Thursday, 04 Apr, 2024

PublishingIndia.com

+91-9899775880
011-47044510
011-49075396

Home | About Us | Journals | For Authors | For Librarians | News & Events | My Account

Home » Journal » International Journal of Banking, Risk and Insurance » Volume 7 Issue 2 » Scale Efficiency and Indian Life Insurance Industry During the Post-Reform Period: An Econometric Study

Welcome Guest

username

LOGIN

Register | Forgot Password?

Scale Efficiency and Indian Life Insurance Industry During the Post-Reform Period: An Econometric Study

International Journal of Banking, Risk and Insurance
Volume 7 Issue 2

Published: 2019
Author(s) Name: Madhu Sarda, Indrajit Ray | **Author(s) Affiliation:** Assistant Professor, Department of Commerce, Maulana Azad College, Kolkata, India.

Locked **Subscribed** **Available for All**

Abstract

The sine qua non of an efficient financial system is competitiveness which follows liberalisation. For the Indian insurance sector, tryst with liberalisation began two decades ago with the enactment of the Insurance Regulatory and Development Act, 1999. In view of the impact of liberalisation policy on the efficiency of the Indian life insurance sector, the present article seeks to measure scale efficiency of the individual companies and the industry as a whole during the post-reform period. In an attempt to do so, we apply Economic Frontier Approach (EFA) to estimate Transcendental Logarithmic (Translog) cost function consisting of one output and two input variables, i.e., labour and capital, for a wider time period from 2003–04 to 2015–16. Obtained results are mixed. Though the life insurance industry as a whole has huge scope of scale expansion, most of the individual firms are experiencing scale diseconomies. The present paper also succeeds in establishing a relationship between scale efficiency score and firm's asset size. The outcome suggests a positive relationship between them.

Keywords: Life Insurance, Scale Efficiency, EFA, Translog Function

View PDF

Sitelinks
Home
Journals
Submission Guidelines
Call For Paper
TOC Alerts
Journals Price List
Subscription Form
News & Events

Journal Type
Print Journal
Online Journal
National Journal
International Journal
Indian Journal
Peer Review Journal
Journal with ISSN
Indexed Journal

Journal Subject
Management Journal
Finance Journal
Human Resource Journal
Marketing Journal
Hospitality Journal
Entrepreneurship Journal
Commerce Journal
Psychology Journal
Computer Science Journal
Social Work Journal
Supply Chain Management Journal

Contact
E-598, Ground Floor, Palam Extension
Near Ramphal chowk, Sector-7, Dwarka
New Delhi - 110077

011-47044510; 011-49075396
+91-9899775880; +91-9212715375
info@publishingindia.com

Refund policy | Privacy policy | Copyright Information | Contact Us | Feedback

© Publishingindia.com, All rights reserved

IJNRD.ORG ISSN : 2456-4184
INTERNATIONAL JOURNAL OF NOVEL RESEARCH AND DEVELOPMENT (IJNRD) | IJNRD.ORG
An International Open Access, Peer-reviewed, Refereed Journal

Understanding the impact of Covid-19 lockdown on the increase in the usage of Unified Payment Interface (UPI)

Camellia C. Burman
Assistant Professor
Maulana Azad College, Kolkata
and
Dr. Swapan Sarkar
Associate Professor
Department of Commerce
University of Calcutta

Abstract

The payment system has witnessed a lot of phases and has come a long way since its inception. Currently, the payment system is in a transition phase whereby it is shifting from a cash-oriented platform to a digital platform. The transition is an arduous process but the usage of the electronic modes of payment is on the rise. This process began with the implementation of plastic money in the form of cards, gradually it involved transfer of funds using the internet connectivity in the form of internet banking, which evolved further into electronic wallets and now the Unified Payment Interface or most commonly known as the UPI where funds can be transferred instantly with the click of a button. The usage of UPI has increased considerably and a sharp rise in its usage is noticed post implantation of lockdown due to Covid-19. This paper tries to investigate the rise in the usage of the different cashless modes of payment and also rationalize the sharp increase in the transactions executed through UPI in the year 2020 compared to that of the year 2019 using the Wilcoxon Signed Rank Test. The study reveals that the increase in the transactions executed post Covid-19 lockdown significantly differs from the rise in the transactions executed during the pre-Covid period. So, it can be concluded that, the pandemic has pushed the people to accept the digital modes of payment widely, thereby easing the transition process from a cash-based economy to a digital one.

Keywords: Cashless economy; UPI; Wilcoxon Signed Rank Test; Covid-19; lockdown.

Introduction

Conversion into a cashless economy is an international issue as most of the countries all across the globe have already transformed themselves into cashless economies. The mode of payment has developed with time and starting from barter system we have undergone a long way to bring currencies into existence as a medium of exchange. Now globally, the countries are working towards eliminating the concept of transacting with physical form of currencies altogether and focus on transmitting funds from one source to another. Every day innumerable number of transactions take place all across the globe and in exchange of the goods and services purchased, the most commonly accepted mode of payment here in India are either cash or cards which are either debit cards or credit cards and nowadays we see an increased usage of Unified Payments Interface (UPI). Under few circumstances when these two methods fail or are unavailable few alternative options are available in the form of making payments through E-Wallets or through Unified Payment Interface (UPI). In order to process payments through either E-Wallets or UPI, the vendor also needs to operate through the same platform or application. Such payments ensure that the funds are directly transmitted from the source wallet to the beneficiary's wallet in case of E-Wallet payments and debited from the source bank account to the recipient's bank account in case of UPI payments. Also, for security reasons and authentication protocols many people are unable to transact using the electronic mode and they also distrust the system as they fear their accounts can be hacked if they transact online (Vikram, 2021). In order to familiarize the citizens with the cashless mode of payment, the Prime Minister of India on 8th November, 2016 announced the demonetization of currency notes of denominations ₹500 and ₹1,000. The entire nation was taken aback as these two were the highest denominations currency notes in circulation and the citizens were left with currency notes of only ₹100 and its lower denominations currency notes (Nagdev, 2018). Earlier before 2016, the Government of India has undertaken the step to demonetization of its currency notes but the one of 2016 faced criticisms on the ground that the currency notes of the highest denominations were declared as invalid. But this step was not only taken to eradicate black money, counterfeit currency notes, currency used for terrorist financing and corruption but also to push the nation towards digitization. The policy of demonetization along with Digital India can help the citizens be acquainted with the system of currency less transactions to some extent and has created a separate stage for choosing electronic mode of payment as an alternative option for the consumers of India (Balaji, 2018). On the other hand, the Covid-19 pandemic has accelerated the shift that was already in process. Due to the lockdown imposed people had no other option but to keep the economy running digitally as much as possible. The social distancing norms and the restrictions imposed by the Government compelled the residents of India to seek resort to the various cashless modes and as a result a major chunk of the population transacted digitally for the very first time (Saroy, R. & et. al, 2022). As a result, the transactions involving electronic platform showed a considerable increase post implementation of lockdown and usage of UPI surpassed all other forms of electronic payment.

What is UPI?

Unified Payment Interface or most commonly known as UPI is a real time payment system that involves immediate transfer of funds between two bank accounts with the help of a smart phone. It is controlled by the Reserve Bank of India and the Indian Bank Association and was developed by National Payments Corporation of India. The users of several bank accounts that are registered with the UPI are benefitted as this platform allows the access of multiple bank accounts through a single application. In order to access the UPI, a Virtual Payment Address is created which is required to be linked by the users' bank accounts. In addition to this process, the user needs to create a UPI pin which will be automatically linked to the Virtual Payment Address. Transactions can be executed only if the UPI pin matches with the Virtual Payment Address set by the user.[1] After the set up is complete, the user can simply transfer the funds to another user by entering the amount and verifying the access through the UPI pin to execute the transaction which just requires a smart phone with internet connectivity.

