# Performance Indicators of Financial Knowledge and Management

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#### **ABSTRACT**

**Purpose:** The paper attempts to identify different performance indicators and barometers of financial knowledge and management that are found to have influence on investment decision making and standard of living that individuals spend throughout as and when gets earning capability. Being a behavioral and psychological phenomenon, effectiveness of individual's knowledge lies in understanding ability of different parameters of financial issues such as time value of money, compounding, risk and return, inflation, diversification and more. Therefore present study is a surplus to existing literature as it demonstrates India's overall position in financial literacy and its domain financial knowledge among G20 nations based on INFE OECD report 2017.

**Research Approach:** The study is descriptive and explanatory in nature that aims to indentify the role of few selected parameters to measure basic and advanced financial knowledge based on organization for economic cooperation and development report, Lusardi scale and other various previous studies through review of literature.

#### **Findings and Conclusion:**

As per the report published by OECD/INFE on adult financial literacy of G20 with two participating nations, India is one of the five least scoring nations in terms of financial knowledge, attitude and behavior. Different parameters of financial knowledge includes diversification, risk and return, interest techniques, inflation and many more. For every individual, it is essential to ponder over these issues before reaching to conclusion of investment decisions. As the report depicts clearly, that India stands below average therefore it is need of the hour to make people aware of different concepts of investments through programs and institutes.

**Keywords:** Financial knowledge, Inflation, Diversification, Parameter, G20 nations.

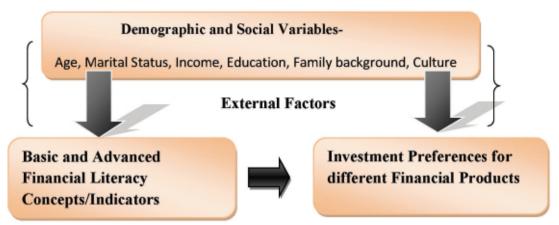
# Introduction

Financial knowledge and management is characterized by an intellectual ability of an individual to take relevant financial decision and reap benefits of their earnings. No matter how well the earnings of the family is, the benefit of it can only be reaped if invested through proper channels. The rationale behind the financial literacy is to make individual aware of economic state of affairs. G20 is an international platform to pool together governors from different nations to bring out financial stability among the largest developing economies of the world. According to previous review of literature there are different dimensions to measure financial literacy that is reflected through financial knowledge, attitude and behavior. The Organization for

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economic cooperation and development is an international intergovernmental platform that seeks to solve common problems through coordination and collaboration. As per the census report 2011 literacy rate in India is 74.04% (https://en.wikipedia.org/wiki/2011 Census of India) but when it comes to financial knowledge, among 19 G20 with two participating nations, India could not even cross the average score. In the present day scenario it is essential for a layman to have conceptual understanding of basic phenomenon to avoid financial loses. The rationale behind financial knowledge and management is to develop cognitive skills and confidence among investors. The different dimension of financial knowledge includes calculation of simple and compound interest on investment, risk minimization through diversification, more risk yield more return than less risky investments, investments in portfolio is securer than investments in par stock of a single company, time value of money that describes it is better to have money in hand at present than money to be received in future, investments in securities always bear an inflation risk as the value of money goes down in near future and many more. Thus this paper attempts to identify India's position among G20 nations based on these indicators and to give conceptual understanding on these concepts. As per the report OECD (2017), India is among the nations where a first national strategy is being implemented, therefore it becomes mandatory on the part of government and established financial institutions to inculcate understanding level of financial concepts especially among adults for economic growth and development of nation.

# Reflection of demographic and social variables on Financial knowledge and Preferences



Source: Author's Presentation

## Literature Review

(Consumer financial Protection bureau, 2019), study clearly emphasizes that financial education leads to improvement in financial behavior. This study focuses on the financial education of the youth to improve knowledge. There is a wide scope of improvement like budgeting, spending choices, development of saving habits and many more.

