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Financial Literacy During a Crisis: Financial Lessons Learned from COVID-19

Kirti Goyal
School of Business and Commerce, Department of Business Administration, Manipal University Jaipur, Jaipur, India, kirticommerce@gmail.com

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Financial Literacy During a Crisis: Financial Lessons Learned from COVID-19

Abstract

Background – Coronavirus Disease 2019 (COVID-19) has spawned a global health and financial crisis. It is high time we acknowledged the importance of financial literacy in preparing financially vulnerable households to get through tough times. Objective – This paper aims to highlight financial lessons learned from the pandemic, focussing on the role of financial literacy in the judicious financial behaviour. Material and methods – The paper amalgamates the concept, levels and outcomes of financial literacy, followed by the discussion on financial education. A framework is presented presenting the crisis's impact on well-being and the noteworthy lessons. Results and conclusions – The diverse aspects of financial behavior that fundamentally depend upon financial literacy will be critical during COVID-19 and its aftermath. Having emergency funds, investing wisely, conservative borrowing, insurance coverage, financial goals, fin-tech and financial inclusion are the life-saving skills that protect from financial fragility and build financial resilience. The study intends to provide readers with a thumbnail of various aspects of financial knowledge that are often neglected in routine , and suggests future research agenda. This study will aid researchers, policy-makers and financial educators in developing strategies that are critical to economic recovery and future financial preparedness.

Keywords

Financial literacy, Financial behaviour, COVID-19, Financial resilience, Financial fragility, Emergency savings, Financial education

RESEARCH ARTICLE

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Kirti Goyal

School of Business and Commerce, Department of Business Administration, Manipal University Jaipur, Jaipur, India

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1. Introduction

COVID-19 has spread around the world, and the World Health Organization (WHO) has declared it a global pandemic. The disease has resulted in a large number of confirmed cases and deaths in more than 180 countries (Kumar & Pillai, 2020). COVID-19 has already been labeled the ‘Black Swan’ of 2020, having catastrophic economic after-effects. According to the International Monetary Fund (IMF), the ‘Great Lockdown recession’ has turned to be even more damaging than the ‘Great Depression’, as it has caused two interrelated contagions at the same time - health and financial (Gopinath, 2020). Closure of businesses, unemployment and loss of earnings fueled anxiety over the financial well-being of households. December 2020 unemployment reported by the Bureau of Labor Statistics was a disturbing 6.7%. (Henricks & Foreman, 2021).

A recent study by Goyal et al. (2021) shows that the COVID-19 has caused financial distress to Indian households (Kalakata et al., 2021). There is emerging literature on how the COVID−19 is impacting the financial markets and economy (Sahoo & Ashwani, 2020; Shukla et al., 2021) and how it has turned up as a financial contagion (Akhtaruzzaman et al., 2020; Baker et al. 2020a, 2020b; Devpura & Narayan, 2020). During the turmoil, households experience everlasting jerks to their financial lives, including insufficient liquid assets to cope with current as well as future plunges in income, combined with a higher spinning credit card obligation (Farrell et al., 2020).

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E-mail address: kirticommerce@gmail.com.

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In an escalating financial crisis, the role of financial literacy is manifold, as it makes people financially resilient and lessens the risk associated with carrying too much debt and mortgage delinquency (Klapper & Lusardi, 2020). People who are financially literate can perform better in terms of job planning (Lusardi & Mitchell, 2014) and can diversify their savings (Hastings & Mitchell, 2020). Financial literacy is also associated with financial fragility and the ability to handle unprecedented distress (Lusardi et al., 2011). The cost of being financially illiterate can be too high during the economic volatility brought about by COVID-19. The need for financial education will be tremendous as society moves towards restoration of normalcy (Hensley, 2020). The survey in October 2020 by National Endowment for Financial Education (NEFE, 2020) shows that nearly 4 out of 5 (84%) people in the US say that they still experienced COVID-19 related financial stress. About half report that they are concerned about not having emergency savings and are worried about the payment of their monthly bills. About 33% are concerned about job loss.

Taking a cue from the COVID-19 pandemic, an introspection is needed as to what part education in financial literacy plays in people's preparedness to deal with economic threats, managing personal finances during a crisis, and recovering at the earliest possible. The purpose of this paper is threefold: 1) to discuss the concept of financial literacy in the context of financial planning in general and financial crisis in particular, and current state of the level of financial literacy as evidenced in the extant literature, 2) to elucidate the financial impact of the COVID-19 and the noteworthy financial lessons COVID-19 has taught us, and 3) to emphasize the importance of financial literacy and financial education in achieving financial resilience during a crisis and its aftermath. Pursuing the current objectives, we present a sketch of the relationship that exists between financial literacy education and financial planning amid this pandemic, to embrace the crucial role that financial wisdom acts during the difficult times as such. It offers suggestions to policymakers, financial educators, researchers, and financial counsellors and planners to develop strategies to recover from the crisis. The paper is structured as follows: Section 2 provides research methodology of this study. Section 3 delineates the concept of financial literacy and pandemic financial crisis, while Section 4 covers the level of financial literacy around the world. Section 5 deals with the importance of financial literacy to deal with COVID-19 economic crisis in the context of financial well-being, emergency savings, debt, investment and insurance behavior. Section 6 covers the role of financial education in the time of pandemic financial crisis, while Section 7 details the financial lessons learned from COVID-19. Section 8 concludes the study, suggesting future research directions.

