A Study on the Impact of COVID - 19 on Alternative Investment Funds in India

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Abstract

This paper aimed to study and analyze the four major aspects of the COVID – 19's effect on alternative investment funds in India. First of all, the research was carried out to study the significant differences between the SEBI quarterly AIF commitments raised in the pre and post covid periods (i.e. from 2018 to 2021) by employing a one-way ANOVA test. The results revealed there existed a statistically significant difference in the AIF structure pre and post COVID - 19. The second aspect involved ascertaining the correlation coefficients between stock market performance and various categories of AIF. It was observed that there was a pattern between BSE 500 and AIF data, suggesting a direct relationship between stock market performance and AIF commitment raised. It was also concluded that Indian interest rates were negatively correlated and the USD/INR rates were positively correlated with the AIF. Further, in the third aspect of the study, primary research was undertaken to understand the investor perception of AIF. For the same, a 23-Likert scale questionnaire was developed for institutional investors and high net-worth individuals who invested in AIF. Finally, out of the five independent variables, four components were extracted using a rotated component matrix. The final aspect of the study focused on crowdfunding. The results indicated that crowdfunding, inherently, may cause the initial agreement to collapse, leaving both parties worse off, that is, VC without a project and the entrepreneur without the VC's expertise. In essence, the study concluded that alternative investment funds were not much affected due to the pandemic. Rather, as an implication, they necessitate a specialized and transparent regulatory framework as an individual asset class.

Keywords: alternative investment fund, COVID - 19, analysis of variance, principal component analysis, crowdfunding, venture capital

JEL Classification Codes: C12, C38, C87, G23

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he alternative investment fund industry in India is quite recent and the regulations were introduced in the year 2012 only. Simply stated, alternative investment funds (henceforth referred to as AIF) are a vehicle that invests in assets and approaches that do not fit well under the categories of individual bonds, equities, or cash. There are three categories of AIFs. The investors who can invest in an AIF are institutional investors, high net worth individual sovereign funds, and pension funds. The AIF need not necessarily invest 65 percent in unlisted equity; rather it can be entirely a debt fund as well. AIF fulfill the dual objectives – a) to provide a well-regulated platform to its investors that enables investor protection; and b) to allow flexibility to the asset manager to launch funds beyond the traditional venture capital fund.

The purpose of this research was to determine the consequences and causes of COVID - 19 on alternative investments from 2018 to 2021. The present study contributes to the literature in many ways. First of all, past

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scholars have discussed the functioning and risk level assessment of AIFs in India in great depth, but there is hardly any study that captures the impact of the pandemic on the alternative investment market and analyzes the significant difference between AIF in the pre-covid and post-covid times. Further, no adequate research is carried out to study the perception of investors on investing in AIF in the pre-covid and post-covid times. Moreover, not many studies have been conducted to analyze the impact of crowdfunding on the changes in the venture capital industry during covid and which are the factors that could hinder the growth of AIF in the future. With regard to the institutional investor perspective, there are a lot of papers focusing on factors affecting the AIF industry, but the retailer investor perspective has not yet been considered. Thus, this study intended to fulfil all the gaps and provide a comprehensive and conclusive evidence about AIF's reaction during COVID - 19.

Literature Review

The literature review for each objective has been done separately as elucidated below:

\$ Objective I. To evaluate the micro and macro level risk of AIF, Panait and Barangă (2018) proposed an approach to assess the risk of an AIF. The approach involved the creation of a risk management panel consisting of eight risk categories, each with different risk signals. The proposed framework combined several indicators with a time series and cross-sectional approach. But due to AIF being in its nascent stage, the unavailability of reports and data limited the testing of the model. Thus, the proposed framework was deliberately made flexible in nature to deal with the complexity of the computation of risk ratings mechanically. It was, further, concluded that selfassessments and market supervisors with essential comparisons among industry players can be evaluated to help the asset manager.

