

# Financial Literacy: Conceptualization, Measurement and Its Inadequacy among Individuals.

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## ABSTRACT

Financial literacy has assumed immense importance in current scenario. The increasing complexity of the financial markets coupled with deregulation have made financial decision-making tricky particularly for financially unsophisticated individuals. In fact, the low level of financial literacy along with presence of complex financial products in market were two main factors considered to have played an important role in economic meltdown. Policy makers at various levels have been actively supporting financial education initiatives as they believe that it can make strong intervention in doing away with poor financial decision making which results due to lack of financial knowledge. Therefore, it is expected that financially literate individuals would make prudent financial choices which will eventually ensure their financial security or financial well-being. In fact the definition of financial literacy as put forth by OECD lays down that the aim of financial literacy is to improve financial well-being among individuals. Financially literate individuals reportedly demonstrate sound decision making skills, resilience towards economic shocks, better retirement planning, and improved debt management. Some research studies also indicate strong correlation between financial literacy and positive financial behaviours like stock market participation, portfolio diversification, asset accumulation etc. All such behaviours ensure improved financial security and well-being among financially literate individuals. Though owing to importance of financial literacy, it has evoked huge academic interest but a standard definition and measure of financial literacy is lacking. Keeping all this in view, this paper will shed some light on the concept of financial literacy while presenting some of its commonly quoted definitions. The paper will also discuss various measurement methods for financial literacy. The paper also makes an attempt to report financial literacy levels existing across different demographic groups based on various research studies conducted across the world.

**Keywords:** Financial literacy, portfolio diversification, financial well-being, retirement planning.

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## 1. INTRODUCTION:

### 1.1 Significance in current scenario:

Financial literacy has assumed immense importance in current scenario. There are many factors which have added to the significance of financial literacy and have made it a centre for attention from various quarters. Over the recent years there has been a tremendous increase in the number of financial products available and due to this financial landscape is becoming increasingly complex. Knowledge about the basic financial concepts is indispensable to be able to operate in such an environment. It is in fact the primary goal of financial education to enable individuals to easily navigate through complex range of financial products and make a sound financial choice among them.[12]. The increasing complexity of the financial markets coupled with deregulation have made financial decision-making tricky particularly for financially unsophisticated individuals.[3][13]. Such developments have increased the importance of improving financial literacy [7]. In fact, given the complexity of financial environment it is impossible for an individual to operate efficiently today without being financially literate.[10].

Further, market liberalization and structural reforms in pensions have led to a shift in decision power away from the government and employers toward private individuals.[21] Thus the responsibility for financial well-being now lies largely

with the individuals themselves[1]. The individuals are therefore required to actively manage their own finances which cannot be achieved without having financial knowledge.

Financial literacy has particularly become a focus of attention after the sub-prime mortgage crisis because they were largely attributed to the financial unsophistication on part of the investors.[3][5][16]. In fact the low level of financial literacy coupled with presence of complex financial products in market were two main factors considered to have played an important role in economic meltdown[14]. Besides helping in sound decision making, financial literacy is also instrumental in enabling individuals to protect themselves against financial frauds. The benefits of financial education appear across various areas like retirement planning, credit use, savings etc.[15]. It has globally been recognized as an important factor in ensuring economic stability and development.[26]. Improving the overall level of financial literacy will not only improve social inclusion but also contribute towards nation's well-being through increased use of financial services.[8]. The Federal Reserve recognizes that informed, educated consumers not only achieve better outcomes for themselves but, through careful shopping for and use of financial products, help to increase market efficiency and innovation.

The inability on the part of the individuals to make self-beneficial financial decisions not only harms an individual's interest but also entails negative consequences for the economy in general[3]. Since the financial literacy of individuals has a bearing on the entire economy, it is therefore no wonder that governments across the globe are making efforts to impart financial education among their citizens. Improving consumer financial literacy has now become an important objective in public policy with an aim of improving welfare through better decision making (U.S. House of Representatives, Financial Services Committee 2009).

Various financial institutions like investment banks, brokerage and financial advisory firms, insurance companies, etc. are launching many formal and informal financial literacy programmes. Besides this, consumer groups, private employers, community service organisations and local government agencies also carry out such programmes.[23]. Taking steps towards improving the financial literacy should be among the primary concerns of policy-makers as it is not only individuals but society at large that stands out to make gains out of these endeavours.[64]

## 1.2 Concept and definitions

As financial literacy is increasingly being recognized as a core skill among consumers given its role in current complex financial scenario, it has evoked a huge academic interest.[6]. A lot of research has been focused on measuring financial literacy and suggesting means for its improvement. But despite all this, a little attention has been given to developing standardized measures of financial literacy and academic literature lacks a formal definition construct financial literacy. In fact majority of research studies done in this area (72%) did not include a definition of financial literacy [6]. Various definitions of financial literacy have been proposed by researchers over last decade. Organizations as well as individuals doing research in this area continue to use the definitions and measures of financial literacy developed on their own as a standard definition and measurement approach for same is not available in the literature.[13] [17]. Across literature, financial literacy is interchangeably used with terms like financial education, financial knowledge and financial sophistication, financial competency and an explicit definition is lacking.[6][2][7][11].