2. Research methodology

As stated earlier, the present paper is aimed to assess the impact of COVID-19 on finances of all the individuals and elucidate the importance of financial literacy in this context. To achieve the study's objectives, some extracts have been drawn from the extant literature available on various sites of internet in the form of highlights from various institutions like world Bank and IMF and so on. Further, research articles and reports of various surveys held related to the financial impact of COVID-19 were referred. The relevant information available in various forms and at various sources was scanned and interpreted carefully while drawing a right conclusion for this study. It is worthy to mention that this study is exploratory in nature.

Presently, there is a dearth of data regarding the financial impact of COVID-19 but only the intuitive estimates are there in hand. The most data is available only about the number of positive cases, no. of deaths, cases recovered and so on. On account of non-availability of quantitative data, the use of statistical tool was not possible, hence a descriptive article has been drafted with the help of online views of experts regarding the impact of ongoing pandemic. These experts mainly belong to financial planning domain, Chartered Financial Planners, Financial Educators, etc. They have deeply observed the current scenario of financial literacy and financial planning during and before COVID-19, and therefore shared their expert opinion on this topic in the form of scholarly research and various online platforms. It should be noted that this study is in the global context, irrespective of the financial impact of COVID-19 on any particular country.

3. The concept of financial literacy and pandemic financial crisis

3.1. Theoretical underpinning

Keynes (1936) determined eight reasons for saving from which precautionary motive is the most important. According to the crisis theory, a crisis takes place when the problem is more difficult than the availability of resources to deal with it (Caplan, 1964). According to the theory on buffer stock of wealth, risk-averse individuals focus on wealth accumulation to cover themselves against shocks (Deaton, 1992, p. 16). The timely identification of peoples' ability to cope with economic shocks, and assessing their vulnerability promotes us to introduce the concept of 'financial resilience'. According to Salignac et al. (2019, p. 5), 'Financial resilience is an individual's ability to access and draw on internal capabilities and appropriate, acceptable and accessible external resources and supports in times of financial adversity'. In other words, resilience is an individual's capacity to 'bounce back after adverse events and experiences, to readjust to changing circumstances and to deal with environmental stress' (Abbott-Chapman et al., 2008, p. 612).

Due to the complexity of human nature, many factors, such as their income and wealth, along with various demographic, socio-economic characteristics and psychological attributes, may affect an individual's choices, capacity to save, and ability to cope with shocks. The importance of psychological aspects is recognized in the Theory of Planned Behavior (TPB) (Ajzen, 1991), which examined the attitude-behavior relationship. According to the TPB, among other factors, attitude shapes behavior intentions which in turn shapes behaviors. An individual's actions on managing the finances depends also on the level of an individual's financial literacy. Such relationship is supported by the theory of social learning which highlights that observational learning impacts financial behavior (Bandura, 1986).

3.2. Financial literacy and financial planning

An individual's forethought on how much he earns, how much he spends and how much he owes is the essence of his financial well-being. It is a money management aptitude which is accomplished through financial literacy. 'Financial literacy is the measure of the degree to which one understands key financial concepts, and possesses the ability and confidence to manage personal finances through appropriate short-term decision making and sound, long-range financial planning, while mindful of life events and changing economic conditions (Remund, 2010). It is a life coach whose scope is not restricted to economic understanding. It broadens one's ability to administer routine personal finance with the help of that knowledge. Several studies reveal that people with financial literacy are more likely to exhibit judicious financial behavior (Atkinson & Messy, 2012; Shim et al., 2010) and are better equipped to cope with macroeconomic collapse (Klapper et al., 2012). Financial literacy results in the optimization of personal family budgets, making a provision to save more. Research shows that people with higher financial literacy are able to manage their everyday finances more efficiently (Hilgert et al., 2003; Selim & Aydemir, 2014). Financial literacy is positively correlated with saving (Lusardi & Mitchell, 2014), and the dearth of financial literacy hinders wealth accumulation by households. While it has been well recognized that taking ideal saving decisions is a strenuous task when the future is unpredictable and people lack the wisdom to make a calculative saving plan, a knowledge of interest rates and inflation can help park the funds in a befitting portfolio.

Not only saving, but also prudent borrowing behavior is achieved with the help of financial literacy (Lusardi & Tufano, 2015). Sub-optimal borrowing behavior, such as high-cost informal borrowing, failure to refinance mortgages, the use of costly credit cards and burdensome loans can be avoided when an individual is financially literate (Klapper et al., 2012; Xiao et al., 2011). Financial education pertaining to specific health insurance and life insurance products also enhances insurance literacy (Tennyson, 2011).

Fig. 1 shows the framework of the financial impact of COVID-19 and the lessons learned from the pandemic in the specific context of financial literacy and financial education.

> *"April is Financial Literacy Month, and this year it could not have come at a more difficult time. Although it may feel like a perfect storm, we also need to remember that it is during a storm that sailing lessons prove their worth. And by sailing lessons, I mean the skills that come from financial literacy".* (Lusardi, 2020, p. 1).

