Private Equity Industry and Funding Instrument Analysis in the Post-Covid-19 Pandemic Era

Jiayu Yu^{1,a,*}

¹University of Toronto Scarborough, Ontario, Canada, M1C1A4 a. atroposyu@gmail.com *corresponding author

Abstract: A rising number of academic papers have analyzed the negative impacts of the COVID-19 epidemic on the financial markets. However, the thorough research of the pandemic's effects on financial markets and lifestyle changes remains relatively unexplored. Based on research and data from the world's major economies, including Europe and North America, this paper empirically analyses, forecasts, and assesses the worldwide private equity business and its prevalent financing techniques, as well as emerging financing methods. Due to the influence of the COVID-19 pandemic, the results indicate that some leveraged or stable companies have favorable medium-term prospects, but the long-term impact may be little. In addition, the pandemic has altered the way people live in certain regions and accelerated the growth of certain sectors, such as online education and artificial intelligence. The author also concludes that, despite the fact that the new finance methods may partially replace the traditional ones, their inadequacies are revealed.

Keywords: private equity, financing instruments, COVID-19, crowdfunding, security token offering

1. Introduction

The aftermath of the coronavirus on the economy has led numerous industries to suffer. Nonetheless, it has significantly altered how we currently live, work, and communicate.

In this setting of crises, the future consequences are mostly uncertain. Due to changing lifestyles, a lack of liquidity, and high inflation, several traditional sources of funding and the private equity business are set to experience profound changes. At the same time, new financing channels — crowdsourcing and security token offering (STO) — arose in response to the financing difficulties of some established financing channels, becoming the dominant force in the finance industry. The purpose of this paper is to speculate on how the private equity business may evolve in the medium to long term in relation to many traditional financing vehicles and the investing process following the COVID-19 pandemic. This paper will provide a forecast for the future development of the private equity industry and make recommendations for underlying issues based on data relating to traditional funding resources, IPO information, people's social behavior, and the historical performance of crowdfunding and STO during the COVID-19 pandemic.

2. Introduction to Various Private Equities and Financial Instruments

2.1. Mezzanine

Mezzanine financing is a mix of debt and equity that permits lenders to convert securities into equity in the event of default. Mezzanine finance is extremely straightforward to get because the investor simply needs to conduct basic due diligence and the investment typically requires little to no security. This indicates that mezzanine debt is riskier than standard debt. Although investors have the right to convert the debt into control of the company, investors risk losing their investment if the company declares bankruptcy. Mezzanine debt gives the highest rate of return compared to normal bonds or debt, and it often generates returns of more than 12 percent annually. It often provides more consistent profits than equity. From 1998 to 2002, the average internal rate of return (IRR) for mezzanine financing fluctuated between 16 and 25 percent, never dipping below 15 percent. The performance was consistent throughout the 2008 financial crisis and the COVID-19 pandemic [1]. Therefore, when the medium-term market is relatively low and the majority of investors tend to be risk-averse, mezzanine debt is a means of obtaining high but fixed returns and increasing flexibility. Obviously, the returns also depend on the performance of the company. Additionally, Saratoga Investment Corporation claimed that mezzanine finance has excellent long-term potential. The market for mezzanine finance will reach \$9.43 billion by 2026, expanding at an annual rate of 4.6%. For instance, the e-commerce business, which grew rapidly before the pandemic, has grown substantially again, necessitating the construction of additional warehouses and distribution hubs. Mezzanine financing can fill this need, as traditional lenders have been reluctant to support the construction needs of the e-commerce business.

2.2. Growth Financing

Growth financing is intended to expressly support the company's expansion. It can meet the needs of businesses as they scale up production and place large orders in advance, both of which need substantial growth-related investments. Finances for growth play a significant part in assisting businesses to attain higher levels and greater profitability. In 2020, Webscale, an e-commerce platform, earned \$26 million in investment, marking a rise of 108% [2]. During the pandemic, as businesses have shifted to online sales, e-commerce companies have expanded.