Yüksel (2021) answered three major questions – a) whether the hedged mutual fund investors can recognize exceptional fund managers; b) whether the hedged mutual funds can outperform the market; and c) whether the investors exhibit any behavioral biases while investing in hedged mutual funds. The findings suggested that hedged mutual fund investors place a higher value on the return associated with exotic risk exposures. Moreover, hedged mutual funds did not contribute considerable value to investors on average.

Gompers et al. (2022) highlighted the impact of COVID - 19 on private equity investors and their behavior. They surveyed a sample of 200 PE managers with \$1.8 trillion AUM regarding their competence, judgment, and operations of the portfolio. Private equity managers were asked to classify their portfolios based on the impact of the pandemic. A green portfolio meant a positive effect of the pandemic. The portfolios were marked yellow if they were somewhat affected and were marked red in the rest of the cases. The results showed that the expectations regarding the future performance of the private equity portfolios have been lowered. From an investor's perspective, PE investors also expected their existing fund's performance to suffer as a result of the pandemic.

To the best of our knowledge, none of the existing literature considered the performance of AIF during the pandemic, which forms the first gap that we aimed to fulfill.

- \$\to\$ Objective II. Smet and Hooghiemstra's (2019) contribution demonstrated that a wide range of 'co-investment vehicles' may be covered under the AIFM Law framework. The purpose of this paper was to identify whether an investment vehicle qualifies as an AIF or not. The analysis concluded that if the vehicle qualifies as an AIF, it may be difficult for the vehicle's manager to comply with AIFM law if the structure is not properly authorized. The second objective, thus, was to study the relationship between various investment avenues and AIF.
- \$\top \textbf{Objective III.} The next part of the research focused on investor perception. Manda and Beatrice (2019) highlighted the recent changes in Indian debt mutual funds, their impact, and investors' perceptions of debt funds

and finally made recommendations to assist various stakeholders. The analysis of the primary data collected for 139 respondents, using a questionnaire, provided evidence that the majority of respondents were aware of the SEBI reclassification, but believed that further awareness of debt schemes was required. The study advised investors to consider diversified debt fund schemes that have a high AUM to minimize the impact of a default incidence on returns. On the basis of the review, there was motivation to undertake a similar analysis for AIFs and study the impact and investor perception towards AIF, especially during the pandemic.

\$ Objective IV. The final part of the research focused on studying the impact of crowdfunding on the venture capital industry. The research conducted by Babich et al. (2020) proposed a logical foundation for the past findings and concluded that some projects lose venture capital funding following successful crowdfunding campaigns. Thus, crowdfunding can be harmful to both the entrepreneur and the venture capitalist. Fairchild et al. (2017) devised a methodology to help entrepreneurs decide whether to go with venture capital or crowd-funding. Their analysis elucidated that if an entrepreneur goes with venture capital, the venture capitalist will put in the effort to create value in exchange for acquiring a portion of the equity. On the other hand, though entrepreneur gets to maintain their equity if they opt for crowd-funding, crowdfunding investors are not interested and do not result in the creation of value. In summary, the study investigated the impact of entrepreneurial overconfidence on his choice and helped the entrepreneurs to make financing decisions based on the advantages and disadvantages of both sources. Moedl (2018) investigated the impact and signaling effects of crowdfunding on following venture investor decisions. A choice-based conjoint experiment among venture capitalists was performed to highlight pre-funding's significance in new venture financing. Overall, the study found that a business angel's pre-funding is a positive signal, while prior crowd financing is a negative signal that affects venture capitalists' selection processes. On the basis of the extensive literature review carried out, it was established that no significant study has been undertaken to study the impact of crowdfunding on the venture capital industry during COVID - 19 and which are the factors that could hinder the growth of AIF in the future.

Objectives of the Study

- (1) To analyze the significant difference between Alternative Investment Funds in the pre-Covid and post-Covid periods.
- (2) To analyze the relationship between stock market performance and various categories of AIF in the pre-covid and post-covid periods.
- (3) To study investor perception of alternative investment funds during the pandemic.
- (4) To assess the impact of COVID 19 on crowdfunding and its subsequent impact on the venture capital industry.