4. Levels of financial literacy: evidence around the world

In the wake of the economic slump caused by the measures to combat COVID-19, it is imperative to find out whether people are literate enough to be able to have planned their everyday finances in such a way that they can keep afloat and have a long-term relief plan, post the pandemic. Recent surveys in the US demonstrate that knowledge related to personal finance has remained tenaciously weak over time (Lusardi, 2019). According to Lusardi and Mitchell (2011), data from the Flat World project demonstrated that the world is flat in terms of financial literacy levels across developed and developing nations. Not only low, but middle-income individuals may also find it difficult to meet ends as 1 in 5 of such individuals spends more than they earn

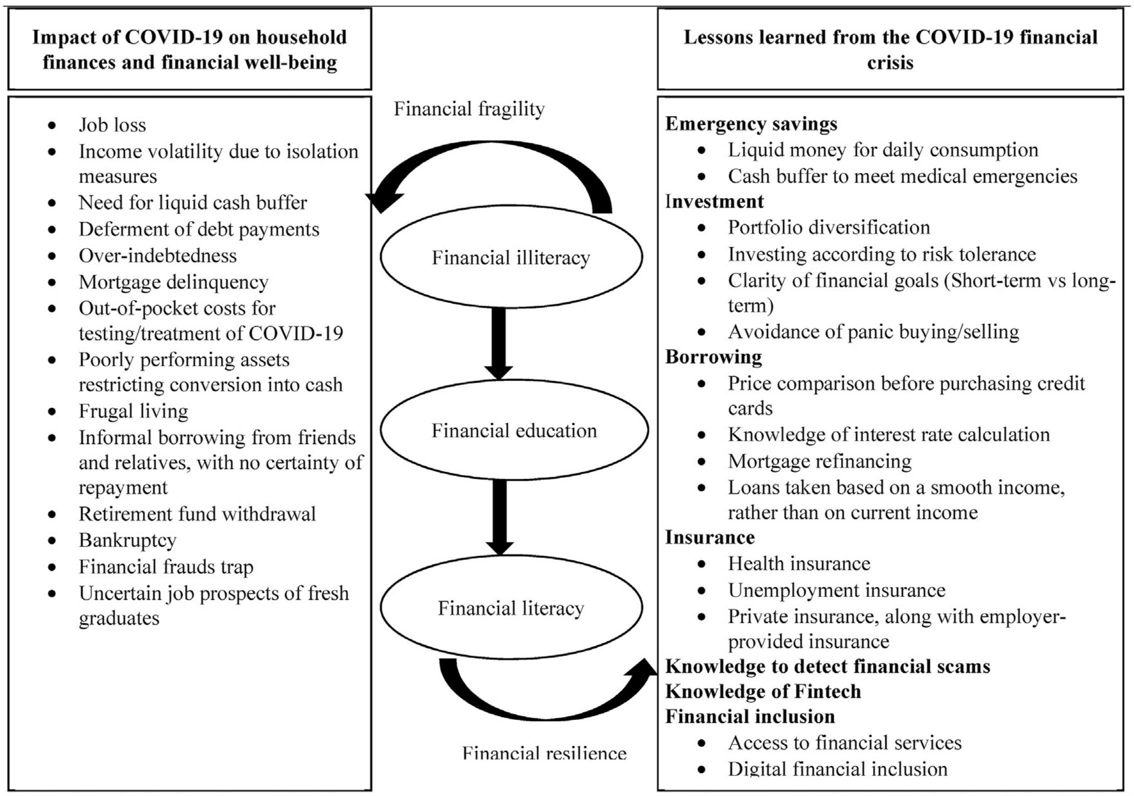

Fig. 1. Framework showing the impact of COVID-19 on personal finance, and the financial lessons learned from pandemic crisis. ***Source:*** *Authors' own collaboration.*

across the OECD countries (OECD, 2020b). This turned the attention on the alarmingly low knowledge level in low, middle and even high-income groups, and among all age groups and education levels. According to a latest survey (OECD, 2020c), young people appear to have lower financial literacy and worse financial attitude scores than the rest of the sample consistently and significantly. A survey by National Foundation for Credit Counselling (NFCC), Americans show poor financial behavior as 62% of U.S. adults have carried out credit card debt in last 12 months (NFCC, 2020), which may relate to the lack of financial literacy among them.

Italy and Spain, which are the hardest-hit countries in the COVID-19 crisis, show the lowest level of financial literacy (Fornero & Monticone, 2011). Across G20 countries, not even 50% of the adults could secure a minimum target score (70%) in financial knowledge, with an extremely poor knowledge of compounding and diversification (OECD, 2017). There has been only a 3% rise in the US financial literacy levels between 2017 and 2020. (Yakoboski et al., 2020). The continued evidence of a low level of financial literacy poses a serious threat to the financial well-being of households and makes them financially fragile (Lusardi et al., 2011).

Financial literacy levels were weal before COVID-19. In 2017, 49% of 2017 respondents answered financial literacy questions correctly. According to Yakoboski et al. (2020), in 2020, respondents answered 52% of the questions correctly, a failing grade. Unfortunately, understanding risk and insuring are the functional areas where knowledge is lowest, which matters most in economic turmoil. Respondents correctly answered 64% of borrowing questions, 47% of insuring questions, and 37% of risk questions. Ordinary financial decisions can be difficult without a solid financial knowledge base. In extraordinary times like these, when risk and uncertainty are amplified, it is even harder.

5. Financial literacy and financial planning: a quintessential agenda to cope with the covid-19 financial crisis

Extant research shows that planning is strongly correlated with financial literacy, which, in turn, brings about an increase in wealth of an individual (Lusardi & Mitchell, 2007; Nam & Loibl, 2021). There exists a relationship between financial literacy and investment behavior (Ahmed & Noreen, 2021). Debt literacy enables the process of making routine financial decisions regarding credit and low debt literacy may lead to over-indebtedness (Almenberg et al., 2020; Lusardi & Tufano, 2015). Those who are weak in calculating the interest rate appropriately tend to take accumulate more debt (Lusardi & Tufano, 2015). The evidence of poor financial literacy is prevalent worldwide, among all age groups (Lusardi & Mitchell, 2007). Education may stimulate better planning behavior (Bayer et al., 2009).

