Funds**

- Potentially cheaper to have price exposure to gold price as compared to other available avenues.
- Quick and convenient dealing through demat account.
- No storage and security issues for investors
- Transparent pricing
- Can be traded on stock exchange like buying/selling a stock

Ideal for retail investor as minimum lot size to trade is one unit on secondary market

Differences Between Physical Gold And Gold Exchange Traded Funds

| *PARAMETERS* | *GOLD[Physical Gold]* | *GOLD ETFs* |
|---|---|---|
| Meaning | An individual buys gold in the physical form. The purity of the gold may or may not be of minimum 99.5% purity | Gold ETFs are open ended exchange traded funds that will invest the money in standard gold bullion (gold with 99.5% purity). An investor holds units of an ETF whose value depends on the price of the physical gold in the market. |
| Pricing | Pricing of the physical gold is not uniform. It varies from jeweler to jeweler | Gold ETFs are priced as per international standards and are always transparent. |
| Investment | Physical gold biscuits are available in the standard denomination of 10 grams that requires a huge investment. | Gold ETFs are available in small quantities i.e., even in 1 gram. Hence, are more affordable. |
| Charges | When an investor buys gold jewellary, he has to pay 20%-30% of the total buying value of the gold as making charges. | Buying a gold ETF includes expense ratio of only 1% every year and brokerage charges of 0.5% or less of the purchase price with every transaction |
| Wealth tax | 1% wealth tax is applicable if the value of the gold possessed by an individual is more than Rs 30 lakhs | There is no wealth tax applicable on Gold ETFs |

| *PARAMETERS* | *GOLD[Physical Gold]* | *GOLD ETFs* |
|---|---|---|
| Short-term capital gain tax | If physical gold is held for less than 3 years then the investor has to pay a short-term capital gain tax as per his income tax slab | The short term capital gain tax applicable for gold ETFs is same as physical gold. |
| Long-term capital gain tax | If gold is sold on profit after three years then the investor has to pay a capital gain tax of 20% with indexation | The long-term capital gain tax is the same as physical gold |
| Liquidity | Physical gold can be purchased from banks and jewelers but can be only exchanged through jewellers | Buying / selling of gold ETF is much easier than physical gold as it is traded on the stock exchange NSE and BSE |
| Returns | Actual Return= Current price of a gold/coin minus buying price and making charges of an ornament | Actual Return=Current price of a gold unit trading on stock exchange minus buying price and brokerage charges. |
| Making Charges | Making charges in the range of 10% to 20% if buying in the form of ornaments | No making charges |
| Purity of Gold | Purity of Gold is always in question | Gold ETF only deals with 99.5% |

**Table & Graph No : 1 Classification of Respondents on the basis of Gender**

| *Sl.No* | *Particulars* | *No of Respondents* | *Percentage (%)* |
|---|---|---|---|
| 01 | Male | 18 | 60% |
| 02 | Female | 12 | 40% |
| | TOTAL | 30 | 100% |

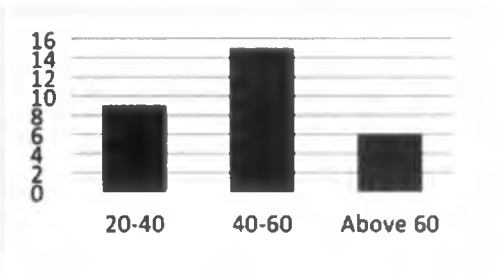

**Source: Filed Survey**

**Analysis & Interpretation:**

The table and graph shows that nearly 18 respondents are male and 12 are female. So here the male earners are high than female. Because our India is a male dominated society.

**Table & Graph No:2 Classification of Respondents on the Basis Age**

| *Sl.No* | *Particulars* | *No of Respondents* | *Percentage (%)* |
|---|---|---|---|
| 01 | 20-40 | 09 | 30% |
| 02 | 40-60 | 15 | 50% |
| 03 | Above 60 | 06 | 20% |
| | TOTAL | 30 | 100% |




**Source: Field Survey**

**Analysis & Interpretation:**

The table and graph shows that 9 respondents are in the age between 20 to 40 age group, 15 respondents are in the age between 40 to 60 age group and remaining 6 respondents are in the age above 60 age. Here the more respondents are comes under the age of 40 -60. Because they can plan for their daughters marriage to keep some investment on gold related securities for their future benefits.