Due to the pandemic and rising inflation in the middle and later stages of the pandemic, which produced market uncertainty, it is possible that the majority of businesses will not be able to expand significantly during this time. Therefore, demand and use of growth financing may be relatively low over the medium term. Nevertheless, as the economy recovers and the impact of the pandemic diminishes over time, this financing will remain on schedule.

2.3. Leveraged Buyout (LBO)

Leveraged buyout (LBO) refers to the acquisition of another company using a substantial amount of debt to cover the purchase price. (10% equity, 90% debt) During the pandemic, the majority of companies' values have declined. Similarly, interest rates in several nations have been lower than they were before the pandemic. This is a fantastic opportunity to leverage a middle-term buyout. For instance, corporations are seeking to spend \$955.7 billion in North American markets, a sum collected over years of robust funding due to a recovering economy and low loan rates [3]. Long-term, however, these benefits will shrink as average valuations and interest rates increase and eventually return to normal levels.

2.4. Distressed Buyout

When an investor or firm purchases the debt of a failing company with the expectation of converting the debt into equity to restructure the business, this is a distressed buyout. For several businesses, the impact of the pandemic on their supply networks has drastically affected profitability. With the government progressively increasing interest rates and the impact of unresolved inflation, the economy is becoming increasingly unstable. They are causing the emergence of troubled debt and nonperforming assets. Consequently, this presents numerous chances for private equity firms to acquire high-quality properties at inexpensive costs over the medium term. However, when market volatility and systematic risk decrease over the long term, these possibilities will disappear.

3. Analysis of the Pandemic's Influence on the Technology and Venture Capital Industry

3.1. Positive Outcomes of the Pandemic Regarding Technology and the Venture Capital Industry

In addition, the COVID-19 pandemic has made it more difficult to identify an exceptional startup and assign a suitable valuation. This has caused global venture capital firms to be risk-averse and adopt a defensive investing strategy, moving their focus to mature, late-stage startups. Investing in industries with highly developed technologies can also yield greater returns for investors. According to Grabow in 2022 [9], the market for late-stage finance remains active. The amount of capital raised from venture capital climbed dramatically from \$59 billion in 2020 to over \$135 billion in 2021.

Since the epidemic has persisted for more than two years, some countries have reduced the impact of the virus and resumed normal activities as vaccines have become more widely available, while others have battled to prevent new cases and implement fresh lockdowns. For many people, a return to normalcy is still unknown, but it is undeniable that the epidemic has profoundly impacted a number of industries. Additionally, the epidemic has hastened technological transformation in sectors such as industrial automation, remote work and learning, and contactless payments.

In particular automation technologies Prior to the pandemic, the influence of automation on the global labor force continued to expand in multiple dimensions. As COVID-19 influences how we live and work, our perception of health improves. Therefore, businesses that support automated, contactless solutions may have enormous long-term potential. Peterson et al. also asserted that automation accelerates during a recession, as firm revenue declines make humans relatively more expensive [10].

In addition, a reduction in the supply of labor from the EU beginning January 1, 2021 in the United Kingdom will continue to encourage businesses to use automated technologies. Since 2018, Starship Technologies' autonomous robot trucks have been utilized to deliver groceries to 100,000 residents in Milton Keynes, United Kingdom. During the epidemic, the number of clients surged significantly by 80% [10]. Therefore, automation technology was a thriving sector prior to the epidemic. For enterprises that have surpassed the "Valley of Death" and into the growth phase, it is simpler to obtain capital during or after the epidemic.

The second industry to gain from the epidemic is remote technology, including remote education technology and telecommuting technology. Prior to the COVID-19 epidemic, the majority of businesses saw telecommuting technologies like Skype and Zoom as optional extras, and remote technology usage was relatively low. However, the prevalence of remote work policies has expedited the use of these technologies significantly. Numerous distant technology companies also provided their services for free and made substantial enhancements to increase their market share. In three weeks following the pandemic breakout, EdSights, a firm that connects college students with school resources, doubled its clientele to 30 colleges. Ironically, it took a year to acquire its last sixteen

customers. Even if the epidemic abates, as some teams become accustomed to or benefit from telecommuting technology, there will be a requirement for a balance between office and remote work. In addition, it is anticipated that high schools and universities will continue to incorporate it into their educational programs after the pandemic. In addition to the exciting prospect, remote technology offers a great deal of room for improvement, which necessitates funding from investors. For example, eliminating disturbances in the remote experience and addressing privacy concerns are two areas that require funding.