Before the world could get rid of the blemishes of the depression of 2008, the masses now have to cope with the repercussions of income loss. This is manifesting in the form of poverty and the failure to make ends meet, as coronavirus hits the health and financial well-being of the people (OECD, 2020a). Fig. 2 shows the percentage of households in affected countries who found that the COVID-19 was likely to impact their personal finances. Initially, when the Italy and China, were the most hard-hit countries by COVID-19, 75% and 89% people respectively believed to have an impact on their finances. However, according to the data by Worldometer in May 2021, the United States and India are the two most affected countries which already believed to have a considerable impact on their finances. As per OECD, more than one-third of households lack financial security, and do not have buffer funds to sustain their family's needs for more than 3 months in case of an income break. The most vulnerable are the young, the poorly educated, couples with children and families with a single earning member. Even middle-income families will find it hard to sustain themselves, because in 20% of the households, the expenditure is higher than the income (OECD, 2017). Also, over-indebtedness is more prevalent among households with mid-level income than in households with low or high income (OECD, 2019). Thus, irrespective of the income groups, the COVID-19 crisis builds a strong case for being financially prudent, in order to be able to cope with the financial strain resulting from income loss due to the shutting down of businesses, unemployment, wage cuts and the exhaustion of funds in healthcare emergencies.

5.1. Financial literacy and financial well-being

An online survey was conducted by BFA Global in Wave 2 on April 11, 2020 and April 12, 2020. It polled 1646 respondents from low and lower middle-income groups in eight countries viz., Ghana, India, Kenya, Mexico, Nigeria, South Africa, the UK and the US. The results reveal that there was a fall in financial well-being, worldwide (Amin, 2020). Data demonstrates that the income had fallen for more than half the respondents, while expenses had increased. Less than half of them had emergency funds and overall, respondents expected a decline in their financial well-being. Table 1 shows the recapitulation of the effects of the COVID-19 on financial well-being. According to the World Economic Forum, the world saw COVID-19, first as a financial crisis and then as a health crisis. Financial literacy is a pre-requisite for better financial well-being and fewer financial concerns (Taft et al., 2013, p. p63).

5.2. Financial literacy and emergency funds

According to Keynes (1936), the first and foremost motive for saving by people is 'To build up a reserve

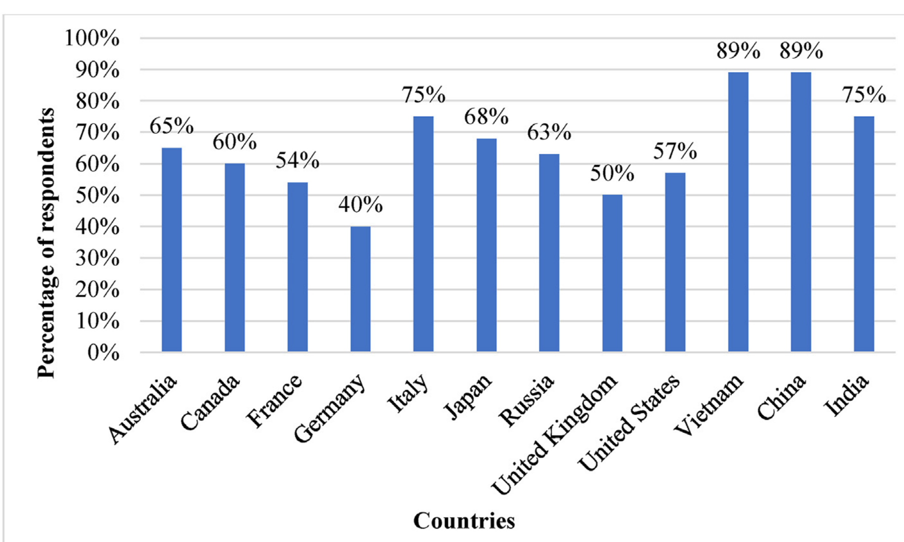

Fig. 2. Percentage of people in the most-affected countries who believe that COVID-19 is likely to have an impact on their personal finances (as of March 14, 2020). ***Source:*** *Statista (2020).*

Table 1. Overview of effects of the COVID-19 on financial well-being.

Metrics	Ghana	India	Kenya	Mexico	Nigeria	South Africa	UK	US
Income has declined	62%	56%	81%	62%	73%	66%	33%	46%
Expenses have increased	56%	39%	51%	54%	49%	39%	26%	35%
Have emergency funds	34%	72%	39%	49%	44%	33%	40%	47%
Have stocked up	74%	69%	67%	75%	68%	65%	46%	69%
Will be delayed on debt	80%	87%	90%	78%	81%	83%	59%	53%
Expecting serious financial shock	75%	56%	86%	65%	57%	70%	29%	39%
Expecting serious health shock	11%	29%	25%	13%	16%	20%	20%	23%
Weeks of cushion	6.1	6.8	5.2	4.2	5.8	5.4	6.4	6.2
Have funds to continue business on half revenue	23%	42%	19%	10%	28%	20%	29%	36%
Business revenue will fall significantly	50%	33%	52%	64%	34%	52%	17%	50%
Business may have to shut down due to the crisis	30%	35%	41%	43%	33%	43%	13%	28%
Still residing at same place	86%	81%	73%	92%	73%	90%	92%	90%
Most or all abide by restrictions	73%	84%	71%	69%	65%	71%	85%	68%
Life is unbeatable or will be in a few days	13%	7%	11%	11%	20%	9%	3%	5%

Note: The figures show the percentage of low and lower-middle income respondents in eight countries who believed that their financial well-being was affected by the COVID-19 on the basis of various metrics. **Source:** Amin (2020).

against unforeseen contingencies' (*the precautionary motive*). This theory is based on the inter-temporal consumption and saving behavior in a life-cycle model. Households must set aside some amount of wealth to provide them with a financial shield in times of crises (Deaton, 1992, p. 16). Emergency funds are the highly liquid funds set aside and which can be used to cover the expenses for 3–6 months in case of unemployment, a health emergency or economic distress (Greninger, 1996). Such funds can be in the form of cash (either in checking or savings accounts) or money market funds. Other forms of quick funds are certificates of deposit, stocks, bonds and mutual funds.