(Annamaria Lusardi, 2019) in research paper highlighted the significance of three basic financial concepts relating to compound interest calculation, inflation and risk diversification and outcome reveals that people around the world possess lowest level of knowledge on risk diversification. Finding from flat World Project consisting 15 nations suggests that knowledge of financial knowledge is at crisis around the world and around 30% only could answer all the questions correctly. Financial literacy is strongly associated with higher return on individuals investment, ability to meet contingent expenses, proper debt management. The study emphasizes on making people aware of risk and diversification concepts at school and workplace to make them to reach to their full potential.

According to OECD/INFE International Survey of adult financial literacy competencies report (2016), many nations across the globe are unable to achieve minimum score in terms of financial knowledge. Not

more than half of respondents of the OECD nations could respond the concept of compounding and diversification. Surprisingly only the respondents of few nations adopt advisory service while purchasing financial products. Financial knowledge is an important component of financial literacy. Among OECD nations budgeting was accepted as an important tool of financial management while lack of saving is an important matter of concern. Men are found to have statistically positive attitude towards long term than females. Schools can play the best role in inculcating positive attitude such as saving habits, budgeting, spending plans, planning heads and more.

(OECD financial education principles and best practices, 2009), showed a concern on low level of financial ability due to lack of self awareness and passive behaviors particularly among disadvantaged and vulnerable groups. The most expected benefit of financial education is increase in individuals' standard of living through effective financial market that ultimately results in economic growth. The key practices for financial education and awareness programs include formulation of effective policies and their implementation through collaboration of different parties like NGO's, private and local networks actors. OECD dedicated to create awareness about insurance and pension plans due to complexity of products and low risk tolerance. More emphasis was laid upon quality of information and on ongoing training programs at workplace.

(Financial literacy and inclusion: results of OECD/INFE survey across countries and by gender, 2013), in a survey found that large percentage of people could not calculate simple interest and are unaware of the concept diversification. Access to financial product and their usage is one of the basic indicators of financial inclusion. As the survey was based on gender, several issues were highlighted such as low confident among females than males related to their financial knowledge and skills still short term money management capability of females were found to better than males. The concept of inflation was widely understood by majority of the respondents of nations that how it affect the standard of living.

(Financial literacy around the world: Insights from the Standard and Poor's ratings services global financial literacy survey) emphasized that, without the knowledge of basic financial concepts, proper management of funds is difficult. It has been observed that people with high income group tends to be more financially literate. The essential requirement of financial inclusion is financial literacy. The gender gap found to be more significant in both advanced and emerging economies. Financial literacy sharply increases with the attainment of education, income and age. It is essential to develop financial literacy skills for day to day operations such as for savings in bank account, credit card payment, risk management and more. It is recommended that policymakers should safeguard the interest of investors from financial abuse and training programs to vulnerable groups.

(Puneet Bhushan, Yajulu Medury, 2013), in their paper financial literacy and its determinants found that overall financial literacy rate is not encouraging. Financial literacy is significantly affected by various demographic variables such as gender, income, employment and education. Financial literacy among males is significantly higher than females. Financial literacy is highest among the age group of 60-70 years followed by 51-60 age groups. Employees working in non government and in urban areas are found to be more financially literate than those working in government and rural respectively.

## **Objectives**

To emphasize India's current position among G20 nations in terms of overall financial literacy and its domain of knowledge.
To review existing literature and identify standard parameters to measure financial knowledge based
on previous studies and emphasize conceptual understanding.

#### Research Methodology

The present research design is descriptive in nature based on secondary sources of information collected from journals, articles, periodicals and research reports published by OECD. Though the objective of research paper is to review existing literature based on financial literacy and observe different indicators of financial knowledge and overview literacy rate across the world among G20 nations. Line graph has been used to show the trend of highest and lowest financial scores of nations. Comparative assessment of India's position has been depicted through percentage chart that nations scored in a survey.

# Research gap

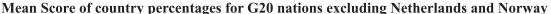
Financial uncertainty is a matter of great concern for every individual's significantly in developing nation due to unawareness and casual behavior. Usually more financially knowlegable people are more likely to be aware and participate in retirement plans (Lusardi 2015). Through extensive review of literature it has been observed that not only emerging economies score low but even major advanced economies of the world face with a crisis in a basic financial domain like diversification, compound and simple interest, bond prices, inflation, money illusion and so particularly to women and low educated respondents (The S&P GLOBAL FINLIT SURVEY). Therefore this paper is an attempt to brief out conceptual understanding of basic and advanced financial literacy terminology so as to demonstrate crystal clear vision to investors before they enter into crucial decision making situation.