3.2. A Greater Role for Crowdfunding and Security Token Offerings in the Future

In the future, newer financing methods, including as crowdsourcing and security token offerings, will play a larger role.

The global financial and economic crisis caused by the epidemic has severely hampered the ability of governments to respond to the needs of local populations in many regions of the world. In the context of current crisis, it is difficult to mobilize traditional sources of finance due to the lack of liquidity for all financial actors. To combat the issue posed by conventional financing channels, new sources of capital — crowdsourcing and security token offerings — should become one of the primary pillars of enterprise finance. Moreover, startups will undoubtedly have conflicts of interest with investors such as VCs and PEs. For instance, private equity or venture capital firms aspire to acquire the company's shares at a low price, whereas startup companies seek to enhance the valuation of their own businesses. However, conflicts of interest are uncommon in crowdfunding and security token offers, as investor participation is typically voluntary.

In addition, crowdsourcing and security token sales share similar characteristics with conventional finance channels. Rather than making direct contacts with the startup team, such as private equity, venture capital, or government, it will be accessible to a broad spectrum of clients over the Internet. Fans of the company are more likely to financially support it. Consequently, the corporation is able to increase and capitalize on its public impact.

3.2.1. Crowdfunding

During the COVID-19 pandemic, the popularity of crowdsourcing has exploded. According to the post by Zribi, crowdfunding platforms in Europe raised 1.02 billion euros in 2020, a 62% increase over 2019, and the platform launched 115,616 financing projects during the year [11]. However, entrepreneurs and investors interact indirectly through crowdfunding. This means that the donor cannot judge the reputation of the project sponsor and the quality of the company's product based on the minimal information provided on the platform, unless he or she is already familiar with the company's condition. More than 90% of crowdfunding campaigns struggle to reach their financing goals, and 43% do not receive a single donation, according to research [12]. Therefore, social media plays a crucial role in crowdfunding by fostering the confidence of potential investors. Zhang et al. also found a favorable correlation between the success of crowdfunding campaigns and the number of subscribers on the social network of the project's sponsor [13]. Consequently, crowdfunding may not be as precise as traditional finance routes for obtaining the necessary amounts. Nonetheless, as a new and burgeoning finance vehicle following the epidemic, it does boost chances for startup financing.

3.2.2. Security Token Offering (STO)

The interview with Amoils indicated that the Security token market cap reached \$366,100,103 by the end of 2020 [14], an increase of nearly 500% from the beginning of 2020. This kind of financing will continue to expand into new areas and sustain a strong development rate in the future.

STOs enable token issuers to trade their assets online and leverage the features of blockchain to create funds and liquidity. In the meantime, it also avoids investment bank flotation fees. For the most part, investors are restricted to purchasing shares or bonds to invest in firms. STOs offer investors a novel investing opportunity. Collectible items, real estate, and intellectual property that are difficult or time-consuming to dispose can now be turned into security tokens due to the rise of STOs. In other words, STOs present investors with chances for portfolio diversification and even hedging [15]. Although the argument for investing in cryptocurrencies as a risk diversification strategy is controversial.

For instance, Allen claims that the shock of the COVID-19 outbreak has increased the link between the returns of cryptocurrencies and the S&P 500 [16]. This indicates that cryptocurrency investments are unlikely to serve as a crucial diversification tool throughout the pandemic. Consequently, investment in cryptocurrencies such as security tokens carries with it a number of unknowable dangers.