The COVID-19 pandemic has forced the affected countries around the world into a complete lockdown, leading to a temporary shut-down of businesses, and a halt in the income of daily wage earners, businessmen and salaried professionals (Gopinath, 2020). At times like this, only those who had set their financial goals and kept a buffer aside for a rainy day are able to sleep comfortably and meet the essential needs of their households for a few months to come (Farrell et al. 2020).

Households who are financially literate are more likely to maintain emergency funds, and are less financially fragile (Babiarz & Robb, 2014). Of course, there are various factors that determine the holding of emergency funds by households. Older people, those who are well educated and those having an income are more likely to have emergency funds (Chen & DeVaney, 2001). But it has been further shown that it is not only the households whose income is less than or equal to expenditure that fail to save. Even those whose income is more than their expenditure are not likely to save for emergencies (Babiarz & Robb, 2014). Additionally, the findings of Steinert et al. (2018) rule out the misconception that poor people are 'too poor' or 'too unsophisticated' to save. There is evidence from the global financial crisis of 2008, when households reported an inability to meet emergency fund needs (Klapper et al., 2012). The results of the Global Economic Crisis Survey revealed that almost half of Americans and all others across the world were not self-assured in their ability to turn up with $2000 in a month (Lusardi et al., 2011).

Research on financial literacy suggests that financial education, in order to change such behavior related to precautionary savings, is a prerequisite for better financial security and resilience (Lusardi et al., 2011). According to 'The 2020 TIAA Institute-GFLEC Personal Finance Index', knowledge about risk is poorest among US adults, which makes people there vulnerable in an uncertain environment. Out of those with better financial literacy, approximately 85% find it easy to make ends meet in a typical month. Fig. 3 shows the percentage of adults in the US, according to their financial literacy levels, who find it easy to make ends meet.

5.3. Financial literacy and debt literacy

Debt literacy is an intrinsic component of financial literacy. According to Lusardi and Tufano (2015), 'Debt literacy refers to the ability to make simple decisions regarding debt contracts, and applying basic knowledge about interest compounding to everyday financial choices. People with low levels of financial literacy are more likely to opt for costly mortgages and less likely to take advantage of mortgage refinance when interest rates fall (Klapper et al., 2012). Due to financial illiteracy, people purchase costly credit cards without being aware of the

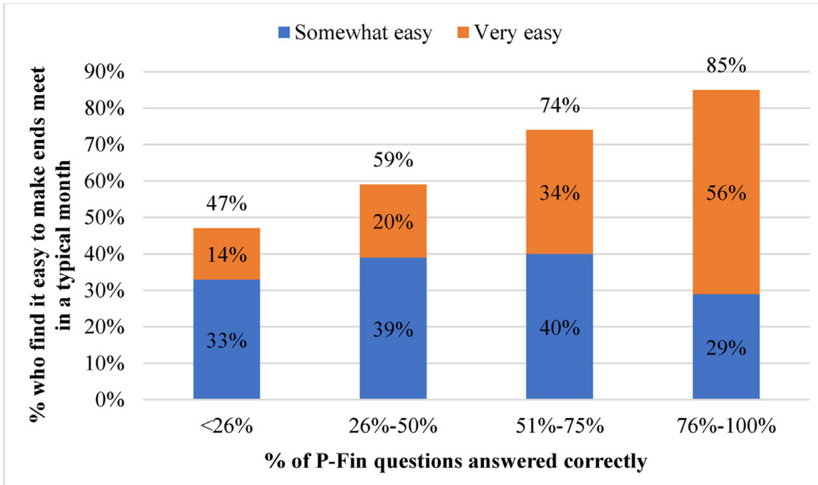

*Fig. 3. Percentage of adults in the US who find it easy to make ends meet on the basis of their financial literacy levels. **Source:** TIAA Institute, The 2020 TIAA Institute-GFLEC Personal Finance Index.*

associated fees, and end up with heavy debt burdens due to non-payment of credit card bills (Gathergood, 2012). Those who are unable to calculate interest rate in a stream of instalments may borrow more and end up with less wealth accumulation (Lusardi & Tufano, 2015).

Evidence around the world shows indebtedness among people as a result of financial illiteracy (Lusardi & Tufano, 2015). Among OECD countries, on an average, 11% of middle-income households are over-indebted (OECD, 2019). Loan deferrals for 3 months may provide short-term relief to the households facing income loss during the global COVID-19 pandemic. However, the likelihood of joblessness due to the looming economic crisis post the pandemic can complicate the financial health of the households, when they will be burdened with hefty debt taken earlier with poor foresight (Farrell et al., 2020). Also, those households who are out of emergency cash holdings will resort to additional credit assistance, thereby raising their debt burden. Loan repayment depends on future income, and if that income flow is at stake for an uncertain reason, a person can go into a debt hole (GFLEC, 2020).

