Risk of Financial Illiteracy

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On my honor as a university student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments.

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In the domain of learning, the word “literacy” means ability to read and write. In the domain of finance, the word “literacy” can be taken to mean the ability to read (and comprehend) the terminology, and communicate the needs, decisions, and tasks. The objective of the tasks is financial well-being of the individuals and their families. The skills needed evolve with new tools and techniques brought into the domain. It makes it imperative to acquire skills and use them to make an impact on oneself and people around. In 2008, the U.S. The President's Advisory Council on financial literacy came up with a “consensus” definition of “financial literacy” as “the ability to use knowledge and skills to manage financial resources effectively for a lifetime of financial well-being.” (Kaiser 2017) Financial literacy helps us to build knowledge and skills to manage money well. This paper examines the problem, and solution approaches using socio-technical tools, followed by their analysis and implications.

The Problem

Research findings show that,

- In recent research according to NEFE, one in five U.S Teens lack basic financial skills.
- The Program for International Student Assessment (PISA) shows that 22 % U.S. teenage students lack basic financial literacy skills, and they are totally average when it comes to demonstrating a strong knowledge of financial skills. In the 15 countries that participated in this study, the United States ranks 7th in the evaluation of aptitude in understanding basic finance.
- According to a study of Standards & Poor’s (S&P) Rating services in the US in 2014, little less than half of adults are financially illiterate and financial illiteracy has profound effects on saving for the future and increasing their risks of higher debt.

- Referring to the study Standards and Poor's (S&P) did in 2015, FINCA International noted-
    - Due to lack of knowledge about finance and financial products, many people – in the demographic of lower income groups – are not able to access banking and financial services and are therefore kept out of financial markets.
    - In emerging economies, 31 percent of the richest households are financially literate compared to 23 percent of adults in the poorest households.
    - About 30 percent of women are financially literate compared to 35 percent of men.

Based on recent studies and statistics, the lack of financial literacy is commonly leading to below problems.

1. Credit card debts are reaching all time high
2. Nearly half of population in US do not have enough money to retire
3. Two-Thirds of Americans are unable to afford for $300 emergency expenses

The recent pandemic situation with COVID-19 impacted many families directly and/or indirectly on their financial well-being. While the primary reason for financial instability is due to loss of job and temporary closure of the workplace, other contributing factors are due to lack of financial literacy.

This paper doesn't cover how to address the issues that rise with inflationary pressures and affect all segments of population because of global events. Global events that are triggered through the chain of cascading events like the Ukraine war may cause disproportionate impact on population segments. The Covid related after-effects produced similarly disproportionate impacts. Those require a different set of strategies, not just financial literacy promoting campaigns. Besides the macro level policy measures are needed at the government level, some amount of preparation along the lines of financial literacy would still be useful.

Risks Associated with Financial Illiteracy

Based on recent studies, financial illiteracy is across all economic boundaries from well-educated, high-income adults and low-income to high-income families, who may not know how to manage their money well or budget properly. Financial illiteracy is remaining high as people are not getting educated with basic financial information. (Lusardi, 2019) There is good evidence that financial illiteracy has reached record proportions. This has contributed to a low standard of living in general for many Americans. Following are some of the risks associated with financial illiteracy.

- The stress and anxiety with financial insecurity in families can probably lead to divorce, suicide, domestic violence, and other crimes.
- Financial illiteracy can result in - poor savings, bad spending habits, excessive usage of credit cards, and poor investment decisions.
- Rising numbers of bankruptcies. As per Federal Reserve reports, a typical family that files for bankruptcy owes more than 1.5 times its annual income in short-term, high interest debt. (Orton, 2007).
- The new generations have become a captive audience and easy victims with the increased availability of on-line shopping and gambling, electronic fishing scams and aggressive credit card solicitations. (Mandell 1970)

There are several examples of personal lives of prominent people in sports that earned top figures during their day and went bankrupt when the income dried up or ended on subsistence level. The examples abound in other professional fields of performing arts, others etc. This drives home the point that it is not about just earning money, but to have a financial plan and structure around growth and balance. It affects not just beginners, but also all other age groups.