Methodology

Data Collection

The research was conducted using both primary and secondary data. For the primary data, a survey was circulated among the AIF investors. A questionnaire, with 23 questions, was designed based on the five independent variables identified through critical analysis of the literature review. These variables were investor behavior, return, risk propensity, investor preferences, and taxation impact on AIF. Investor perception of AIF was considered as the dependent variable. In addition, the quareterly data on AIF commitments raised in all three

categories were collected from SEBI's official website for the period 2018 – 2021. Further, for calculating the correlation coefficients, the data regarding BSE500, Indian interest rates, and USD/INR were collected from the Yahoo finance database and St Louis fed website. For the fourth objective, various websites such as Scopus Index and Google Scholar were used to identify research papers, articles, and journals of high repute.

Research Methodology

Post-variable identification, appropriate hypotheses were framed to test the significant differences between pre covid and post covid AIF commitments and were analyzed by employing the One-way ANOVA test (Table 1). Hypotheses were, again, formulated to test the association of AIF commitments raised with macro variables like BSE500 (Table 2), Indian interest rates (Table 3), USD/INR (Table 4), and trend analysis (Figure 1). For the third objective, ten variables were identified, on the basis of an extensive literature review, that impacts investor perception of AIF. The sampling technique used was convenience sampling. While the minimum sample size required for this research was calculated to be 118, the final sample size considered for analysis was 140. The questionnaire was distributed using Google form and the data were collected. The tests conducted in this segment are the Reliability test (Cronbach's Alpha) (Table 5), Rotated Component Matrix (Table 6), Spearman's Correlation, and Principal Component analysis (Figure 2).

Analysis and Results

Analysis of Significant Differences and Correlation of AIF Commitments Raised

The hypotheses formulated were tested and the findings of the analysis are elucidated below:

Dependent Variable: Commitments Raised and Independent Variable: Time frame.

\$\,\mathbb{H}_{0.1}\$: There are no significant differences between the level of AIF commitments raised prior to and post-Covid 19.

\$\Box\$ H_{a.1}: There are significant differences between the level of AIF commitments raised prior to and post-Covid 19.

Generally, there are three categories in AIF.

Table 1. One-Way ANOVA Test for AIF Commitments Raised in India

Hypothesis	ypothesis Hypothesis variable		p - Value	Null Hypothesis	
				Accept/Reject	
H _{0,1.1}	Category 1 of AIF commitments raised	β1 = 0	.007	Reject	
H _{a, 1.1}		$\beta 1 \neq 0$			
H _{0,1.2}	Category 2 of AIF commitments raised	β1 = 0	.003	Reject	
$H_{a,1.2}$		$\beta 1 \neq 0$			
H _{0,1.3}	Category 3 of AIF commitments raised	β1 = 0	.004	Reject	
H _{a,1.3}		$\beta 1 \neq 0$			

- \$\textsquare\$ Category-1 funds: These are funds that have a very positive spillover benefit on the overall economy. Some of the funds under CAT-1 are Venture Capital Funds, social venture funds, and infrastructure funds.
- \$\text{\$\colongraphian}\$ Category-2: These are the residual category that does not fall under either of the categories of CAT-1 and CAT-3. These are tax-exempt vehicles. Real estate funds and private equity funds fall under CAT-2.
- ♥ Category-3: These are funds that employ very diverse or complex trading strategies. Hedge funds are registered under CAT-3 AIFs.

In the above analysis, three categories of AIFs were considered. The p-values of the independent variable (Table 1) are 0.007, 0.003, and 0.004, respectively for each category, thus, rejecting the Null hypothesis ($H_{0,1}$). This suggests that the time frame (pre-covid and post-Covid) affected all three categories of AIF commitments raised in India and therefore, there is a statistically significant difference in the AIF structure during pre-covid and post-covid.

\$\text{Hypothesis 2: The Impact of BSE 500 on AIF commitments raised in India.}

Dependent Variable: AIF commitments raised in India and Independent Variable: BSE500.