Features of UPI

- UPI helps the users to transfer funds instantly from one bank account to the other.
- The users can avail the facility 24 hours and even on public holidays as it is completely based on digital platform.
- The UPI is provided by the banks for Android, Windows and IOS operating systems.
- A user can use the UPI platform to transfer funds using the recipient's mobile number or bank account details or with the help of the recipient's UPI ID or through the Quick Response Code.
- Transactions can be executed for a particular user only if the UPI pin matches with the UPI ID created by the user.
- UPI enables the user to make utility bill payments, merchant payments, in-app payments, over the counter payments and also barcode based payments.
- UPI rewards its users with frequent cash back offers which get directly credited to the users' bank account as well as gift vouchers for online shopping.

Growth of UPI in India

In order to incorporate most of the population in the banking net and to promote digital execution of transactions, India is experimenting and launching various digital payment modes which are very much user-friendly. Plastic money in the form of cards has been in circulation for a long time but it was not used by people on a large scale basis. The other modes in the form of internet banking like Real Time Gross Settlement (RTGS), Electronic Funds Transfer/National Electronic Funds Transfer (EFT/NEFT), Immediate Payment

[1] https://www.business-standard.com/article/economy-policy/all-you-need-to-know-about-upi-the-unified-payment-interface-116041200561_1.html

Service (IMPS) were not preferred by all because of the charges laid on the payment modes previously and too much of data entry also created errors while transferring fund from one account to the other. Things started to change with the increased acceptance of smart phones and availability of proper internet connectivity. This led to the development of various payment based applications in the form of mobile banking which gradually led to the emergence of e-wallets and ultimately the launch of UPI. Due to the ease of use and the security of payments it has been widely accepted by the users and it emerged as one of the significant platforms in executing digital transactions.

Literature Review

The study conducted by Rai and Badugu (2018), shows the picture of the preferred payment system among the residents of Delhi and Varanasi pre and post the demonetization of 2016. A convenience sampling method was used in this study taking a total of 100 respondents from Delhi and Varanasi region. The study revealed that there was a significant change in the preferred method of payment pre and post demonetization with the help of Z test. As per the study, people mostly opted for cash mode of payment while most people opted for internet banking method of payment post demonetization.

A study in the differences in technology adoption behaviour of customers in Indian banks during the pre and post demonetization phase has been carried out by Sundar (2020), consisting of 200 bank customers. The study could not find constructive effects of demonetization on the adoption of digital payment platforms by the respondents chosen despite a significant growth that has been observed in the usage of digital payment system across the country post demonetization period. However, the usage of Point of Sale (POS) has increased tremendously.

The study of the trend of digital payment modes has been carried out by Hindocha and Pandya (2019) following the effects of demonetization in the Indian economy. The study aimed to analyze the impact of demonetization on the electronic fund transfers which actually is considered as a significant contributor to the nation. The study revealed that there has been a significant positive impact on e-transactions especially in respect of RTGS and NEFT both in terms of volume and value and it has also witnessed a significant growth in mobile banking as well.

The digitization of financial services equipped with the spread of information technology has changed the way people transact and this change has strengthened even more due to the Covid-19 pandemic. Romdhane (2021), in his study tried to analyze the impact of information technology on the digitization of financial services during the pre-Covid time and study the challenges that the banks are facing to manage this thereby highlighting the post-Covid stakes. The study suggests that the banks need to combine the physical proximity and the digital offer in order to give support to the current scenario and slowly transitioning into a completely digital platform

in the near future will help the economy to adopt appropriate strategic plans which would be useful to counter threats.

The availability of low cost mobile data and the increase in the usage of smart phones have helped the Government of India to shift to extensive usage of digital platforms to execute transactions. Demonetization followed by the Covid-19 pandemic have made major portion of the population of India to use the digital platforms to transact. Pandey, A. & et. al (2021), in their study tried to analyze the level of adoption of the digital modes of payment by the people from the demonetization period till the Covid era. In order to analyze it, a survey was conducted on 165 respondents and it concluded that there was a significant difference between mean usage of digital payment system post demonetization and during Covid period.

Research Question

The different modes of electronic payment methods have shown an immense growth with respect to their respective volumes and values of transactions. This growth is observed in almost all the modes of payment since the year 2013 except that of the Debit Card transactions as this mode has shown a consistent decline from the year 2018 onwards. The UPI was launched in the year 2016[2] and since then the volume and value of its transactions showed a gradual increase. But the increase in the year 2020 was quite steep compared to that of the year 2019. Therefore, this paper tries to examine and validate the sharp growth in the UPI transactions especially from the year 2020 onwards due to the lockdown imposed because of the Covid-19 pandemic.

Objectives

The objective of the current study is as follows:

- To analyze the status of the volume and value of transactions of the different modes of electronic modes of payment available in the Indian economy.
- To analyze the rationality of the drastic rise in the volume and value of the transactions related to UPI payment system.

Methodology

The different modes of electronic modes of payment that have been considered in the present study are RTGS, EFT/NEFT, IMPS, Credit Cards, Debit Cards, Prepaid Payment Instruments (PPIs) and the UPI. To analyze the trend of the above modes of payments the volume and value of the transactions of the above mentioned modes have been obtained from the RBI archives from the year 2013 till the year 2021. But for UPI, the data is considered from the year 2016 and is obtained from NCPI archives. The trend is analyzed with the help of line charts using Microsoft Excel.

[2]https://www.livemint.com/Money/Cog3dAvOZka0OsNg8M9S8O/UPI-20-launched-Here-are-its-key-features.html

In order to understand the rationality of such an increase, the UPI data has been divided into two parts considering the first part as pre-Covid period and the second as post-Covid period both for volume and value of transactions related to UPI. The pre-Covid time period considered here is 29 months before the imposition of lockdown starting from October, 2017 to February, 2020 and the post-Covid time period considered here is from March, 2020 to July, 2022 i.e. 29 months after imposition of lockdown.

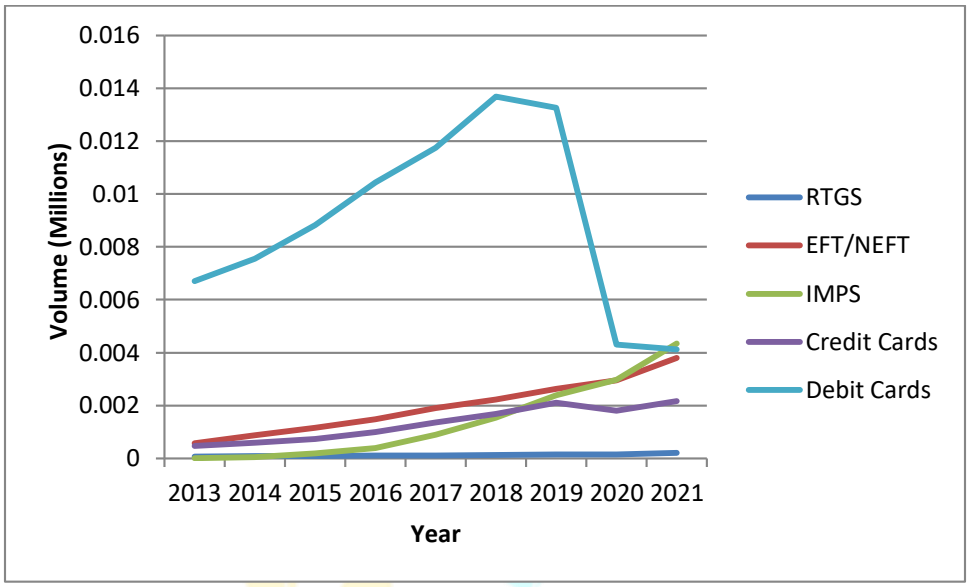
The data so obtained has been analyzed to check the normality of the series by using the Jarque-Bera Test, thereafter Wilcoxon Signed Rank Test (Dumitriu, 2011), has been carried out to find out the differences in the increase in the volume and value of the transactions between the two series.