Why is Financial Literacy Important?

There is a saying – Give a fish, it feeds a person once, teaching how to fish sustains one's living. Similarly, earning money is not enough, but keeping the money growing consistent with macroeconomic indicators, like inflationary pressures, growing with funds that invest through diversified portfolios, balancing across different geographies. Unless otherwise backed by appropriate investment measures, the inflationary pressures diminish wealth.

An understanding of basic concepts in finance empowers people to make well informed financial choices, and the lack of which can lead to people borrowing more and saving less. Being financially literate, one will be able to manage the ups and downs of financial situations with more confidence; to be efficient with your finances in such a way that you can accomplish life's financial goals, by saving diligently to recover from unexpected expenses. <u>It is not about the amount of money, but the process of learning to organize one's life and accomplishing things more efficiently</u> (Huston, 2010). We are in a capitalist society, so it's to everybody's benefit to know as much as they can about being wise about their money so that they can at least give themselves some type of stability in the future.

Overall, financial literacy is affecting everything from day-to-day to long-term financial decisions, and this has had an impact on the decisions (or no decisions) that the individuals make for themselves and which in turn affect the society at large. Lower levels of financial literacy across many countries are correlated with ineffective spending and financial planning, and expensive borrowing and debt management. (Knoll 2012)

How to Assess Financial Literacy?

Recognizing the value of financial literacy and the issues involved, several institutions have sought to measure the levels of financial literacy found among both young and adults at a global level. The level of literacy, which has been closely monitored for several years, is based on a definition of financial competence popularized by research by the Organization for Economic Cooperation and Development (OECD). However, it seems that this can also be supported by other studies on the subject. (OECD 2017)

Simplified way to assess one's financial literacy is to ask some questions about personal finances. Do I know -

- How to create a personal budget?
- Have an emergency fund that covers three months of basic living expenses?
- Any plan for retirement?
- If carrying debt, then is there a plan to pay it off?
- Understanding of credit score and how to improve it?

Approaches for resolving Illiteracy

Depending on the patterns of solutions to address the issue of financial illiteracy, two approaches can be thought of – 1) Collective Engagement, and 2) Individual Engagement. The distinction is based on who the influencer is, and the size of the target audience in shaping the solution.

Collective Engagement approach:

The influencer in this approach will be the government, or agencies that are established with the key objectives in their mission, such as non-profit organizations. The government can handle either directly or indirectly through formulation of policies. Depending on the country and the governance setting there, different solutions can apply. In a capitalistic society like the US, the form of solutions may be different from those in another country, say India, for example.

Observing the measures taken by the government in India to bridge the gap between the financial services and technology and its reach to the public, the following steps stand out. These help to promote the inclusion of the subjects in the financial system as a common foundation.

1. Access to the bank accounts for millions of people in India in mobilization drive, who are otherwise not serviced by the banking system.
2. Adoption of financial technology and making it accessible through the smartphone for the public. This empowered them to pay or receive the payment electronically for transactions using QR code. The prevalent use of smartphones supports these measures.

In the US economy, home equity as an asset for public holding is significant. The government policies are directed at public owning, building growth in home equity as an asset, which adds to financial stability of the households, and thus the country.

In another variation of collective engagement, there is a notion that practical hands-on experience as part of group exercises/workshop can gain valuable practical knowledge to the public in finance/economics. This is a way to bring economics to the public at large. This is exemplified in the paper (Medvecky 2016) – "**Participative Budgeting (PB)**," which is the general term for a very wide range of programs run in 1,500 cities internationally in which citizens are given a say over how a portion of public money is spent. The first and most famous instance of PB was developed in Port Alegre, Brazil. This is based on the premise - The public may not know about the technical instruments' economists use to measure, theorize, and impact the economy. But they do know something of what they want economics to do for them, their families, their communities, and their environment.