- \$\,\mathbb{H}_{0.2}\$: The BSE500 index is not correlated with the level of AIF commitments raised in India.
- \$\Box \mathbf{H}_{a.2}\$: The BSE500 index is correlated with the level of AIF commitments raised in India.

As can be noted from Table 2, the Pearson's correlation coefficient (*r*) between the BSE500 and CAT-1 is +0.917, BSE500 and CAT-2 is +0.780, and BSE500 and CAT-3 is +0.877. The coefficient is also found to be statistically significant and positive, implying that an increase in BSE500 will correlate with an increase in AIF commitments raised and vice versa. Thus, we reject the null hypothesis and conclude that there is a strong positive relationship between BSE500 and different categories of AIF at 0.01 level of statistical significance.

\$\text{ Hypothesis 3: The impact of Indian interest rates on AIF commitments raised in India.}

Dependent Variable: AIF commitments raised and Independent Variable: Indian interest rates.

- the Indian interest rates are not correlated with the level of AIF commitments raised in India.

Table 2. Correlation Between BSE500 and AIF Commitments Raised in India

Hypothesis	Hypothesis variable	H₀	r - Value	Null Hypothesis
				Accept/Reject
H _{0,2.1}	Category 1 of AIF commitments raised	β1 = 0	.921**	Reject
$\mathbf{H}_{a,2.1}$		$\beta 1 \neq 0$		
H _{0,2.2}	Category 2 of AIF commitments raised	β1 = 0	.879**	Reject
H _{a,2.2}		$\beta 1 \neq 0$		
H _{0,2.3}	Category 3 of AIF commitments raised	β1 = 0	.813**	Reject
$H_{a,2.3}$		$\beta 1 \neq 0$		

Table 3. Correlation Between Indian Interest Rates and AIF Commitments Raised

Hypothesis	Hypothesis variable	H₀	r - Value	Null Hypothesis	
				Accept/Reject	
H _{0,3.1}	Category 1 of AIF commitments raised	β1 = 0	760**	Reject	
H _{a,3.1}		$\beta 1 \neq 0$			
H _{0,3.2}	Category 2 of AIF commitments raised	β1 = 0	742**	Reject	
H _{a,3.2}		$\beta 1 \neq 0$			
H _{0,3.3}	Category 3 of AIF commitments raised	β1 = 0	672**	Reject	
H _{a,3.3}		$\beta 1 \neq 0$			

Table 3 shows that Pearson's correlation coefficients (r) between the Indian interest rates and the three categories for AIF commitments raised are -0.760, -0.742, and -0.672 respectively. A negative sign implies that a decrease in Indian interest rates will cause an increase in the AIF commitments raised in India and vice versa. Thus, we reject the null hypothesis in all three cases and conclude that there is a strong negative correlation between the Indian interest rates and different categories of AIF at 0.01 level of statistical significance.

Figure 1 illustrates the negative relationship discussed above using a simple scatter graph. Quarterly data on the Indian interest rates from 2013 to 2021 is plotted on the X-axis, while the Y-axis represents the quarterly AIF commitments raised for the same period.

Dependent Variable: AIF commitments raised in India and Independent Variable: USDINR.

\$\Box\textbf{H}_{0.4}\$: The USD/INR rates are not correlated with the level of AIF commitments raised in India.

🖔 H₂₄: The USD/INR rates correlated with the level of AIF commitments raised in India.

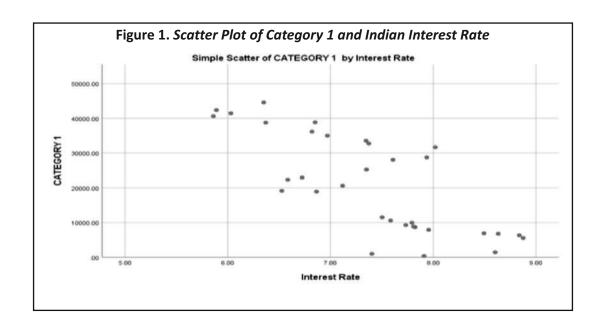


Table 4. Correlation Between USD/INR and AIF Commitments Raised in India

Hypothesis	Hypothesis variable	H _o	r - Value	Null Hypothesis
				Accept/Reject
H _{0,4.1}	Category 1 of AIF commitments raised	β1 = 0	.889**	Reject
$H_{a,4.1}$		$\beta 1 \neq 0$		
H _{0,4.2}	Category 2 of AIF commitments raised	β1 = 0	.851**	Reject
H _{a,4.2}		$\beta 1 \neq 0$		
H _{0,4.3}	Category 3 of AIF commitments raised	β1 = 0	.838**	Reject
H _{a,4.3}		$\beta 1 \neq 0$		