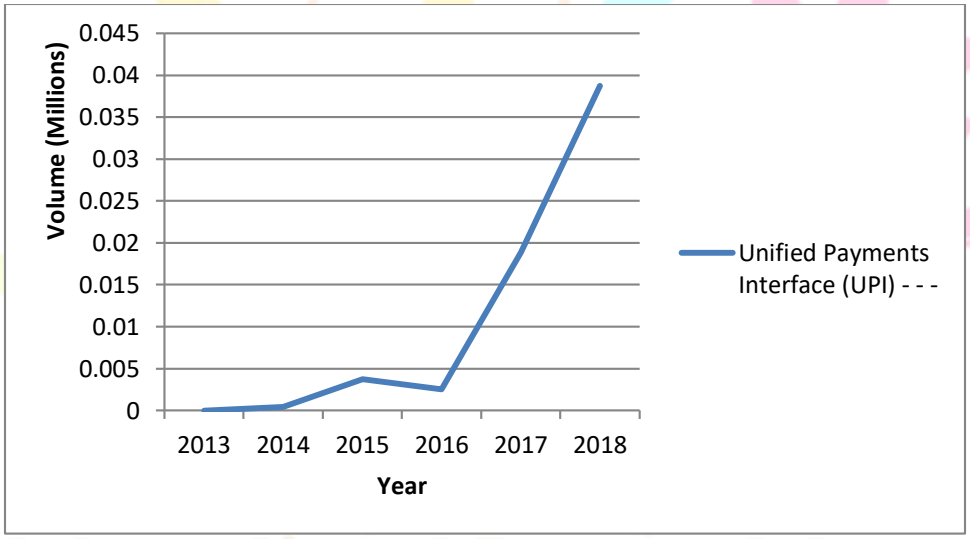
Analysis

The different modes of electronic payment data available from the year 2013 reveal that there has been a significant growth in the different modes of electronic payment system in India. While, a significant growth in RTGS, EFT/NEFT, IMPS, Credit Cards and Prepaid Payment Instruments can be noticed, the growth in the usage of Debit Cards saw a steady rise till the year 2018 and thereby the volume of the transactions as well as the value of the transactions started to decline considerably. A new mode of electronic payment system entered the Indian economy in the year 2016 which is commonly known as UPI or the Unified Payments Interface which captured a huge mass of the Indian household to facilitate the e-payment mechanism. The ease of use made it even easier for the people to transact using this mode of payment as the funds can be transferred easily by just entering a simple PIN. A sharp growth in the usage of UPI both in terms of volume as well as value is witnessed from the year 2020 onwards. This can be linked with the Covid-19 pandemic, the social distancing norms that have led people to accept UPI in order to proceed with the transactions. The volume and value of the different modes of electronic payment is shown in the following tables along with their respective line charts.

Year	RTGS	EFT/NEFT	IMPS	Credit Cards	Debit Cards	PPIs	UPI
	Volume (Million)	Volume (Million)	Volume (Million)	Volume (Million)	Volume (Million)	Volume (Million)	Volume (Million)
2013	73.26	568.81	8.78	475.62	6,703.33	126.04	-
2014	85.53	873.03	54.22	588.88	7,560.06	236.16	-
2015	92.87	1,161.91	179.93	734.36	8,813.85	663.24	-
2016	98.94	1,481.38	389.48	986.97	10,435.43	1,248.36	2.65
2017	117.1	1,897.65	890.42	1,355.43	11,743.40	3,376.38	429.15
2018	131.15	2,218.06	1,533.81	1,680.15	13,691.85	4,348.90	3746.32
2019	145.34	2621.81	2382.97	2094.96	13256.68	5161.61	2527.17
2020	144.47	2946.33	2973.83	1793.46	4312.38	4960.45	18880.91
2021	198.78	3800.89	4338.09	2156.43	4122.85	6158.38	38733.14

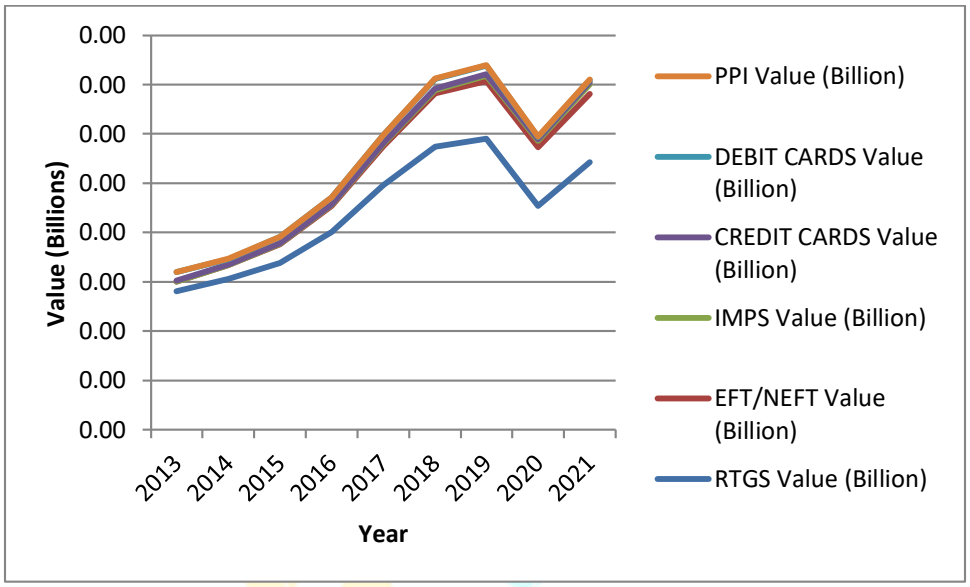
(Source: RBI and NPCI)

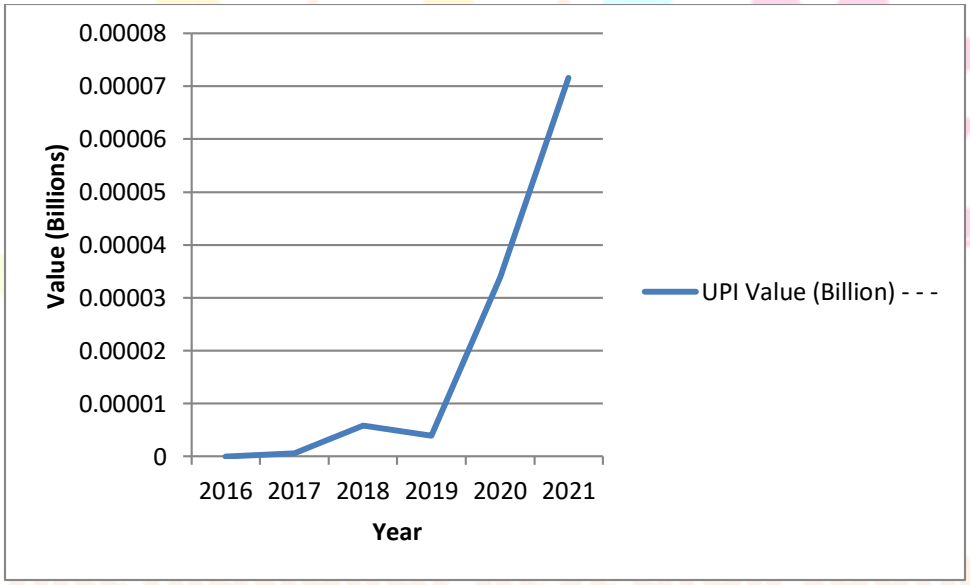




Year	RTGS	EFT/NEFT	IMPS	Credit Cards	Debit Cards	PPIs	UPI
	Value (Billion)	Value (Billion)	Value (Billion)	Value (Billion)	Value (Billion)	Value (Billion)	Value (Billion)
2013	561,710.53	39,707.36	50.31	2,555.90	35,056.29	71.44	-
2014	611,898.95	55,339.48	390.36	1,827.73	22,948.86	158.7	-
2015	676,957.62	75,985.56	1,328.04	2,276.60	25,940.71	409.23	-
2016	802,344.99	106,103.90	3,111.86	2,984.31	26,935.40	683.73	8.9307
2017	993,269.88	157,997.27	7,660.25	4,335.74	31,573.07	1,311.95	570.2087
2018	1,147,748.80	216,347.88	13,926.19	5,698.41	38,292.74	2,006.90	5857.1045
2019	1,180,394.89	232,966.51	21,819.80	7,165.73	35,582.55	2,184.35	3917.5
2020	907254.77	238494.9	26838.36	5506.1419	8906.86	1895.92	33877.5
2021	1086151.29	276781.83	38283.5	8878.83	7432.95	2740.63	71576.13