In the US, the operation of the HOAs can be an example of Participative Budgeting. The use of funds efficiently on prioritized programs is achieved through the collective participation of the constituents in the association. The smaller the size the HOA, the greater the participation of people involved. Larger associations tend to have lower participation as few handle most of the budgeting for the majority. In India, the example closely related to Participative Budgeting, is Panchayat Raj (Wikimedia, n.d.), which is a form of local self-government that operates at the lowest level of hierarchy.

Education Outreach:

More than any time, it is very important to build the financial knowledge and capability of all our students. To better navigate their financial futures and be prepared to make smart choices, students need to learn about earning and spending, saving and investing, using credit wisely, paying for college, and recognizing and avoiding financial fraud. (Amagir 2018)

Financial education is a crucial foundation for raising financial literacy and informing the next generations of consumers, workers, and citizens. Many countries have taken efforts in recent years to implement and provide financial education in schools, colleges, and workplaces. To be effective, financial literacy initiatives need to be large and scalable. Schools, workplaces, and community colleges and platforms, and non-profit organizations conducted workshops, etc.

provide unique opportunities to deliver financial education to large and often diverse segments of the population. (Beverly, 2007).

In addition to the potential for large-scale implementation, the main components of any financial literacy program should be tailored content, targeted at specific audiences. (Cude, 2006) An effective financial education program efficiently identifies the needs of its audience, accurately targets vulnerable groups, has clear objectives, and relies on rigorous evaluation metrics. (Braunstein, 2002) A key lesson is that when it comes to providing financial education, one size does not fit all.

Individual Engagement Approach:

The individual engagement means the tools will be experienced by the consumers individually instead of this being a group exercise. The tools are technology based with either direct interaction by the consumers or indirect interaction through the consultant/advisors. These are noted as the following socio-technical tools.

1. Free annual credit report is available at https://www.annualcreditreport.com
2. Education to become homeowner (mainly from Government Sponsored Enterprises, Freddie Mac, and Fannie Mae)
3. Tools available at finance and banking websites, including financial planning sites.
4. Trading apps for stock and crypto currencies. (Which employ the gamification to hold the interest and develop the class of investors.
5. Consultation with the financial planners, who employ tools on the client's behalf.

Analysis of Socio Technical tools:

Free Annual Credit Reports:

The advent of credit reports of individuals requires an understanding of it as a concept, and how to manage the financial behavior to ensure performance that will be rated well. (Access to credit reports is made possible by federal law, which mandates that the user get a free annual credit report from each of the credit reporting agencies. All credit reports from the three agencies are made available, once per year, from the website, https://www.annualcreditreport.com. Besides showing a glance at credit performance of an individual, there is a possibility to glean the information on suspicious transactions. The alerting mechanism on such transactions is being made available to many credit card services for a small fee.

The tool provides an unbiased view of the state of credit history and performance of a consumer, thus making it a valuable tool for keeping with financial health awareness.

Education to become homeowners:

Home-ownership is an important avenue for most Americans as the source of stable wealth generation. Of the percentage of renters, there is always a desire to become a homeowner. The Government Sponsored Enterprises (GSEs), Freddie Mac, and Fannie Mae, as they operate now, serve the mission – to provide affordable, sustainable homeownership. To provide equitable homeownership opportunities, they remove the entry barriers through different means, one of which is preparing to become a homeowner. (Fannie Mae, n.d) The GSE provided tools are available assessing the homeowner readiness to homeownership and provide a score. The tools are provided through counseling agencies and perhaps they may be available for direct access also in future.

As the information comes from the mission serving GSEs, and considering that they don't directly deal with the homeowners as the consumers, but through lenders in the secondary mortgage market, this source can be highly trusted reasonably as in the best interest of the consumers. The gamification concept can be manifest in that the homeowner readiness assessment is assigned a score, and steps to guide for improvement of the score. The gamification lies in treating the score a competition to strive better against.