**Table & Graph No:3 Classification of Respondents on the basis of Qualification**

| *Sl.No* | *Particulars* | *No of Respondents* | *Percentage (%)* |
|---|---|---|---|
| 02 | Graduate | 12 | 40% |
| 03 | Post Graduate | 10 | 33% |
| 04 | Professional | 08 | 27% |
| | TOTAL | 30 | 100% |

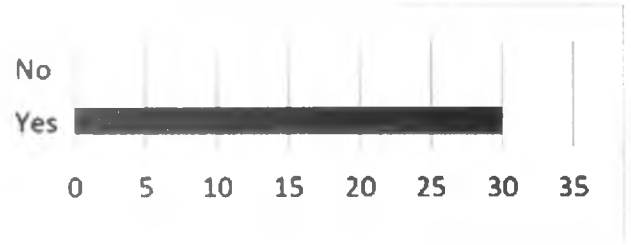
**Analysis & Interpretation:**

Here the table and graph shows that 12 respondents are graduates, 10 respondents are post

graduates and remaining 8 respondents are professionals. Post Graduates are high than others Because here the education is also one of the main factor to understand the concepts.

**Table & Graph No:4 Classification of Respondents on the basis of Investment made in ETFs**

| *Sl.No* | *Particulars* | *No of Respondents* | *Percentage(%)* |
|---|---|---|---|
| 01 | Yes | 30 | 100% |
| 02 | No | 00 | 00 |
| | TOTAL | 30 | 100% |




Source: Field Survey

**Analysis & Interpretation:**

Here the table and graph shows that 30 respondents are made investment in Exchange Traded Funds. Because the ETFs market have more demand only in Gold related product in Indian market.

**Table & Graph No:5 Classification of Respondents on the basis of Most Investment Product in ETFs**

| *Sl.No* | *Particulars* | *No of Respondents* | *Percentage(%)* |
|---|---|---|---|
| 01 | Index ETFs | 00 | 000% |
| 02 | Gold ETFs | 30 | 100% |
| 03 | Liquid ETFs | 00 | 000% |
| | TOTAL | 30 | 100% |


Source: Field Survey

**Analysis & Interpretation:**

The table and graph shows that 30 respondents are invested in Gold ETFs because Indian people are very crazy on Gold. Therefore, there is a high priority on Gold ETFs.

**Table & Graph No:6 Classification of Respondents on the Basis of Deal In Gold ETFs**

| *Sl No* | *Particulars* | *No of Respondents* | *Percentage(%)* |
|---|---|---|---|
| 01 | Yes | 28 | 99% |
| 02 | No | 02 | 01% |
| | TOTAL | 30 | 100 |

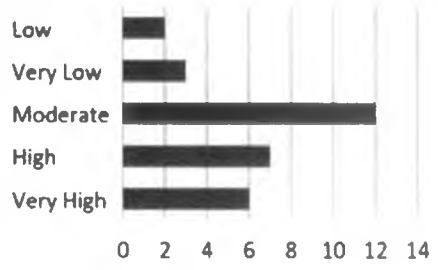

Source: Field Survey

**Analysis & Interpretation:**

The table and graph shows that 28 respondents are deal with Gold ETFs and remaining 2 respondents are not deal. Therefore, Gold ETFs are highly demandable product in Exchange Traded Funds market.

**Table & Graph No:7 Classification of Respondents on the Basis of Liquidity Perception on Gold ETFs**

| *Sl No* | *Particulars* | *No of Respondents* | *Percentage(%)* |
|---|---|---|---|
| 01 | Very High | 06 | 20% |
| 02 | High | 07 | 23% |
| 03 | Moderate | 12 | 40% |
| 04 | Very Low | 03 | 10% |
| 05 | Low | 02 | 07% |
| | TOTAL | 30 | 100 |



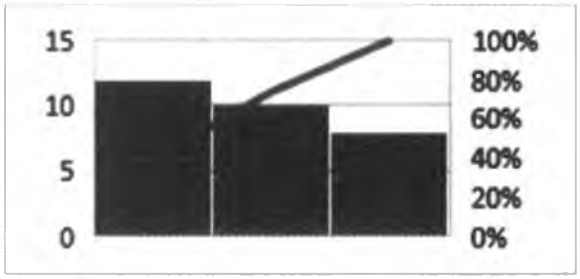

Source: Field Survey

### Analysis & Interpretation:

The table and graph shows that for 6 respondents perceive that liquidity on Gold ETFs is very high, 7 respondents have high liquidity perception, 12 respondents feel moderate liquidity on Gold ETFs and remaining 5 respondents perceive that low and very low liquidity. Because there is no Lock in period for Gold Funds or Gold ETFs. So there is a high liquidity

**Table & Graph No:8 Classification of Respondents on the Basis of Safe Investment of Gold ETFs**

| *Sl No* | *Particulars* | *No of Respondents* | *Percentage(%)* |
|---|---|---|---|
| 01 | Very High | 12 | 40% |
| 02 | Moderate | 08 | 27% |
| 03 | Low | 10 | 33% |
| | TOTAL | 30 | 100 |




Source: Field Survey

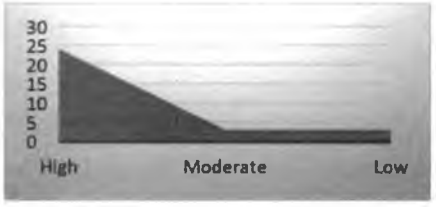
### Analysis & Interpretation:

The table and graph shows that Gold ETFs is a safe investment for 12 respondents and for 8 respondents it is moderate and remaining 10 respondents are not feel that Gold ETFs is a safe investment. Here Gold ETFs securities are better that Physical gold. So it is safe than other physical asset.