4. Suggestions

4.1. Raising Capital from Limited Partners

Ziegler et al. stated in 2020 that as travel limitations owing to the pandemic and economic instability heighten liquidity concerns, particularly outside of North America, General Partner (GP) is spending more time and money seeking cash [4]. In addition, Limited Partners (LP) have placed a greater emphasis on enhancing investment flexibility, repayment mechanisms, investment horizons, contract periods, investment types, and diversification. Increased fundraising pressure has prompted GP to actively change their terms and conditions in several areas during the fundraising process.

In the coming years, GP should focus on providing LP with information on the fund's operations and terms that are favorable and dependable. For instance, enhancing the investment strategy's transparency, the frequency of contact with limited partners, terms and measures not meeting the desired return, and remedies to the investment liquidity issue.

4.2. Sourcing Investment Opportunities

The number of active private equity and venture capital companies is expanding, making it more difficult for investors to find transactions. As capital markets continue to grow more crowded and competitive, investors must discover innovative means to streamline their trading sourcing tactics. This heightened competitiveness may prompt many businesses to adopt a data- and digital-driven strategy to deal sourcing, as opposed to the conventional network-, influence-, and reputation-based method. This is due to the fact that timely and correct financial data can aid in authenticity verification, research emphasis, and efficiency enhancement. It is essential to comprehend the long-term movement in consumer preferences. They predict potential future demand, new sources of innovation and disruption, and how policy and regulatory changes will affect the economy, all of which may have significant ramifications for global portfolios. The economic impact of the pandemic may be relatively short-lived, but the resulting consuming ideals and lifestyles may be deeply ingrained and long-lasting. The 2021 research by Remes et al. indicates that e-commerce, virtual healthcare, and home nesting, all of which have expanded significantly as a result of the epidemic [5], may continue to gain popularity over time. The COVID-19 epidemic has hastened the adoption of digital technologies, particularly in e-grocery purchasing and healthcare. The pandemic and lockdowns also reversed the long-term trend of spending less money and more time at home, resulting in "home nesting".

4.3. Growing Portfolio Companies

As a result of the pandemic, private equity firms may have portfolio deficiencies, such as simple structured investments and insufficient liquidity. Miguel et al. have proposed that in order to ensure that portfolio firms are promising [6], PE will primarily refer to the following six indicators:

- Risks to employees' and customers' health, safety and productivity
- Financial/ liquidity risk or customers seeking financing
- Geographic considerations
- Short-term revenue and delivery risks
- Longer-term risks and opportunities
- Less tangible risks and opportunities

Consequently, PE firms and investors may place a greater emphasis on these factors in the future, continually assessing whether the companies in their portfolio fit certain standards and adjusting their investment goal as necessary. Meanwhile, the pandemic increased people's awareness of health and safety considerations. In addition to assuring the performance of the company it invests in, the PE firm will focus more on the public health and safety of its employees.

4.4. Seeking Portfolio Exits

Chen & Vetterli. claimed that COVID-19 almost halted IPO activity in the first half of 2020 [7], with only 388 companies executing IPOs, a 23% decline from the previous year. In the second half of the year, however, when the impact of the pandemic began to diminish, there were 619 publicly traded companies, a 3% rise from the previous year.

Due to the pandemic, the duration of the typical exit strategy-IPO was extended. Due to the uncertainties, the business had to wait at least six months for the opportunity. In the aftermath of COVID-19, companies in the high-tech industry (HiTech) have faced more underpricing (approximately a 23% drop) and greater post-IPO volatility, according to research conducted by Baig & Chen in 2022 [8]. In contrast, the average initial return for newly issued healthcare companies during the pandemic is much greater.

In unusual circumstances or when the economy varies rapidly and unpredictably, the conventional exit strategy-IPO does not appear to be effective or timely in meeting investors' expectations. IPO underpricing during the pandemic will also have a negative impact on financial performance, such as a decrease in return on investment (ROI); however, this will depend on the industry of the invested company. In light of the fact that there is no assurance of a successful departure from any investment company, the solution is to diversify the portfolio and invest in companies with significant growth potential and a solid ability to sustain their basic principles. In addition, the investor should radically rethink their strategy and develop it around a clear vision of the future, rather than only modifying old models.