Table 5. Reliability Statistics

Cronbach's Alpha	N of Items				
.784	12				

A similar analysis was undertaken to study the impact of USD/INR on the AIF Commitments raised in India. Findings, summarized in Table 4, show that the Pearson's correlation coefficient (r) between the USD/INR and the three categories for AIF commitments raised is 0.889, 0.851, and 0.838 respectively. The p-value (2-tailed) is 0.000 in all three scenarios. The results corroborate that the higher the USD/INR rates, the higher will be the AIF commitments raised in India, and thus, we reject the null hypothesis and conclude that there is a statistically significant correlation between USD/INR and different categories of AIF.

Analysis of Investors' Perception of Alternative Investment Funds During the Pandemic

Internal consistency is measured using Cronbach's Alpha, wherein any score more than 0.70 is considered acceptable. For our analysis, the total number of responses obtained from the google form was 140 and the Cronbach's Alpha for the 12 items was 0.784 (Table 5), indicating that the scale is trustworthy and has internal consistency.

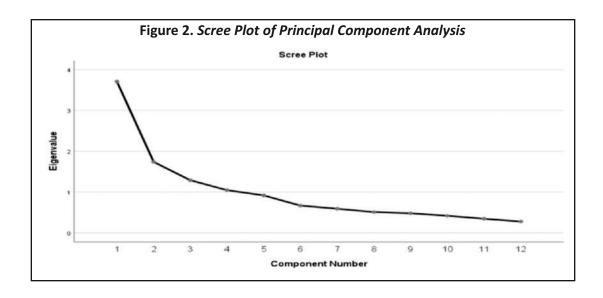
The results of the rotated component matrix are tabularized in Table 6. It shows the variables under different components. Generally, when a variable meets the loading criterion on more than a single component, then it might not be considered for naming the component. Statement numbers 5,6,10, and 12 meet the criterion and thus, are not named as a separate component. Further, we observe that out of the measured variables, items one and two meet the loading criterion on component one and, thus, is named 'Investor perception'. Similarly, items nine and 11 meet the loading criterion on component two and is named 'tax impact on AIF', items seven and eight meet the loading criterion on component three and is named 'Investor behavior' and lastly, items three and four meet the loading criterion on component four and is named as 'Risk propensity'. In summary, out of the five independent variables, four components were extracted using a rotated component matrix.

Figure 2 shows that there is at least one dominant component (i.e., Component 1). However, the "rubble" appears to trail off after Components 2, 3, and 4. This suggests that four possible components can be extracted. The factors post-observation is:

- Factor 1: Individual Decision-Making in Investment in AIF.
- Sector 2: External Factors in the Investment Decision in AIF.