Trading apps:

Gaming is powerful in drawing the player attention, focus, and learning through simulation. Simulation of battlefield exercises are almost close to real; we hear they can be supplemented as low-cost additional training besides the field exercises. Example of poker game with not real money gives the feel of gaming and training to play it, which requires understanding of key concepts of betting, watching the situational dynamics and sensing where you could place what level of bets, which involves same kind of risk taking as when playing in real with real money. This is made possible with software supported simulation.

If gamification can be successfully applied in other fields, they could be applied equally in the financial literacy field, too. The trading apps cut the entry barrier to the space typically reserved for big institutions. They draw attention to them from the people applying the same techniques of gaming, including simulation. It is not uncommon to see teenagers applying observations collected through simulation and exercising through real trade transactions. Some examples of gamification based trading apps include Robinhood, WebBull, etc. While the gamification-based trading apps makes entry and transacting easier, and facilitates conscious effort on the user to learn and understand the basics of finance, they can have drawbacks.

During the covid time (Želinský, n.d.), several trading accounts are opened, and increased trading activity. It can't be said they are based on prudent decisions. The same features of gamification that promote attachment through irrational, but emotional connection, can also cause irrational risk taking through simplification. Further there is a limitation of gamification in not erasing the boundaries between insiders (meaning experts from institutions) and outsiders (meaning consumers as investors), as the gamification-based trading apps are not designed with that objective. To provide the general safeguards, the policy should require the apps to include notice of inherent risks. Besides reminding through notification, there is little that prevents the risk-taking behavior.

Tools available at banking and third-party web sites:

Personal bankers and credit card issuers provide tools to track spend patterns that will help understand where money is going and where a person stands with financial situation. Tool capabilities include - getting alerted to potential fraud as soon as possible, getting credit scores, and credit inquiries, etc.

The tools can be trusted, if they are provided by the banking sites that the consumers have relationships with already. Suspect the third-party websites that are not already tried and trusted by others. Be aware of the scams that employ techniques such as phishing emails and other means to extract the account access information to steal the money from bank accounts and portfolio accounts.

Financial Planner consultation:

Financial literacy is also accomplished through the financial planner consultation. The consultation can be periodic, which covers all aspects, including managing the investments, growth, budgeting, saving for college, retirement planning, debt consolidation, wealth management, and wealth transfer, etc. Typically, the following steps among many are considered during the financial planning consultation exercises:

- Creating a budget of expenses and disposable (investable) funds against the income and tracking it periodically.
- Creating an emergency fund to support 4-5 months of expenses at any time, when interruption of income occurs.
- Planning for retirement cash flows to support the retirement and other lifestyle goals, etc.

Compared to all other tools, this one tool has a comprehensive view of one's financial health for current, and future needs perspective. The financial advisor provides professional assessment and many fundamental steps in preparedness for most of the life needs of one and one's family. Trust of the advisor is critical, so choice must be informed as by referrals among the network of friends and neighborhoods. Some employers offer free financial counseling or an employee financial wellness program. Typically, the financial planners wouldn't directly charge the customers for the services, but through the earnings on the investments managed by them.

Conclusion

Financial literacy is to have a basic understanding around saving, investing and debt taking that leads to an overall state of financial well-being, which in turn leads to self-trust, and self-respect. It all starts by building basic knowledge of money matters at home, in the community, and through understanding of debt management, investment risk, savings options and other financial aspects as you grow.

The recent economic crisis and the increasing complexity of our financial system makes it clear that strengthening the financial knowledge and skills of people of all ages is critical to the economic and social fabric of our communities, and financial stability of our country.

There is a need to have a clearly defined set of standards for providing solid financial education that is appropriate and establishes a path to positive actions, and support for involvement in community expend situations as in Participatory Budgeting. Additionally, a pool of trained educators is crucial to effectively deliver financial education outreach and to cover the needs from all socio-economic backgrounds.

Of different types of socio-technical tools, the class of tools, “Trading Apps” which make it easier for entry can potentially cause adverse effects also. Adequate safeguards can be instituted in them through government policies in the public interest. Certain socio-technical tools are reasonably safer as examined in view of policy mandated protections.

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