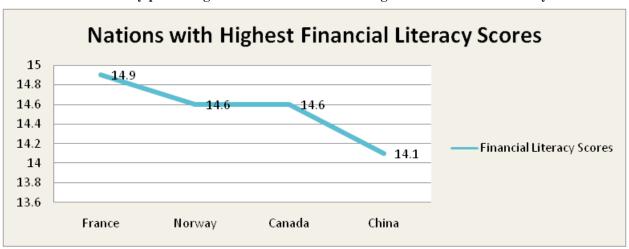
#### Limitations

The paper is an attempt to find different indicators of financial literacy but all could not have been included that serves as a limiting factor for measuring financial literacy. Only the most significant factors affecting financial literacy have been included but there are several external factors that affect the investment power and knowledge of individuals.

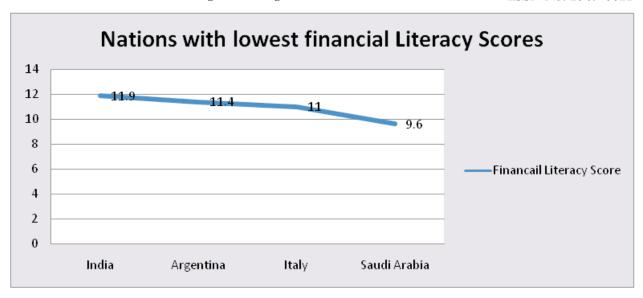
## India status among G20 nations

In a report published by OECD/INFE in response to Hangzhou action plan of G20 leaders that conducted a survey among G20 groups and two guest nations (Netherlands and Norway), India stands among the four least scoring in terms of financial attitude, knowledge and behavior. Overall score was 21 with an average of 12.7 (excluding mean percentages of Netherlands and Norway), India scored 11.9.





Source: G20 OECD/INFE report on adult financial literacy in G20 countries, 2017



Source: G20 OECD/INFE report on adult financial literacy in G20 countries, 2017

Comparative Assessment of India's Performance with highest and lowest financial literacy Score of G20 nations on the basis of selected Indicators of Financial Knowledge

	Time Value of money	Compounding over 5 Years	Risk and Return	Definition of Inflation	Diversification
France	59%	54%	87%	87%	75%
Canada	57%	56%	86%	92%	68%
India	41%	35%	78%	73%	50%
Italy	48%	33%	73%	71%	37%
Saudi Arabia	27%	34%	67%	71%	60%
Average G20 nations	53%	42%	78%	77%	59%

Source-G20/ OECD INFE report on adult financial literacy in G20 countries, 2017

#### **Findings and Interpretation**

The figures depicts percentages of correct responses of nations (France and Canada) highest scoring and (Italy and Saudi Arabia) least scoring in financial knowledge, attitude and behavior (Norway being excluded) out of overall score 21. The green color symbolizes percentage obtained greater than India while red for percentage less than India. It is clearly viewed that out of five indicators of financial knowledge, India is below than average among four and at par with average score of risk and return. Even the Saudi Arabia and Italy are found to better in diversification and time value of money concept respectively than India. Result suggests that respondents in India lack basic knowledge of financial concepts. The differences in percentages between France (highest scoring) and India clearly depicts that there wide scope and gap that India needs to cover to enhance the financial concept that is significantly essential for nations growth and development.