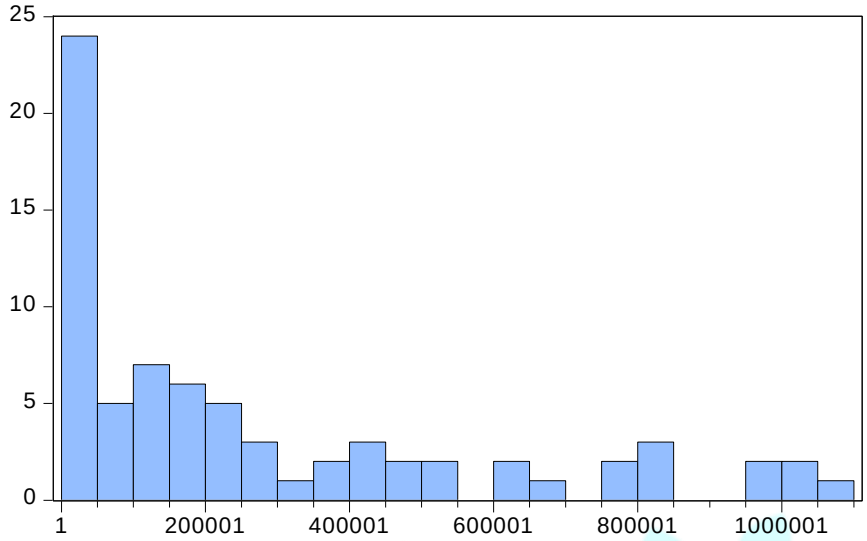
(Source: RBI and NPCI)





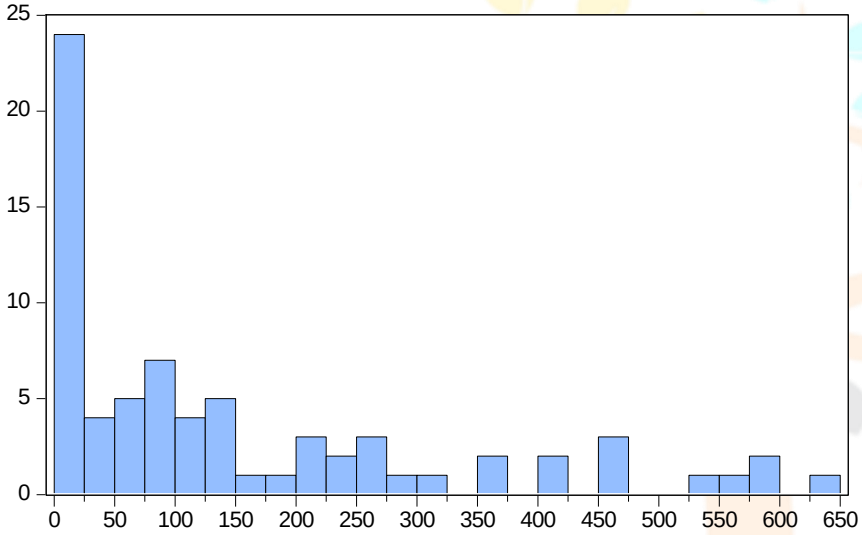
Normality Test

The Jarque-Bera test result shows whether a series is normally distributed or not. (Jarque-Bera, 1987) had proposed an omnibus test for univariate sample case using skewness and kurtosis. For the purpose of this current study to check the normality of the UPI series for both Value and Volume data, the results of the Jarque-Bera test reveals that the null hypothesis can be rejected and hence it can be concluded that the series are not normal.



Series: VALUE__IN_CR__
Sample 2016M07 2022M07
Observations 73

Mean	270533.0
Median	151140.7
Maximum	1062992.
Minimum	0.380000
Std. Dev.	311995.3
Skewness	1.168719
Kurtosis	3.194375
Jarque-Bera	16.73342
Probability	0.000232



Series: VOLUME__IN_CR__
Sample 2016M07 2022M07
Observations 73

Mean	151.8230
Median	82.22900
Maximum	628.8400
Minimum	0.009000
Std. Dev.	174.2704
Skewness	1.250668
Kurtosis	3.517568
Jarque-Bera	19.84552
Probability	0.000049

Wilcoxon Signed Rank Test

In order to proceed with the analysis, the data is divided into two parts corresponding to UPI series Pre-Covid 19 and UPI series Post-Covid 19. In order to analyze the data, Wilcoxon Signed Rank Test is conducted on the series to understand whether they are significantly different from each other. The UPI volume and UPI value data is segregated into two parts, namely, the pre-Covid series of volume and value ranging from October, 2017 to February 2020 and the post-Covid series of volume and value ranging from March, 2020 to July, 2022. The results obtained from the Wilcoxon Signed Rank Test are displayed below:

Hypothesis Test Summary

Null Hypothesis	Test	Sig.	Decision

The results show that the null hypothesis is rejected at 5% level of significance. It can be therefore said, that the growth in the volume and the value of transactions in UPI in the pre-Covid period significantly differs from the volume and the value of transactions in UPI in the post-Covid period.

Conclusion

This study tried to analyze the impact of Covid-19 on the rise in the usage of UPI as a medium of payment using the electronic payment platform. An analysis of the various modes of electronic payment systems like RTGS, EFT/NEFT, IMPS, Credit Cards, Debit Cards, Prepaid Payment Instruments (PPIs) and UPI have been made from the year 2013 onwards and for UPI 2016 onwards. All of the modes show an increase in both volume and value of transactions except that for debit cards. Both the volume and value of transactions for debit cards show a considerable decline in usage from 2018 onwards. UPI platform was launched in India on 11th April, 2016, and very few people adopted it at that point of time and at the same time very few banks provided the facility. Gradually, with time the volume and value of transactions using UPI started increasing and people started adopting it due to its user-friendly platform. The rise in the transactions using UPI can be observed in the year 2020, as it saw a jump of 747% in its volume and 865% in its value of transactions as compared to the year 2019. Wilcoxon Signed Rank Test shows that there is a significant difference in the rise in the pattern of both the volume and value of the transactions related to UPI between the pre-Covid and the post-Covid series. So it can be said that the imposition of lockdown and the social distancing norms have led the people to adopt the UPI mode of payment rigorously for executing transactions.

References:

Balaji, R.P. & Vijayakumar, T. (2018). Diffusion of Digital Payment System in Rural India. Global Journals, 18 (4), 29-32.

Dumitriu, R., Stefanescu, R. and Nistor, C. (2011). Holiday effects on the Romanian stock market. Vanguard Scientific Instruments in Management 2011, 1(4)/2, 35-40.

Hindocha, M. and Pandaya, J.K. (2019). The Impact of Demonetization on Electronic Fund Transfers. *IUP Journal of Bank Management, 18* (2), 7-18.

Jarque, C. M. and Bera, A. K. (1987). A test for normality of observations and regression residuals.

International Statistical Review, 55, 163–172.

Nagdev, K., Kumar, P., Rajesh, A. and Kumar, S. (2018). Measuring demonetisation: a path towards the cashless India. Int. J. Public Sector Performance Management , 4 (1), 114-132.

Pandey, A., Shetty, A., Chheda, V., Kaur, T. and Vartak, M. (2021). GROWTH OF THE DIGITAL PAYMENTS INDUSTRY AND ITS FUTURE IN INDIA. International Journal of Advance and Innovative Research, 8 (2 (III)), 5-11.

Rai, P. and Badugu, D. (2018). A Study on Preferred Payment Systems: Pre and Post The 2016 Demonetization Exercise In India. IOSR Journal of Business and Management , 20 (11), 63-68.

Romdhane, S. (2021). Impact of Information Technology and Digitalization on Banking Strategy Pre-Covid-19, Challenges in the Covid Era and Post-Covid Stakes. International Journal of Accounting & Finance Review , 6 (2), 60-73.

Saroy, R., Awasthy, S., Singh, N., Adki, S. and Dhal, S. (2022). The Impact of Covid-19 on Digital Payment Habits of Indian Households. Bulletin of Monetary Economics and Banking (Special Issue 2022), 19-42.

Sundar, I. S. (2020). Digital Technology in Banking Post Demonetization. International Journal of Engineering Technologies and Management Research, 7 (07), 2020.