5.4. Financial literacy and investment behavior

Since the financial markets are becoming intricate, it is onerous for an individual with a lack of financial literacy to calculate the risk and return related to unfamiliar financial products (Hensley, 2020). As far as investing is concerned, many people are not able to quantify their short and long-term financial goals. This, and a poor knowledge of risk, may result in sub-optimal decisions in investing. Careless investing increases the chances of leaving the individuals with insufficient wealth in times of need (Hastings & Mitchell, 2020).

Individual preference for one investment over others, primarily because the expected utility is higher with this investment than with alternatives. Capitalists anticipate maximising utility. Utility theory can be used to explain situations where a decision-maker must choose between a risky prospect and the utility value that is anticipated to be realized, according to Asri (2013). The choice is made by weighing the utility of the anticipated result times the probability. The decision-maker is assumed to be confident in each outcome's probability when using theory. Households with better financial knowledge are more likely to invest in a way that may result in accumulation of wealth over time (Atkinson & Messy, 2012). Financial illiteracy follows poor assumptions about the pricing of the asset and over-affirmative expectations on appreciation in future price. Financial literacy is also associated with portfolio diversification; so, those with poor knowledge mostly hold undiversified portfolios (Hastings & Mitchell, 2020) which restrict their ability to liquidate their funds during a financial slump, when the markets are volatile leading to unexpected losses. Thus, financially informed investors have diversified portfolios that can provide them with a risk appetite adequate enough to achieve desirable returns (Hilgert et al., 2003).

March 2020 witnessed one of the most tragic stock market crashes in history (Mazur et al. 2021). Various stocks exhibited volatility at its peak that correlated negatively with investment returns. With any unforeseen news, markets lose nerve and following the available information, people try to interpret the consequences more broadly. The emergence of negative emotions and pessimistic attitude drive investors to terminate financial investment in the stock market as a result of which the stock market returns fell (Naseem et al., 2021).

The COVID-19 pandemic can enable us to visualize the effectiveness of portfolio diversification. Due to the outbreak of the virus, stock markets are responding negatively, with equity prices falling, thereby making the investors 'unsuccessful' (Baker et al. 2020a, 2020b). There is a para mounting drop in the stock market as a result of pandemic. In order to mitigate business losses, central banks have reduced the rates of interest globally (Rosario & Mazumdar, 2021). As a result of falling interest rates, there is an upsurge in bond prices. In such a scenario, investors skewed towards equity investment would be distressed, while those whose portfolios are spread across equities and fixed income assets would be composed during the turbulence (Hensley, 2020). This creates a strong case for financial literacy in portfolio diversification.

5.5. *Financial literacy and insurance*

The outbreak has re-emphasized the necessity for insurance, more than anything else. Financial education is vital in choosing insurance products wisely, as it helps in fostering insurance awareness (Dalkilic & Kirkbesoglu, 2015). A recent market survey reports that 90% of Australians do not know about life insurance (Asteron Life, 2015). According to an estimate, the outbreak might have resulted in the loss of 20 million lives across the world (Walker et al., 2020). Life insurance can cover the financial loss to the family as a result of the death (Farrell et al. 2020). In countries where the government is providing coronavirus insurance coverage, the additional burden on patients' families is somewhat reduced but the countries which depend on private insurance now repent for not having covered themselves through insurance. Many people in the US are not insured; the US health segment depends on private insurance (GFLEC, 2020).

Those whose health insurance was bound to their employment are feeling a major shock. Travel insurance covers the loss of trip charges paid (non-refundable) due to the cancellation of a trip for some reason (Gopinath, 2020). A large number of people who were travelling, either for leisure or for business/educational purposes, have had to cancel their bookings due to the spread of the virus to the restrictions imposed by the government. Such people could have gotten their claim processed, had they opted for travel insurance. But most of the people are not able to predict uncertainties, and usually, do not think of complex insurance products due to their poor understanding of financial concepts (U.S. Bureau of Labor Statistics, 2019).

6. The role of financial education in the time of a pandemic financial crisis

Financial education is 'the process by which financial consumers/investors improve their understanding of financial products, concepts and risks 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' (OECD, 2005).

A burgeoning literature has established well, the relationship between financial education and financial literacy (Fernandes et al., 2014). Further, financial literacy has a positive impact on financial behavior such as monthly bill payments, saving, budgeting, emergency fund and portfolio diversification (Hilgert et al., 2003). Research also shows that financial education imparted to young children can provide positive financial behavior later in their lives (Berry et al., 2018). The urge for financial education around the world is triggered by the poor preparation of households during financial emergencies, high debt levels and other adverse outcomes of the unanticipated COVID-19 crisis. Specific financial education is provided according to the type of audience and subject area (Fox et al., 2005). Advocates insist on 'just-in-time' financial education with respect to particular financial behaviors in order to avoid the expiring effects of that education (Fernandes et al., 2014).

Financial education will undoubtedly play a momentous role in economic restoration post-pandemic, as it did after the global recession of 2008. Digital financial education is the best way to educate youth and children about financial concepts (OECD, 2018). IOWA Department of Education has made available financial literacy resources, both for elementary and secondary levels, to support financial learning during COVID-19.

7. Financial lessons from COVID-19

7.1. *Precautionary liquid savings*

Having an emergency fund equivalent to 6 months' expenses (as a rule of thumb) can drive out the uncertainty the pandemic causes to the households. The prospect of job loss due to a financial crisis makes it all the more crucial to create the padding of emergency savings before the turmoil impacts the financial well-being of an individual (GFLEC, 2020). The COVID-19 crisis has shown that our consumption habits can be more frugal than usual, given that we have the attitude and knowledge to prepare ourselves for any uncertainty in our lives.