**Table & Graph No:9 Classification of Respondents on the Basis of Risk Reduction Regarding Gold ETFs**

| *Sl No* | *Particulars* | *No of Respondents* | *Percentage(%)* |
|---|---|---|---|
| 01 | High | 24 | 80% |
| 02 | Moderate | 03 | 10% |
| 03 | Low | 03 | 10% |
| | TOTAL | 30 | 100 |

Source: Field Survey

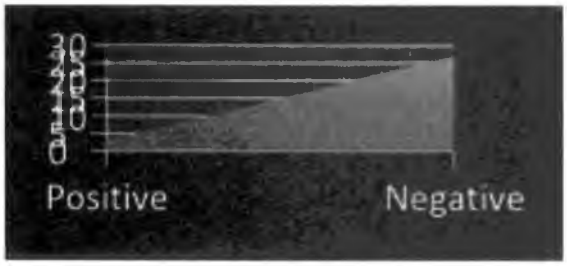


**Analysis & Interpretation:**

The table and graph shows that there is a high risk reduction of Gold ETFs by 24 respondents and 3 respondents have moderate risk and remaining 3 respondents have low risk reduction. The Gold ETFs is high risk and high return because Gold ETFs trade in stock exchange.

**Table & Graph No:10 Classification of Respondents on the basis of Suggestion on Gold ETFs**

| *Sl No* | *Particulars* | *No of Respondents* | *Percentage (%)* |
|---|---|---|---|
| 01 | Positive | 03 | 10% |
| 02 | Negative | 27 | 90% |
| | TOTAL | 30 | 100 |




**Analysis & Interpretation:**

The table & graph shows that 27 respondents have a negative opinion regarding Gold ETFs and remaining 3 respondents have a positive opinion , because in the present scenario Gold ETFs is not performing in the market especially in 2017-18.

**Findings**

- Nearly 40% of respondents are female in research survey.
- Only 30% of respondents are in the age of 20-40 who invested in Gold ETFs.
- Majority 33% of respondents are Post Graduates in the survey.
- 100% of respondents are knew about Exchange Traded Funds.
- Majority 100% of respondents knew about Gold ETFs.
- Nearly 40% of respondents have a moderate liquidity perception on Gold ETFs
- Maximum 12% of respondents are agree that Gold ETFs is a safe investment.
- Majority 90% of respondents have a negative opinion on Gold ETFs

**Suggestion**

- Here the suggestion is most of the Indian ladies are very eager to buy Gold. I suggest that compare to Physical gold the Gold funds and Gold ETFs have a good growth in the market for long term benefits
- The concept of Gold ETFs to understand we need some qualification and education to get better knowledge than unknowing investment.

- For daughters people should not gofor purchasing direct gold when the girl baby is born-they can Start investing in Gold related securities for long term benefits and then take that amount for future usage.

## Conclusion

Gold Exchange Traded Funds is one of the good opportunity for the Indian investors. The Indian people are very emotional on gold. Compare to buying of physical gold they can go with the buying of Gold securities or Gold Bonds. Even for the daughters marriage they need to gift gold, until that start investment in Gold securities for long term benefit and from the huge amount buy the physical gold. In the ETFs market-Gold ETFs act as a tremendous role in Indian Country. In 2008 to 2012 the Gold market given the highest interest up to 20%. Finally I conclude that, Gold ETFs are the exchange traded funds which have an objective to provide returns as per the price of physical gold. However, many times it happens that Gold ETFs end to outperform and give higher returns than physical gold.

## References

Chintan Karnani., "Gold Prices; The Analyst", March 2008, Pp38-39.

Manshu., " Which is the best gold ETF in India?", April 2010.

3Ritesh Jain., "Gold is an Excellent Hedge Against Inflation", Investment Guide, 2014.

Adnan Ahmed., " Gold Exchange Traded Funds: Current Developments and Future Prospects in China", Asian Social Science, Vol 6. No. 7 July 2010.

## Websites

www.etf.com, www.hdfcfund.com , www.sebigov.com