Table 6. Rotated Component Matrix

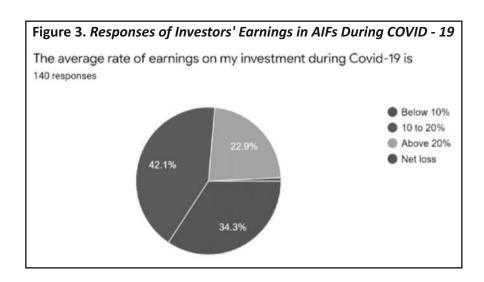
	1	2	3	4
1. My interest level in AIF.	.758			
2. I feel being invested in AIF is a safe investment during Covid.	.820			
3. Investment in private equity is risky as valuation is not accurate.				.800
4. I can take the risk of losing the principal investment				.636
amount for post-covid investment.				
5. I will be prepared to accept poor returns on my investment during the pandemic.			.545	.534
6. I take my decisions independently during investment in AIF.	.539	.412		
7. General investors follow herding behavior during their investment in AIF.			.795	
8. Some investors invest according to the hot hand fallacy.			.816	
9. The impact of the recent increase in the rate of income tax surcharge		.788		
for non-corporate taxpayers resulted in reduced investor appetite.				
10. I think clarity on taxation of Cat-3 AIFs specifically set up as trusts	.405	.412		
would have a positive impact on fundraising.				
11. I see an inherent discomfort to invest in AIFs due to the recent		799		
hike in income from dividends.				
12. Would you recommend the govt. to provide tax clarity on investment	.443	.593		
income similar to foreign portfolio investors?				



Sehavioural Finance Aspects Affecting Investment Decisions in AIF.

Sector 4: Risk and Return Aspects in the Investment Decision in AIF.

Responses to the questionnaire circulated regarding Investors' earnings in AIF are depicted in the pie chart in Figure 3. It shows that the majority of the respondents (i.e. 42.1%) earned 10 – 20% returns during the pandemic and 22.9% of investors earned more than 20% returns. Based on the responses, it can be concluded that investors' returns on AIF were not much affected during COVID - 19.



Impact of Crowdfunding on the Venture Capital Industry and Factors that can Influence AIF post-COVID-19

Crowdfunding is the process of raising cash from a large number of people using social networking sites for a specific purpose. In India, it is critical to develop balanced crowdfunding rules that decrease capital costs and enhance liquidity while also providing appropriate investor security and reducing risks involved in the investments made. On the other hand, VCFs are investment vehicles through which individuals invest their money into new start-ups as well as small and medium-sized businesses with the aim to earn large profits. Investing in these firms, however, comes with a high level of risk.

A critical analysis of the literature led us to conclude that after a successful crowdfunding effort during the pandemic, both the entrepreneur and the VC may be worse off. The probable reasons that follow are:

The fundamental reason is that the additional funds and increased chances of project success as a result of successful crowdfunding may modify the rivalry between investor classes and the motivations of entrepreneurs and venture capitalists to put forth an effort.

A successful crowdfunding effort may backfire on the VC, causing them to abandon the agreement. Furthermore, the success of crowdfunding may be detrimental to entrepreneurs. Entrepreneurs, on the other hand, lose out on the operational knowledge that a VC would have brought to the table if successful crowdfunding prompts the VC to quit the transaction.

Thus, crowdfunding may boost the value of a business and help entrepreneurs get better financing conditions. It has the potential to be a beneficial source of start-up finance. Nevertheless, both those seeking to become crowdfund investors and those seeking investment from crowdfunding investors must exercise caution.

Based on all observations, we conclude that the most severe forecasts about COVID - 19's influence on venture capital did not come true. Although the pandemic has not yet ended, the data suggest that the venture capital industry and its portfolio companies have decreased their action less as compared to their actions in the previous crises and that they have been more adaptable than the other sectors of the economy.

The factors that might affect the future of alternative investment funds in India are:

🖔 Low-Interest Rates: At present, the fixed income instruments are charging low-interest rates due to which the

investor's eyes have caught AIF as an investment avenue. But if AIF generates low returns in the future, then people will start pooling their money in fixed-income securities which will hinder the growth of AIF in India.

- \$\triangle\$ Government Policies: According to the AIF Regulations, AIFs cannot be sold to the general public or retail investors. Only sophisticated investors can join the AIF since each investor must make a minimum commitment of ten million rupees. A change in government policy might result in easy accessibility for all types of investors. In this regard, unlike the mutual fund industry, AIF is not a well-structured industry and it might affect the future of AIF in India.
- \$\text{Lack of Investor Awareness of AIF: Most of the common people as well as retail investors are not much aware of AIF and its operations. The common notion is that AIF is meant for sophisticated investors only. Unawareness and unavailability of performance-related data make it difficult to promote the AIF in India.
- \$\text{Tax Structure: Investors find AIF to be a challenging investment due to its complex tax structure. As a solution, it is advised that for category-3 AIF tax structure, there must be flexibility in documentation and structure should be preserved to meet any future changes in regulatory and tax systems as continuous changes in the legislation may have a negative impact.
- 🔖 Risk Level: Diversification among uncorrelated asset classes is not an easy task. Without adequate due diligence, target allocations to the broad buckets of hedge funds, private equity, and venture capital are likely to disappoint most investors.