7.2. Risk tolerance

The enormous volatility of the stock market during the virus outbreak has compelled investors to re-evaluate their risk tolerance and the products that would have suited their risk profile (Mazur et al., 2021). If the variations in the prices of the investments make an investor fidgety, and he wants to sell the investments as soon as the market crashes, it is always advisable to go for safer investment options like fixed deposits. Beyond basic financial concepts, advanced financial literacy, which is the understanding of risk, return, stocks, bonds and mutual funds, is associated with the risk tolerance of an individual (Chatterjee et al., 2017). It counteracts the negative effects of an investor's fragile risk tolerance.

7.3. Financial inclusion

Financial inclusion can lighten the economic consequences of COVID-19 on the most vulnerable populations of the world (Noggle, 2020). ‘Government-to-person (G2P) payments’ are being implemented globally to provide immediate financial support to the poor. Although a country's infrastructure, such as the availability of financial service providers and the use of digital payments, is the most important determinant of sound financial inclusion system, there exists a logical relationship between financial literacy and financial inclusion (access to finance) (Grohmann et al., 2018). Approximately 2.3 billion working adults do not have an account in formal institutions of finance (Noggle, 2020). This calls for immediate financial inclusion.

7.4. Protection from financial scams

During tough times, fraudsters run unethical financial schemes, scams and phishing attacks, preying on the financially vulnerable (Gopinath, 2020). It is found that those who have higher financial knowledge are likely to have higher sophistication in detecting fraud (Engels et al., 2020). Staying informed, and applying preventive and detective measures can protect the financial well-being of people.

7.5. Switching to fintech

The COVID-19 pandemic has changed the way people live all over the world. It is relocating them to digital platforms (GFLEC, 2020). Owing to the rapid digitalization of financial markets, digital financial literacy must be a crucial constituent of policy agenda (OECD, 2018). Since financial institutions worldwide have changed their working hours during COVID-19, online banking helps customers handle finances swiftly, without moving anywhere. According to the FINRA Investor Education.

Foundation's National Survey, almost two-thirds of all credit card holders said that they did not compare best offers before making a purchase. Now that COVID-19 has restricted the mobility of people, it is the best time to take advantage of Fintech to manage money, and find and compare best offers (GFLEC, 2020). Respondents who used digital devices or services have consistently and significantly, higher financial literacy, knowledge, behavior and well-being scores (OECD, 2020c).

7.6. Household budgeting

During months of lockdown, with uncertainties associated with earnings, it becomes crucial for households to look closely at their cash flows, and retool their budgets (Gopinath, 2020). People need to understand the basic difference between essential and non-essential household consumption. The lessons learned on budgeting can help people plan for uncertain fund requirements. Research also shows that an improvement in financial literacy is likely to have a positive impact on budgeting intentions (Agarwalla et al., 2015).

7.7. Checking insurance coverage

Having apt insurance cover can prevent the disastrous effects of crisis (Tennyson, 2011). Lack of a health insurance cover can empty one's pockets. The major lesson here is that even if an individual is provided with insurance by their employer, having some private insurance is equally important (Farrell et al., 2020). Such private insurance will provide a shield even in the case of a job loss as a result of a financial crisis. As will unemployment insurance, which is provided by the State to cover the loss of 6 months' compensation in the event of job loss due to an uncertain reason. According to the US Bureau of Labor Statistics (2019), most unemployed people did not apply for such insurance because they did not know about it. Financial education in this regard can be pivotal to dealing with the crisis.

7.8. Patience with long term investments

According to the World Economic Forum, the global stock markets have shown extremely volatile behavior due to the COVID-19 pandemic. As a result, many investors discontinued their long-term investments out of fear. Such individuals can assuredly benefit from enhanced financial education. This will improve their confidence and help them better understand the risks they encounter.

7.9. Reducing financial obligations

To combat the COVID-19 crisis, the focus should be on the reduction of expenses. If a household is having a surplus fund, it is always advisable to trim financial obligations so as to reduce the interest on loans. Loans taken to maintain an expensive lifestyle, for a wedding, or to repay other loans, as also irresponsible borrowing due to job loss or a health emergency can push an individual into a financial trap. The Consumer Financial Protection Bureau (CFPB) has initiated measures in April 2020 to safeguard and guide consumers during COVID-19, making it smoother for them to receive relief funds. Also, it educates consumers on mortgage longanimity and provides information about upcoming programmes to reduce their struggle.

7.10. The timely knowledge of government provided financial relief during the pandemic

The Global Financial Literacy Excellence Center (GFLEC), while giving suggestions on money management during a crisis, focused on the adequate knowledge of Government-provided financial aid during COVID-19 (GFLEC, 2020). Citizens must be made aware of how can they defer payments on their loans without affecting their credit rating, and the procedure for informing their lenders about the deferment well in time. They must also be informed about the unemployment insurance relief programs provided by the states. The Coronavirus Aid, Relief and Economic Security (CARES) Act was signed on March 27, 2020. It extends unemployment insurance benefits to even those workers affected by the pandemic, who were otherwise not eligible for the same. The Federal Reserve has announced a cut in the interest rate of about 0.25%) in order to upgrade markets and increase consumer expenditure. While many central banks followed the path opened by the Fed, a global low interest period initiated again (Mutlu, 2021). In the first month of 2020, the central banks of North Macedonia, South Africa, Malaysia, Kenya, Argentina, Ukraine, Sri Lanka, and Azerbaijan, as well as Turkey's, reduced interest rates, ranging from 25 to 200 basis points.