One of the widely used definitions of financial literacy is the one proposed by Mandell (2007) which defines it as follows :  
“The ability to evaluate the new and complex financial instruments and make informed judgments in both choice of instruments and extent of use that would be in their own best long-run interests”

While the above definitions emphasize the decision making ability and behavioural component of financial literacy, Lusardi (2008) lays down that financial literacy means having familiarity with the economic concepts and possessing financial knowledge. She defines financial literacy as:

“Knowledge of basic financial concepts, such as the working of interest compounding, the difference between nominal and real values, and the basics of risk diversification”

Sandra Houston (2010) conducted an extensive survey of the existing literature related to the financial literature to identify the constructs used to define financial literacy and elements used in measuring financial literacy. This study is an important step towards developing a standardized measure of financial literacy. It is based on review of 71 studies conducted between 1996 to 2008.

Based on this review, Houston defines financial literacy as possessing the financial knowledge and the ability to use this knowledge for making financial decisions.

The Organisation for Economic Co-operation and Development (OECD) defines financial literacy as –

"Financial education is the process by which individuals improve their understanding of financial products and concepts; and through information, instruction and/or objective advice develop the skills and confidence to become more aware of financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being and protection"

OR

“A combination of awareness, knowledge, skill, attitude and behaviour necessary to make sound financial decisions and ultimately achieve individual financial well being.”

This definition is quite comprehensive as it focuses not only on financial knowledge but gives due weightage to behaviour and attitudes of individuals as they directly influence sound financial decision making. Mere possession of financial

knowledge without it being reflected through an individual's behaviour can't be termed as financial literacy. The ultimate goal of financial education programmes is to enable individuals to make better financial decisions and improve the financial outcomes. Such objectives can be achieved when consumers put their financial knowledge to use through improved financial behaviour. It has been stated as the most important component of financial literacy. An inert set of financial information can do no good to an individual. In this context the definition proposed by OECD gives a sound basis for measuring financial literacy as it emphasizes the application part of the financial knowledge.

## **2. MEASURING FINANCIAL LITERACY:**

Houston (2010) based on thorough review of studies conducted between 1996 and 2010 in the area of financial literacy concludes that about 70% of such studies do not include a definition of the concept. Much of the research work in the area has been done without actually defining the concept. Although many definitions have been proposed yet a standard definition for the concept remains elusive till date. Such definitions emphasize on different dimensions of financial literacy but an analysis of these definitions reveals that all such dimensions of financial literacy can be broadly categorized under two heads only- knowledge and an action component.

In most of the studies only knowledge component has been measured to assess the level of financial literacy. Though financial behaviour has been stressed upon as an important part of financial literacy in many conceptual definitions, yet this dimension has been neglected in most of the financial literacy instruments. Few of the studies which include financial behaviour as a part of financial literacy measurement include OECD survey and Moore (2003). Moore(2003) argues that positive financial behaviour is an important component of financial literacy.

In measuring financial knowledge researchers have relied on two types of measures: objective/ actual knowledge and subjective/ perceived knowledge. The former includes an instrument wherein the respondent is asked to answer a number of questions related to various financial concepts while in the latter the respondent is asked to make a self-assessment of his financial knowledge and related skills.

An instrument of financial literacy based on objective measures seeks to assess the level of understanding a respondent has regarding personal finance. Respondents usually display a tendency to overrate their level of financial knowledge when asked to subjectively assess the same. They exhibit confidence about their hold on financial knowledge while the actual levels of financial knowledge are quite low[22]. This finding suggest that relying on subjective measures for assessing financial literacy may not be appropriate.

Most of the operational definitions of financial literacy do not lay down any benchmark score to distinguish financially literate individuals from the rest. Financial literacy score is usually the proportion of questions answered correctly by an individual and such scores are used to draw comparison across respondents or groups of respondents.