Conclusion

This paper examined the significant difference in AIF commitment raised in India in the pre-covid and post-covid periods from 2018 to 2021. Based on the findings obtained, it can be concluded that the AIF industry had a significant difference in its structure pre-covid and post-covid. Specifically, there were positive changes in the AIF commitments in pre and posts covid, i.e., the funds raised increased in 2020 as compared to the previous year. Further, contrary to the popular belief that AIFs are not affected by stock market performance, our study provides evidence that there exists a strong positive correlation between AIF and the BSE500. Moreover, these funds have a positive correlation with USD/INR and a negative correlation with the Indian interest rates. Thirdly, the results from the principal component analysis conducted on the primary data collected, four components were extracted to be used for future studies. The four components extracted are investor perception, the tax impact on AIF, investor behavior, and risk propensity. On the basis of the responses obtained, we can say that investors expect a simple tax structure in AIF, especially in category 3 AIF, and the most registered and investor-preferred category in AIF during the pandemic is category 2. It is also observed that investor returns were not much impacted by COVID - 19. Additionally, the findings suggest that the most severe forecasts about COVID - 19's influence on venture capital did not come true. In summary, AIFs are a new industry. Despite the risk involved, it is expected to grow well in the future and be one of the most attractive sources of capital for Indian businesses.

Research Implications

- \$\text{Regretfully, most entrepreneurial companies do not have access to venture financing. As a result, a nascent equity crowdfunding ecosystem is required to join and strengthen the crowd.
- 🔖 Equity crowdfunding platforms are required to provide resources for venture formation. Wealth management businesses and banks are paying attention to this type of alternative finance, and this trend may be accelerated by historically low-interest rates.

\$\\$ The restriction on the maximum number of investors who can participate in a program might potentially be loosened by SEBI. This will result in bigger investment amounts in various sectors such as private equity, venture capital, and real estate, as well as higher AUMs under each plan. Consequentially, SEBI would establish a path to promote retail investment and assist the AIF business growth.

The SEBI can establish regulations to improve the transparency of AIF activity, particularly in asset classes and regions where investors might be attracted. This will help investors to execute good investment decisions and will help SEBI to earn the trust of both institutional and ordinary investors. Moreover, a well-regulated and simplified sector would not only improve India's private capital base, but will also raise investor confidence and, as a result, expand deal-making possibilities across the board.

Limitations of the Study and Scope for Future Research

The analysis was conducted for a period restricted to only 2018–2020 as the main study focuses on the pandemic period. Further, the research was limited to data collected for only AIF commitments raised. The study can be carried forward by extending the time frame and adding macroeconomic variables as independent variables and introducing new variables. Research can be further extended to analyze the impact of AIF in India on various sectors and industries. A comparative analysis can also be undertaken between AIF in India and other countries. Moreover, the study captures the association of AIF with only one Stock Market Index, i.e., BSE 500. The scope of the future study can include other indices, sectors, and variables for better understanding.

Authors' Contribution

Dr. Uday Kumar Jagannathan conceived the idea and developed qualitative and quantitative designs to undertake the empirical study. Mangala Minutha extracted research papers with high repute, filtered these based on the keywords, and generated concepts and codes relevant to the study design. Dr. Uday Kumar Jagannathan verified the analytical methods and supervised the study. Mangala Minutha did the numerical computations using SPSS 20.0 and wrote the manuscript in consultation with Dr. Uday Kumar Jagannathan.

Conflict of Interest

The authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest, or non-financial interest in the subject matter or materials discussed in this manuscript.

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