In February, 13 more countries lowered interest rates. These included Thailand, Iceland, Brazil, The Philippines, Russia, Belarus, Argentina (two times), Mexico, Namibia, Indonesia, The Gambia, and China. Overall, 54 central banks tried to support the economy by using the interest rate making March the month which saw the most interest rate cut throughout the year.

Consumers should be educated to make smart money by checking their savings and investments. The money lying in savings accounts will now earn lesser interest. So, it is advisable to rebalance the portfolio. The interest rate-cut may also support mortgage refinancing options.

8. Conclusion

8.1. Discussion

COVID-19 has undeniably led to an aberrant health crisis. The unavoidable measures taken to combat its spread have sparked a global financial crisis, worse than the financial crisis of 2008. The financial repercussions of Coronavirus appear to be long-lasting and develop fragilities in the structure. With effective immunizations and a likely return to new normal life, the question still arises about the vaccine for post COVID-19 household finances. There is no immunity to the personal financial devastation caused by the pandemic.

Prompt government interventions are required to protect livelihoods. And yet, the COVID-19 financial crisis has been teaching lessons for long-term well-being. This study casts a look at the diverse aspects of household financial behavior that fundamentally depend upon financial literacy and financial education. These aspects will be critical during COVID-19 and its aftermath. Financial literacy is positively correlated with financial well-being (Taft et al., 2013, p. p63). Also, financial education, if provided at a 'teachable moment', can have a strong impact on financial behavior (Kaiser & Menkhoff, 2017).

A crisis can teach us some of the biggest lessons of life, as challenges are new and induce anxiety. Although researchers have been building the case for financial literacy time and again (Atkinson & Messy, 2012; Ouachani et al., 2020), this paper is an attempt to reflect on the value of personal finance knowledge in the case of pandemics.

There are some suggestions to managing life's transitions and money during the event of financial crisis: 1) a monthly budget and control of daily spending, 2) saving and accumulation of emergency liquid funds, 3) new debt avoidance and existing debts pay off, 4) needs prioritization, 5) ways to extra money, 6) insurance coverage, 7) avoidance discontinuation of investments by fear of market crash, 8) financial literacy through attending financial education seminars, online portals, books, etc.

8.2. Implications

This study can aid policymakers, financial educators, consumers and researchers in evolving strategies to face yet another crisis and take away lessons for future course of action. Policy makers all over the world must educate people about the most influential means to combat the adversities of COVID-19 and its potential long-term impact for their well-being. The short and medium run effects of COVID-19 will be severe for the most disadvantaged and vulnerable divides. This study looks at the wide range of effects that COVID-19 will have on financial aspects of people's lives, with a focus on people who are financially less literate. It calls for speedy and conclusive action by governments in order to support the most vulnerable segments. It is possible by focusing the importance of a wide and integrated policy response that includes strengthened financial protection and financial education, through specific interventions.

When it comes to the rural side of the economy, it is hopeful that COVID-19 will foster many exemplars of innovative business outcomes and adaptability across rural areas, and from which lessons must be learnt. The government must enact support packages in an equitable manner to support existing and upcoming businesses at regional and national level. Use of digital tools in rural regions, reach of work distribution at remote places to connect urban and rural areas, and mobilising and strengthening local social support system are some of the policy actions that the policymakers must promote in order to aid speedy economic recovery of the rural community (OECD, 2020d).

8.3. Workplace management

Employer-provided education significantly stimulates financial literacy and, in turn, leads to prospects for a better future financial situation as well as a greater satisfaction with the workplace (Hira & Loibl, 2005). It has potentially important implications concerning the usefulness of strategies to build financially stronger and satisfied employees. Perhaps the most important implication of all is that workplace financial education works. Financially educated employees know how to achieve financial success and how to advance within the organization.

The international financial system has largely coped up the shocks from two waves of the COVID-19. Companies started searching new ways of working, they identified different online platforms and work from home opportunities for their employees (Pandey & Bajaj, 2020). Governments, central banks and financial regulators have taken extraordinary measures to mitigate the impact of the pandemic. These measures have contained the severity of the pandemic driven economic shock. With vaccination drives and access being boosted up, a global recovery is quite visible. Still, the priority should be to regain and sustain financial stability. To earn income and restore the financial health, one must stay healthy. Vaccination seems to be the only tool to overcome the havoc caused by the pandemic. Therefore policy measures must be directed towards encouraging more and more people to become vaccinated.

8.4. Future research directions

Keeping in view the social and economic circles, the COVID-19 crisis provokes several of research investigations. As financial education is not seen to have a long-lasting impact on financial behavior (Fernandes et al., 2014; Fox et al., 2005), further research is directed towards the exploration of effective educational strategies to influence financial behavior. Such studies would directly aid financial educators in developing effective educational programmes. Also, it is high time companies adopted financial wellness programmes, because financial wellness is directly linked to physical wellness. Financial stress may lead to physical stress, and in turn, to lost productivity among employees. A coordinated approach to implementing digital financial literacy must be on top of the agenda in times of crisis, when people are isolated and need to manage their finances digitally (OECD, 2018). Also, it is necessary that online teaching aids, and courses regarding financial services and the protection of consumers in such financial services must be included in the curricula of students. As this study aims at pitching the theoretical facet of financial literacy, financial academics will be confronted in coming years with many more questions seeking empirical and realistic evidence of the vitality of financial literacy in times of pandemics.

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