Vikram, Jain, A., Baral, S. and Mohanty, D. (2021). Perceived Benefits for Small Retail Outlets with the Advancement of Cashless Economy. Empirical Economics Letters , 20 (1), 149-161.

Websites:

https://www.livemint.com/Money/Cog3dAvOZka0OsNg8M9S8O/UPI-20-launched-Here-are-its-key-features.html

https://www.rbi.org.in/Scripts/PSIUserView.aspx

https://digitalindia.gov.in/content/national-payments-corporation-india

https://www.business-standard.com/article/economy-policy/all-you-need-to-know-about-upi-the-unified-payment-interface-116041200561_1.html

An empirical study on financial well-being during the COVID-19 in India

Ujjal Sanyal

Department of Commerce,
Maulana Azad College,
Kolkata, West Bengal, India
Email: ujjal.sanyal@maulanaazadcollegekolkata.ac.in

Furquan Uddin*

Department of Management & Business Administration,
Aliah University,
Kolkata, West Bengal, India
Email: furquanbhu@aliah.ac.in
*Corresponding author

Abstract: Financial well-being is one of the several significant issues with its implications throughout the world. The outbreak of coronavirus or COVID-19 has rattled the Indian economy and made a colossal impact on the individual and financial well-being. It is the need of the hour, to quest for the factors that might determine the current psychological status of the people who make an enormous contribution to the financial infrastructure and superstructure of the country. A survey (n = 172) was conducted using convenience sampling on financial well-being during the COVID-19 in India. It also investigated how an ongoing pandemic affects individual perception of the future economic outlook in relation to their financial well-being. With the help of exploratory factor analysis and regression analysis, we identified that financial ignorance, satisfaction with life; financial stress and financial literacy were key contributing elements that constitute financial well-being in India.

Keywords: financial well-being; behavioural finance; COVID-19 and finance; financial ignorance; financial literacy; financial crisis; financial stress; satisfaction with life; rational expectations; COVID-19 and India.

Reference to this paper should be made as follows: Sanyal, U. and Uddin, F. (2023) 'An empirical study on financial well-being during the COVID-19 in India', *Int. J. Financial Services Management*, Vol. 11, No. 4, pp.269–281.

Biographical notes: Ujjal Sanyal is an Assistant Professor in West Bengal Education Service. Currently, he is posted at Department of Commerce, Maulana Azad College, Kolkata. He received his MPhil degree in Finance from University of Calcutta. He has full-time teaching experience in under graduate courses for more than a decade.

Furquan Uddin is an Assistant Professor in Department of Management & Business Administration, Aliah University, Kolkata. He received his PhD degree from BHU, Varanasi and Post-Doctorate Research from AMU, Aligarh. He has more than six years of teaching experience. He has more than 20 publications in journals of repute including ABDC listed.

Copyright © 2023 Inderscience Enterprises Ltd.

1 Introduction

COVID-19 is an acronym for coronavirus disease, originated in China towards the end of 2019 and has since spread globally in the form of pandemic (McKibbin and Fernando, 2020). There was also an apprehension of the effect of trade war between China and USA the two global productions and tech-giants, effect of Brexit in Europe and US Presidential elections in global economy. The combination of the above events had reflections in the year 2020 (Goodell, 2020). On account of these, International Monetary Fund (IMF) had predicted a global growth of 3.4% (Bansal, 2020). These led to the economic downturn similar to the Great Depression (Alamet al., 2020). In modern-day world, strong bonds exist where geographical boundaries diminish and diseases impact directly beyond any mortality and morbidity from pandemic outbreak (Barrafrem et al., 2020a, 2020b). As a result, global stock indices have plunged in international financial markets (Shuraeva et al., 2020). The pandemic has affected every aspect of life including the financial position. Currently, mankind is undergoing a natural state of experiment; it endeavours the research in relation to effect of COVID-19 on financial markets and psychological impact on retail investors (Goodell, 2020). With the natural expectations of fear and uncertainty from the current pandemic situation, firms considered their profitability to be lower, it decreased a wealth of US$6 trillion from its stakeholders between 24th and 28th of February, 2020 (Peterson and Thankom, 2020). It further impacted Standard & Poor's 500 index, which erased over $5 trillion in value in the same week (McKibbin and Fernando, 2020). This loss of value was mostly due to irrational assessment by investors (Ashraf, 2020). Likewise, the spread of COVID-19 in India has drastically lowered the prospects of fiscal consolidation and would increase the pace of slowdown in India's economic development.

Keeping in mind the above considerations, the present study is an endeavour to quantify the assessment of people regarding their financial well-being. In addition, it demonstrates the issues like financial literacy, financial ignorance and several views of financial well-being. Consequently, it explores the forces of rational human mind and financial well-being during a sudden global pandemic.

2 Literature review

Well-being itself is a multi-facet concept. It is a product of individual gratification in six areas: health, leisure, home, business, finance and environment (Van Praag et al., 2003). The ultimate measure to evaluate financial health of a person depends on people's own perspective on their financial situation. Well-being has been described as the person's satisfaction feelings with his or her financial position, Hayhoe (1990). Similarly, Fergusson et al. (1981) stated that financial well-being is an extension of financial income level. Further, financial well-being can also be spotted as a function of spiritual and material dimension of one's financial status, Williams (1983). In the last decade, well-being meant to be the overall happiness or satisfaction, but in the post millennial era the concept has changed to a more materialistic aspect of financial status (Joo and Garman, 1998). Therefore, financial well-being is different among researchers and in various studies, multiple methods have been used to measure economic well-being and welfare.

Therefore, the focus of this present study is, how related variables affect people's financial well-being in India during current world-wide pandemic. The variables have

been identified for the research, through randomly selected 25 research articles available online in various platforms like Scopus, Web of Science and JSTOR. We have used matrix coding technique (see Table 2) to obtain vivid evidence for the prime variables and found significant correlations (see Table 1) among them.

Table 1 Nonparametric correlations

Correlations					
			A: FINANCIAL IGNORANCE	*B: FINANCIAL LITERACY*	*C: FINANCIAL WELLBEING*
Spearman's rho	A: FINANCIAL IGNORANCE	Correlation Coefficient	1.000	.998**	1.000**
		Sig. (2-tailed)	.	.000	.000
		N	25	25	25
	B: FINANCIAL LITERACY	Correlation Coefficient	.998**	1.000	.998**
		Sig. (2-tailed)	.000	.	.000
		N	25	25	25
	C: FINANCIAL WELLBEING	Correlation Coefficient	1.000**	.998**	1.000
		Sig. (2-tailed)	.000	.000	.
		N	25	25	25

Notes: **. Correlation is significant at the 0.01 level (2-tailed); SPSS 24.

Table 2 Matrix coding

Research articles	*A: FINANCIAL IGNORANCE*	*B: FINANCIAL LITERACY*	*C: FINANCIAL WELLBEING*
1: Banerji et al. (2020)	11	11	11
2: Bansal (2020)	12	12	12
3: Barrafrem et al. (2020a, 2020b)	26	26	26
4: Lusardi et al. (2008, 2011)	70	75	67
5. Ozili and Arun (2020)	8	8	8
6: Oprean andTanasescu (2014)	28	28	28
7: Falahati and Sabri (2015)	32	32	32
8: Fünfgeld and Wang (2009)	11	12	11
9: Goodell (2020)	12	12	12
10: McKibbin and Fernando (2020)	15	15	15
11: Paule-Vianez et al. (2020)	9	9	9
12: Shanaev et al. (2020)	9	9	9
13: Strömbäck et al. (2017)	6	5	5
14: Taft et al. (2013)	23	23	23
15: Kapoor and Prosad (2017)	13	13	13
16: Liu et al. (2020)	5	5	5

Table 2 Matrix coding (continued)

Research articles	*A: FINANCIAL IGNORANCE*	*B: FINANCIAL LITERACY*	*C: FINANCIAL WELLBEING*
17: Phan and Narayan (2020)	18	17	18
18: Mishra et al. (2020)	11	11	11
19: Aldana and Liljenquist (1998)	2	2	2
20: Davis and Mantler (2004)	17	17	17
21: Xiao et al. (2009)	15	15	15
22: Sabri and Falahati (2013)	27	27	27
23: Ullah and Yusheng (2020)	39	39	39
24: Zurlo (2009)	46	47	46
25: WEF (2020)	24	24	24

Source: NVivo.