## **3. FINDINGS ACROSS DIFFERENT DEMOGRAPHIC GROUPS:**

Most of the research in the area of financial literacy has been done in the US, UK, Australia and other developed countries. In such countries also most of the surveys have focused on college students and equal attention has not been given to the survey of general adult populations.[4]. Financial literacy studies conducted across the globe have invariably reported low financial literacy levels.[1][10][19][25][27]. It holds true even in case of the well-developed economies of the world. Majority of people in U.S lack understanding of even the basic concepts like inflation, diversification, and compounding of interest [18]. Lusardi and Mitchel (2011) conducted a financial literacy survey across eight countries which include Germany, the Netherlands, Sweden, Italy, Japan, and New Zealand, Russia and the USA and reported that financial literacy is generally very low across all these countries. [20] . A comprehensive financial literacy survey conducted by ANZ Banking group in Australia determined financial literacy score of the respondents based on their response to over 100 questions. It included both telephonic survey as well as in-depth interviews. It however reported that most of the Australians possess a reasonable level of financial literacy and having better understanding of most of the financial matters. Findings of widespread illiteracy are also reported in studies on smaller samples or specific groups of the population (Agnew and Szykman (2005), Bernheim (1995, 1998), Mandell (2004), and Moore (2003). Such findings from across the world are a cause of concern and raise apprehensions about the ability of individuals to properly manage their finances to ensure their financial well-being.[24]. Many households as well as individuals have some knowledge about the basic financial concepts like interest, inflation, time value of money etc but the knowledge about stocks, mutual funds and other investment options is particularly low.[1][10].

One of the most extensive survey related to financial literacy was conducted by OECD International Network on Financial Education (INFE) conducted a financial literacy including 14 countries across 4 continents. The comprehensive questionnaire involving multiple dimensions of financial literacy including financial knowledge, financial behaviour and financial attitudes has been used. The results of this study are also similar to others reporting an overall low financial literacy with average score of 13.7 out of maximum score of 22, thereby depicting a huge scope for improvement.

Agarwalla (2013) measured financial literacy among working young in urban India based on OECD questionnaire and studied the impact of various socio-demographic factors like age, income, gender and education on level of financial literacy. The study reveals that compared to other countries Indian respondents display more positive financial behaviours and attitudes but they fair poorly in the financial knowledge questions. The average financial literacy score among the working young in urban India is 13.8 out of maximum score of 22 which is ahead of many countries surveyed by OECD. They also report a strong correlation between financial knowledge and financial behaviour which is in line with the belief that better financial knowledge would lead to positive financial behaviour. But it is important to consider that while the OECD survey considers general population, this survey in India is based on urban working population so the scores may not be comparable as demographic variables like education and income may hugely vary from general population.

Moore (2003) has used a comprehensive measure to assess financial literacy which includes components like financial knowledge, experiences and behaviours. 30.9% of respondents were placed in high score category based on financial knowledge test taken while 33.1% and 36.1% were respectively placed in low and medium category. The study also brings out that individuals generally have low level of awareness about the unfavourable terms related to mortgage loans. It may make individuals vulnerable to financial distress thereby decreasing their financial well-being.

Al Tamimi and Kalli (2009) based on their study among in UAE found financial literacy levels are quite low among the investors in UAE and are particularly low among the women. The demographic variables like age, employment status and monthly income were not found to have any significant impact on level of financial literacy. Education level, workplace activity and gender are found to effect the financial literacy.

Developing countries lag much behind in research concerning financial literacy. Whatever little is known with regard to financial literacy rates in developing countries is based on global surveys of international organisations like OECD. There are only few studies which have been carried out in India aimed at assessing financial literacy level in Indian population. Such studies are few in number and are mostly based on surveys of small areas or specific groups. The research in this area has only recently gathered some pace keeping in view the global trends.

### **CONCLUSION:**

The indispensability of the financial literacy in the current scenario stands clearly established. It is not only significant for improving personal financial management among individuals but also plays an important role in developing a healthy and stable economy. A lot of studies have reported financial literacy to have positive relation with financially beneficial behaviours like savings, investment, insurance cover etc and ensures that individuals are protected from financial frauds. Given its importance, it has become the priority of the policy makers across the globe to bring about initiatives to improve financial literacy among the populations. These initiatives are expected to lead to informed decision making on part of individuals and will thus help in improving their financial security. As the study brings out, the financial literacy levels across the globe are dismally low so it poses a challenge which needs to be addressed immediately to secure financial interests of the individuals. Financial literacy levels are particularly low among low income groups, women, and elderly people. Steps must therefore be taken to impart financial education to such vulnerable groups which will go a long way in improving their financial well-being or financial security. There is also a need for various organisations like educational institutions, financial institutions, and government bodies to evolve a coherent financial education policy which ensure the required financial skills are imparted to individuals to improve their understanding about finance and guide them in better management of their personal finances. Furthermore, more research needs to be done to empirically assess the impact of financial literacy on financially desirable behaviours. Research in the area will also help to find out better ways of imparting financial education.

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