## Financial knowledge Barometer

Financial Literacy is crucial concept as it involves different dimensions of decision making. Being psychological phenomena the parameters of it cannot be defined precisely through concepts. Therefore some of the barometers through which literacy can be measured according to organization of economic cooperation and development and Mitchell Lusardi scales are-

## 1-Time Value of Money

There is a famous sayings, 'A bird in the hand is worth two in the bush' which means that something at present is always more worthwhile than everything in future, because there is risk of loss associated with it. India economy being in a developing mode has a significant relation with foreign market that keeps on fluctuating over a period of time. To illustrate it with an example, the purchasing power capacity of 100 ₹ note is having more than 100 ₹ to be received in future as the value of money goes on decreasing with the passage of time as a resultant of rise in prices of the commodities. The another sense that can be associated with it is that there is always a possibility of investing money in the banks and financial institution to reap the benefits of interest in the long and short period of time. There is also an opportunity cost associated with money that could have utilized if invested elsewhere for a period of time. The future value of money can be calculated as (Shashi K Gupta, Roshi Joshi, 2014)

$$V_n = V_o (1+i)^n$$
 where,

 $V_{n}$  = Value of money at n period

V<sub>o</sub>= Original sum of money

i= interest rate

## 2- Diversification

There are numerous securities floated in Indian financial market depending upon the risk and return characteristics such as bonds, equity, fixed deposits, and government securities. Each security yield return in the form of interest after a maturity. The idea behind the concept of diversification is that in case the return available from a particular class of security is low it can be offset by another such as government securities or from those that yield safe and secure return. To reap the benefit of diversification it is significantly essential for investors to have financial knowledge of different products and securities floating in the market with their return attributes. This is the need of the hour to develop skill among the investors to know the benefits of diversification of their funds. Investing securities in par stock of a company is always riskier than holding more than one security. Markowitz has defined the diversification concept that the risk of investors can be

reduced through diversification in different instruments (Shashi K.Gupta, 2014). There are different models like Capital asset pricing model that determine the composition of different securities based on risk and return attributes.

#### 3-Risk and Return

The entire financial management and literacy concept is based on the concept of risk and return. If there would not have been risk in investment, investors could have invested in any securities for any period of time. Generally government securities are referred to be less risky than investment in equity shares and other private investments. The risk can be eliminated through diversification and portfolio investments. Investments in single stock of a company is always a risky therefore in order to maximize the return investment is always viewed in portfolio. Risk associated with the investment bears a positive and a direct relationship with return on investments. To say, there are different kinds of securities floated in the market such as government bonds, gilt edge securities, fixed deposits, equity linked saving schemes, debentures and bonds of corporate bodies, and more. Investments in government securities yields low return as they carry less risk and there is little chance for deviation of actual return from expected return.

#### 4- Inflation

Another significant measure of financial literacy and management of resources is based on the concept of inflation. Inflation is the substantial rise in the prices of commodities over a period of time that results in the decrease in the value of money. It is obvious that the amount of money that determines the purchasing power of the commodity yesterday will not be same in the near future. It might apparently appear that that the rate of return offered by securities is enough but when we go into in-depth assessment it may be found that the rate of return offered by the invested securities sometimes is not able to cover the impact of inflation over a period of time. Hence, it is always advisable to take into consideration inflation effect while planning for long term financial issues. The inflation concept if ignored proves to be risky transactions.

## 5-Simple and compound interest

Computation capability of an individual is the fundamental requirement of financial knowledge and management. Every investor is supposed to know calculation related to simple and compound interest in their investments. Securities like public provident fund, fixed deposits yield on the principle of compound interest. Money is invested in securities to reap the benefit of interest be it a call loan to earn interest between 1 to 14 days, money market instruments for a period of month or long term securities for more than a year. Compounding techniques refers to a method where interest is provided on a final amount i.e., principal plus interest earned previous year. Sometimes multiple interest are provided during a period of time therefore it is mandatory for investors to have basic knowledge of what are the returns they will get at the end of a year. Even taxation computation ability is of great concern for investors to have proper tax planning before hand.

# Conclusion

Financial literacy is an indicator to economic growth and development of any nation. Different dimensions of financial literacy include financial knowledge, behavior and attitude. India among the G20 nations could not score even the average in overall financial literacy while the percentages obtained in financial knowledge were below the average. The overall result reflects that India needs a proper implementation of financial literacy training programs through educational institutes. The basic concept of financial knowledge is so significance in daily life that it should be included in the school syllabus to make students aware of financial related issues. Issues like diversification, time value of money, calculations of simple interest are the prominent concept that not only facilitate in resolving financial issues but also helps in other working areas of life.

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