The key criteria of selecting the research articles were keyword search, e.g.; COVID-19 and finance, pandemics, financial well-being, behavioural finance, financial crisis, better-than-average effect, etc. It has been evidently found in studies that during any financial crisis and market-fall, investors usually ignore the position of their investment portfolio and, this event has been termed as the ostrich effect (Karlsson et al., 2009). Financial ignorance here has been defined as the tendency to avoid and neglect pertinent information that is freely available. Likewise, financial literacy is having the minimum knowledge to take financial decision making which enlightens of the commercial aspect of a human being. During an on-going pandemic, factors mentioned in the above study might lead to various coping strategies, resulting from individual differences in multiple levels of financial well-being.

3 Methodology

The study is combination of exploratory as well as descriptive in nature. It aims to explore different dimensions of financial well-being during an ongoing pandemic. Both primary and secondary data have been used for the purpose of the study. Primary data consisted of administered questionnaire. Secondary data were collected through various books and journals. It followed quantitative and qualitative research approach and attempted to find the key factors that affect the financial well-being during the COVID-19 pandemic in India. We have used several statistical techniques by applying qualitative software NVivo, and quantitative software SPSS 24. Descriptive statistics were used to examine each item which was captured through the questionnaire. For each attribute both frequency and descriptive statistics such as min, max, mean and standard deviation. etc., was computed.

The survey has been conducted online in India via Google forms between April 2021 and June 2021, among 172 respondents using convenience sampling. The reason behind choosing convenience sampling technique was primarily related to the current pandemic situation. India was already going through a unique phase, so no additional inputs were necessary for the principal research. Secondly, it was helpful in quick collection of data, which was another pre-requisite of the research i.e., to capture the mind-set of respondents exactly during an ongoing Covid-crisis. Finally, special emphasis was given to the accuracy and precision of data, during collection. The subjects of the study were

both male and female, which included students, self-employed and employees working across different job levels in India. The gender allotment was 55.7% male and 44.3% female. The average age of the participants ranged between 18-years-old and 55-years-old. The educational qualification of the participants was quite high, as it constituted post-graduate degree holder of 47%, graduates of 32% and remaining 21% pursuing their formal education. The study was conducted only considering samples which have competed full value scale. For the process of collecting primary data, structured questionnaires were used. It was further fragmented into six sections. We used 14 different scales for measuring financial well-being during the pandemic. First section dealt with participants demographic details. The second section of the questionnaire states the, measure of financial well-being. For which certain sub-scales were used like, Financial Anxiety scale (Fünfgeld and Wang, 2009), Financial Security scale (Strömbäck et al., 2017) and Financial Homo Ignorans (FHI) scale (Barrafrem et al., 2020a, 2020b). FHI further of sub-scales in relation to, motivated reasoning, aggregation bias, information avoidance and decision avoidance. FHI consisted of 12 items, its values ranged from 1 (low level of financial ignorance) to 5 (high level of financial ignorance). Furthermore, we measured financial literacy of the participants using Financial Literacy scale (Lusardi and Mitchell, 2008) that evaluated their knowledge about general inflation, compounding interest and risk assortment. Sections 3 and 4 of the questionnaires entail two scales consecutively, first being the Satisfaction with Life Scale (SWLS) (Diener et al., 1985) and the other was Subjective well-being scale. The SWLS contained four items, and was measured in 5-point Likert scale 1 (strongly disagree) to 5 (strongly agree). The Subjective well-being scale (Kahneman and Krueger, 2006) with three items was measured in agree or disagree. Section 5 of the questionnaire represented a series of three questions relating to individuals' prospects for the potential transforms in the economic condition (Barrafrem et al., 2020a, 202b) soliciting about their views on how the outburst of COVID-19 will have effect on the household, the country and the World. There were three items and were measured in value ranges from 1 (A lot worse) to 5 (A lot better). The 6th and the final section consisted of a series of additional scales in relation to our study. It included scales like, Financial Stress Scale (Garman et al., 2004) consisting six items, Financial Strain Scale (Norvilitis et al., 2003) of eight items, Financial Socialisation Scale (Danes and Yang, 2014) of six items, Financial Locus of control (Buddelmeyer and Powdthavee, 2016) with seven items, Measurements of Financial behaviours' (Hilgert et al., 2003; Xiao et al. 2006) with nine items, Financial Capability Scale (Collins and Collin, 2013) with six items, Frequency of Financial Problems Scale (FFPS) (Fitzsimmons et al., 1993) consisting of six items, Financial Satisfaction scale (Smith et al., 2017) with three items. The questions were intended to capture the actual financial behaviour of the respondents and, to understand their perspectives on financial well-being during the COVID-19 in India.

4 Results and discussions

The administered data collection from the study showed the following results. Cronbach alpha is the most broadly used method for verifying the reliability of scales. Generally, a Cronbach alpha above 0.7 is desirable for good internal reliability. The Cronbach alpha values for the scales used were 0.726, indicating standard reliability (see Table 6). The significance of the regression model (see Table 3) showed a statistically satisfying result

(F = 451.504), signifying the presence of a linear relationship among independent and dependent variables. Significantly, changes in dependent variables could be specified due to the alteration in independent variables as R^2-value (see Table 4) is .606 or 60.6%. Results also showed, Financial Ignorance had the highest beta value with .538, following satisfaction with life scale .300, then Financial stress with beta value .244 and finally, Financial literacy with .155 (see Table 5). The Kaiser-Meyer-Olkin (KMO) test was also conducted, as adequacy of sample is an important pre-requisite for factor analysis. In our study KMO was .731 (see Table 7), which directs to have adequate sample for the study, as anything above 0.5 is favourable for the analysis. According to the factor analysis conducted, the study had found four key factors that can be extracted using the Principal Component Analysis (PCA). It constitutes 64.86% (see Table 8) of total variance explained in our study, about financial well-being of the respondents during the COVID-19 in India. The solution was obtained by using fixed number of factors. Accordingly, 13 items were selected for factor, 1-Financial ignorance, 2-Financial literacy, 3-Financial stress, 4-Financial strain, 5-Financial socialisation, 6-Financial locus of control, 7-Financial behaviour, 8-Financial capability, 9-Financial problem, 10-Financial satisfaction, 11-Satisfaction with life, 12-COVID-19 on future economic condition and 13-Subjective well-being. In our study, from variable explained (see Table 9) we can extract those factors which were inter-correlated with them and financial well-being. The four extracted factors were Financial Ignorance, Satisfaction with Life, Financial Stress and Financial Literacy, respectively. Financial ignorance is highly associated with financial well-being because, in general as financial ignorance increases amongst respondents, chances of good financial decision-making decreases. Secondly, the study found association between financial literacy and financial well-being. As literacy increases awareness, it makes the investors more prudent in financial decision-making during an ongoing pandemic (Lusardi and Mitchell, 2011). Thirdly, Satisfaction with Life was also highly correlated with financial well-being, as it was discussed before that well-being leads to satisfaction and vice-versa. Hayhoe (1990), defines well-being as satisfaction feeling of a person with his financial status. Finally, financial stress found to have bond with financial well-being in our study. The collapse as a result of the pandemic caused an acute fall in consumption and investment (McKibbin and Fernando, 2020). Significantly, financial stress played an important role in the financial well-being of the respondents during an ongoing pandemic.

Table 3 ANOVA

		Sum of Squares	*df*	*Mean Square*	*F*	*Sig*
Between People		19088.503	171	111.629		
Within People	Between Items	179293.642	13	13791.819	451.504	.000
	Residual	67904.573	2223	30.546		
	Total	247198.214	2236	110.554		
Total		266286.717	2407	110.630		

Notes: Grand Mean = 18.91; SPSS 24.

Table 4 Model summary

Model	*R*	*R Square*	*Adjusted R Square*	*Std. Error of the Estimate*	*Change Statistics*				
					R Square Change	*F Change*	*df1*	*df2*	*Sig. F Change*
1	.778[a]	.606	.573	2.996	.606	18.657	13	158	.000

Notes: a. Predictors: (Constant), FinSatisfaction, FinLiteracy, FinSocialisation, COVID19FutureEcoCond, FinStrain, SWB, FinProblem, SWLS, FinLOC, FinIgnorance, FinStress, FinBehaviour, FinCapability; SPSS 24.

Table 5 Coefficients

Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	5.706	2.627		2.172	.031					
	FinIgnorance	.220	.027	.538	8.077	.000	.562	.541	.404	.562	1.780
	FinLiteracy	.212	.078	.155	2.723	.007	–.090	.212	.136	.768	1.302
	SWL	.405	.089	.300	4.572	.000	.482	.342	.228	.579	1.728
	SWB	–.589	.376	–.096	–1.566	.119	–.308	–.124	–.078	.670	1.493
	COVID19FutureEcoCond	–.046	.074	–.034	–.622	.535	.054	–.049	–.031	.831	1.204
	FinStress	.165	.046	.244	3.582	.000	.387	.274	.179	.538	1.858
	FinStrain	.061	.047	.084	1.290	.199	.405	.102	.064	.590	1.694
	FinSocialization	.115	.049	.154	2.354	.020	.225	.184	.118	.584	1.713
	FinLOC	.062	.052	.079	1.187	.237	.241	.094	.059	.569	1.757
	FinBehaviour	.069	.039	.134	1.770	.079	.162	.139	.088	.433	2.308
	FinCapability	–.210	.066	–.246	–3.201	.002	.241	–.247	–.160	.423	2.363
	FinProblem	–.102	.040	–.165	–2.538	.012	.054	–.198	–.127	.590	1.695
	FinSatisfaction	.074	.108	.042	.687	.493	.207	.055	.034	.655	1.526

Notes: a. Dependent Variable: FinWellBeing; SPSS 24.

Table 6 Reliability statistics

Cronbach's Alpha	*Cronbach's Alpha Based on Standardised Items*	*No. of Items*
.726	.697	14

Source: SPSS 24.

Table 7 KMO and Bartlett's test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		*.731*
Bartlett's Test of Sphericity	Approx. Chi-Square	838.636
	df	91
	Sig.	.000

Source: SPSS 24.

Table 8 Total variance explained

Component	*Initial Eigenvalues*			*Extraction Sums of Squared Loadings*			*Rotation Sums of Squared Loadings*[a]
	Total	*% of Variance*	*Cumulative %*	*Total*	*% of Variance*	*Cumulative %*	*Total*
1	3.887	27.767	27.767	3.887	27.767	27.767	3.128
2	2.237	15.980	43.747	2.237	15.980	43.747	2.505
3	1.858	13.271	57.018	1.858	13.271	57.018	2.677
4	1.098	7.842	64.859	1.098	7.842	64.859	1.526
5	.825	5.895	70.755				
6	.735	5.247	76.002				
7	.704	5.028	81.029				
8	.516	3.688	84.717				
9	.487	3.477	88.194				
10	.405	2.890	91.084				
11	.371	2.647	93.731				
12	.362	2.589	96.319				
13	.331	2.367	98.686				
14	.184	1.314	100.000				

Notes: Extraction Method: Principal Component Analysis; a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance; SPSS 24.

Table 9 Rotation component matrix[a]

	Component			
	1	*2*	*3*	*4*
FinIgnorance	.257	.640	–.458	.249
FinLiteracy	–.048	–.487	.482	.405
SWL	.573	–.244	–.499	–.149
SWB	–.344	.487	.481	.082
COVID19FutureEcoCond	.111	–.472	–.133	.687
FinStress	.563	–.483	–.318	.060
FinStrain	.442	.536	–.261	.436
FinSocialisation	.613	.250	.391	–.093
FinLOC	.496	.574	.191	.107
FinBehaviour	.742	–.185	.375	–.053
FinCapability	.819	.154	.084	–.087
FinProblem	.613	–.166	.423	.117
FinSatisfaction	.587	–.203	–.070	–.327

Notes: Extraction Method: Principal Component Analysis. a. 4 components extracted; SPSS 24.

5 Conclusion

The study investigated how an ongoing pandemic like COVID-19 affects individual perception of future economic outlook and financial well-being. For an emerging country like India, pandemic such as COVID-19 is a setback in its economic growth; it not only hampers the country's economic outlook, but also weakens the investment and financial morale of the county. It affects the financial well-being of world's largest consumer economy, in terms of both shape and size. In the study, it was our objective to provide a vivid picture of country's financial well-being and to quest for the factors that were affecting the same. From the results we can suggest that, people are tremendously gloomy about the economic viewpoint for the future. The pandemic in general, has affected the middle-class and lower middle-class strata of population the most. As, these two large segments of population play a pivotal role in contribution to the economy, their financial well-being works as a catalyst in the growth and development of the country. The implication of this study states that, the four factors identified from our study i.e., financial ignorance, satisfaction with life, financial stress and financial literacy are the key contributing elements that constitute financial well-being in India. The factors are quite relatable for an emerging economy, as the segmented financial genetic structure of any country depends of its literacy and financial awareness, the stress undergone by its population, their satisfaction with life and the level of their financial ignorance. Thereby, accelerating and enhancing the above factors in a positive direction might be helpful for improving the financial well-being of any country. In the same vein, further studies must be conducted for cultivating the inner dimensions and links among these factors to introspect in deep.

References

Alam, M.N., Alam, M.S. and Chavali, K. (2020) 'Stock market response during COVID-19 lockdown period in India: an event study', *Journal of Asian Finance, Economics and Business*, Vol. 7, No. 7, pp.131–137.

Aldana, S.G. and Liljenquist, W. (1998) 'Validity and reliability of a financial strain survey', *Journal of Financial Counseling and Planning*, Vol. 9, No. 2, pp.11–19.

Ashraf, B.N. (2020) 'Stock markets' reaction to COVID-19: cases or fatalities?', *Research in International Business and Finance*, Vol. 54. Doi: 10.1016/j.ribaf.2020.101249.

Banerji, J., Kundu, K. and Alam, P.A. (2020) 'Influence of behavioral biases on investment behavior', *SCMS Journal of Indian Management*, Vol. 17, No. 1, pp.81–98.

Bansal, T. (2020) 'Behavioral finance and COVID-19: cognitive errors that determine the financial future', *SSRN Electronic Journal*. Doi: 10.2139/ssrn.3595749.

Barrafrem, K., Västfjäll, D. and Tinghög, G. (2020a) 'Financial Homo Ignorans: measuring vulnerability to behavioral biases in household finance', *Financial Decision Making Intuition and Deliberation in Decision Making*. Doi: 10.31234/osf.io/q43ca.

Barrafrem, K., Västfjäll, D. and Tinghög, G. (2020b) 'Financial well-being, COVID-19, and the financial better-than-average-effect', *Journal of Behavioral and Experimental Finance*, Vol. 28. Doi: 10.31234/osf.io/tkuaf

Buddelmeyer, H. and Powdthavee, N. (2016) 'Can having internal locus of control insure against negative shocks? Psychological evidence from panel data', *Journal of Economic Behavior & Organization*, Vol. 122, pp.88–109.

Collins, J. and Collin, R. (2013) *Finding A Yardstick: Field Testing Outcome Measures for Community-based Financial Coaching and Capability Programs*, University of Wisconsin-Madison. pp.1–17. Available online at: http://fyi.uwex.edu/financialcoaching/files/2013/07/Report_Final.pdf

Danes, S.M. and Yang, Y. (2014) 'Assessment of the use of theories within the *Journal of Financial Counseling and Planning* and the contribution of the family financial socialization conceptual model', *Journal of Financial Counseling and Planning*, Vol. 25, No. 1.

Davis, C.G. and Mantler, J. (2004) *The Consequences of Financial Stress for Individuals, Families, and Society Centre for Research on Stress, Coping, and Well-being*, Carleton University.

Falahati, L. and Sabri, M.F. (2015) 'An exploratory study of personal financial wellbeing determinants: examining the moderating effect of gender', *Asian Social Science*, Vol. 11, No. 4, pp.33–42. Doi: 10.5539/ass.v11n4p33.

Fergusson, D.M., Horwood, L.J. and Beautrais, A. L. (1981) 'The measurement of family material well-being', *Journal of Marriage and the Family*, pp.715–725.

Fitzsimmons, V.S., Hira, T.K., Bauer, J.W. and Hafstrom, J.L. (1993) 'Financial management: development of scales', *Journal of Family and Economic Issues*, Vol. 14, No. 3, pp.257–274.

Fünfgeld, B. and Wang, M. (2009) 'Attitudes and behaviour in everyday finance: evidence from Switzerland', *International Journal of Bank Marketing*, Vol. 27, No. 2, pp.108–128. Doi: 10.1108/02652320910935607.

Garman, E.T., Sorhaindo, B., Bailey, W., Kim, J. and Xiao, J. (2004) 'Financially distressed credit counseling clients and the incharge financial distress/financial well-being scale', *Proceedings of the Eastern Regional Family Economics and Resource Management Association Conference*, pp.71–81. Available online at: https://scholar.google.com/scholar?hl=en&q=Drentea+and+Lavrakas&btnG=&as_sdt=1%2C5&as_sdtp=#5

Goodell, J.W. (2020) 'COVID-19 and finance: agendas for future research', *Finance Research Letters*, Vol. 35. Doi: 10.1016/j.frl.2020.101512.

Hayhoe, C.R. (1990) 'Theoretical model of perceived economic well-being', *Annual Proceedings of the Association for Financial Counseling and Planning Education*, pp.116–141.

Hilgert, M.A., Hogarth, J.M. and Beverly, S.G. (2003) 'Household financial management: the connection between knowledge and behavior', *Fed. Res. Bull.*, Vol. 89, p.309.

Joo, S.H. and Garman, E.T. (1998) 'Personal financial wellness may be the missing factor in understanding and reducing worker absenteeism', *Personal Finances and Worker Productivity*, Vol. 2, No. 2, pp.172–182.

Kahneman, D. and Krueger, A.B. (2006) 'Developments in the measurement of subjective well-being', *Journal of Economic Perspectives*, Vol. 20, No. 1, pp.3–24.

Kapoor, S. and Prosad, J.M. (2017) 'Behavioural finance: a review', *Procedia Computer Science*, Vol. 122, pp.50–54. Doi: 10.1016/j.procs.2017.11.340.

Karlsson, N., Loewenstein, G. and Seppi, D. (2009) 'The ostrich effect: Selective attention to information', *Journal of Risk and Uncertainty*, Vol. 38, No. 2, pp.95–115.

Liu, H., Manzoor, A., Wang, C., Zhang, L. and Manzoor, Z. (2020) 'The COVID-19 outbreak and affected countries stock markets response', *International Journal of Environmental Research and Public Health*, Vol. 17, No. 8, pp.1–19. Doi: 10.3390/ijerph17082800.

Lusardi, A. and Mitchell, O.S. (2008) 'Planning and financial literacy: how do women fare?', *American Economic Review*, Vol. 98, No. 2, pp.413–417. Doi: 10.1257/aer.98.2.413.

Lusardi, A. and Mitchell, O.S. (2011) 'Financial literacy around the world: an overview', *Journal of Pension Economics & Finance*, Vol. 10, No. 4, pp.497–508.

McKibbin, W. and Fernando, R. (2020) *The Global Macroeconomic Impacts of COVID-19*, Brookings Institute, pp.1–43. Available online at: https://www.brookings.edu/wp-content/uploads/2020/03/20200302_COVID19.pdf

Mishra, A.K., Rath, B.N. and Dash, A.K. (2020) 'Does the Indian financial market nosedive because of the COVID-19 outbreak, in comparison to after demonetisation and the GST?', *Emerging Markets Finance and Trade*, Vol. 56, No. 10, pp.2162–2180. Doi: 10.1080/1540496X.2020.1785425.

Norvilitis, J.M., Szablicki, P.B. and Wilson, S.D. (2003) 'Factors influencing levels of credit□card debt in College Students 1', *Journal of Applied Social Psychology*, Vol. 33, No. 5, pp.935–947.

Oprean, C. and Tanasescu, C. (2014) 'Effects of behavioural finance on emerging capital markets', *Procedia Economics and Finance*, Vol. 15, No. 14, pp.1710–1716. Doi: 10.1016/s2212-5671(14)00645-5.

Ozili, P.K. and Arun, T. (2020) 'Spillover of COVID-19: impact on the global economy', *SSRN Electronic Journal*. Doi: 10.2139/ssrn.3562570.

Paule, J., Gómez, R. and Prado, C. (2020) 'A bibliometric analysis of behavioural finance with mapping analysis tools', *European Research on Management and Business Economics*, Vol. 26, No. 2, pp.71–77. Doi: 10.1016/j.iedeen.2020.01.001.

Peterson, O. and Thankom, A. (2020) 'Spillover of COVID-19: impact on the global economy', *SSRN Electronic Journal*, Vol. 10, pp.11–15.

Phan-Vianez, D.H.B. and Narayan, P.K. (2020) 'Country responses and the reaction of the stock market to COVID-19 – a preliminary exposition', *Emerging Markets Finance and Trade*, Vol. 56, No. 10, pp.2138–2150. Doi: 10.1080/1540496X.2020.1784719.

Sabri, M.F. and Falahati, L.F. (2013) 'Predictors of financial well-being among Malaysian employees: examining the mediate effect of financial stress', *Journal of Emerging Economies and Islamic Research*, Vol. 1, No. 3, pp.61. Doi: 10.24191/jeeir.v1i3.9130.

Shanaev, S., Shuraeva, A. and Ghimire, B. (2020) 'The financial pandemic: COVID-19 and policy interventions on rational and irrational markets', *SSRN Electronic Journal*. Doi: 10.2139/ssrn.3589557.

Smith, J., Ryan, L., Sonnega, A. and Weir, D. (2017) *Psychosocial and Lifestyle Questionnaire 2006 – 2016*, Documentation Type and Report, HRS, pp.1–72.

Strömbäck, C., Lind, T., Skagerlund, K., Västfjäll, D. and Tinghög, G. (2017) 'Does self-control predict financial behavior and financial well-being?', *Journal of Behavioral and Experimental Finance*, Vol. 14, pp.30–38. Doi: 10.1016/j.jbef.2017.04.002.

Taft, M.K., Hosein, Z.Z. and Mehrizi, S.M.T. (2013) 'The relation between financial literacy, financial wellbeing and financial concerns', *International Journal of Business and Management*, Vol. 8, No. 11. Doi: 10.5539/ijbm.v8n11p63.

Ullah, S. and Yusheng, K. (2020) 'Financial socialization, childhood experiences and financial well-being: the mediating role of locus of control', *Frontiers in Psychology*, Vol. 11, pp.1–11. Doi: 10.3389/fpsyg.2020.02162

Van Praag, B.M., Frijters, P. and Ferrer-i-Carbonell, A. (2003) 'The anatomy of subjective well-being', *Journal of Economic Behavior & Organization*, Vol. 51, No. 1, pp.29–49.

Williams, F.L. (1983) 'Money income, nonmoney income, and satisfaction as determinants of perceived adequacy of income', *Proceedings of the Symposium on Perceived Economic Well-being*, pp.106–125.

World Economic Forum (WEF) (2020) *Impact of COVID-19 on the Global Financial System Platform for Shaping the Future of Financial and Monetary Systems Recommendations for Policy-Makers Based on Industry Practitioner Perspectives*, Documentation.

Xiao, J.J., Tang, C. and Shim, S. (2009) 'Acting for happiness: financial behavior and life satisfaction of college students', *Social Indicators Research*, Vol. 92, No. 1, pp.53–68. Doi: 10.1007/s11205-008-9288-6.

Zurlo, K.A. (2009) 'Personal attributes and the financial well-being of older adults: the effects of control beliefs', *PARC Working Papers*, Vol. 48, No. 3, pp.27. Available online at: http://repository.upenn.edu/parc_working_papers%5Cnhttp://repository.upenn.edu/parc_working_papers/27