5. Conclusion

Overall, in a relatively depressed economic situation, investors seeking a relatively steady financing channel with substantial returns, such as a mezzanine, will play a crucial role over the medium term. Simultaneously, during the epidemic, low interest rates caused private equity firms in North America to expand their need for LBO financing. Due to the influence of the epidemic and the post-epidemic period's high inflation, the value of some excellent assets is relatively discounted, and the distressed will be contacted during the intermediate period. The data also revealed that private equity and venture capital organizations were more risk-averse and invested more in mature companies during the pandemic. In addition, people's lifestyles have altered to some extent, which has contributed to the growth of sectors such as the automation industry, remote education technology, and telecommuting

technology. The results also indicate that platforms for crowdfunding and security token offerings have significant practical value and are very feasible. Identifying the characteristics that improve the performance of this type of emerging access to financing can be a useful guide for European and North American firms and economies during COVID-19 and beyond. However, its inherent hazards, insufficient provisions, and local government policy constraints may be the greatest barrier to its widespread adoption.

In this paper, several directions for future investigation are given. First, the sample size for this article is restricted to North American and European markets. Future research may examine data from other regions, such as Asia-Pacific. Lastly, this study contains a pretty limited amount of quantitative research. Future studies may make greater use of quantitative methods, such as financial modeling and statement analysis.

References

- [1] Saratoga Investment Corp. (n.d.). Mezzanine Debt & amp; Financing: The complete guide. Mezzanine Debt & amp; Financing: The Complete Guide | Saratoga Investment Corp. Retrieved August 15, 2022, from https://saratogainvestmentcorp.com/articles/mezzanine-debt/
- [2] Saratoga Investment Corp. (n.d.). Growth financing: Benefits & amp; available options. Growth Financing: Benefits & amp; Available Options / Saratoga Investment Corp. Retrieved August 15, 2022, from https://saratogainvestmentcorp.com/articles/growth-financing/
- [3] Garcia, L. (2021, September 20). Private-equity firms use more debt to score midmarket deals. The Wall Street Journal. Retrieved August 15, 2022, from https://www.wsj.com/articles/private-equity-firms-use-more-debt-to-score-midmarket-deals-1163 2135601
- [4] Ziegler, V., Leung, D., Balasubramanian, A. C., Akkawi, M. F. E., Gotfrit, S., & amp; Spina, A.C. J. (2020). Current observations of covid-19's impact on Private Fund sponsors and limited partners: Insights: Torys LLP. Torys. Retrieved https://www.torys.com/our-latest-thinking/publications/2020/05/current-observations-of-covid-19s-impact-on-priv ate-fund-sponsors-and-limited-partners
- [5] Remes, J., Manyika, J., Smit, S., Kohli, S., Fabius, V., Dixon-Fyle, S., & amp; Nakaliuzhnyi, A. (2021, December 15). The consumer demand recovery and lasting effects of COVID-19. McKinsey & amp; Company. Retrieved August 15, 2022, from https://www.mckinsey.com/industries/consumer-packaged-goods/our-insights/the-consumer-dema nd-recovery-and-lasting-effects-of-covid-19
- [6] Miguel, A. B. de, Connolly, J., Edlich, A., Oxman, A., Pandit, V., Seghers, L., & amp; Skovira, E. (2020, September 16). Private equity and the new reality of coronavirus. McKinsey & amp; Company. Retrieved August 15, 2022, from https://www.mckinsey.com/industries/private-equity-and-principal-investors/our-insights/private-equity-and-the-new-reality-of-coronavirus
- [7] Chen, J., Vetterli, J. (2021, March 8). Global ipos hit back strongly after covid-19 crash: White& Case LLP. Retrieved from

https://www.whitecase.com/insight-our-thinking/global-ipos-hit-back-strongly-after-covid-19-crash

- [8] Baig, A. S., & amp; Chen, M. (2022). Did the COVID-19 pandemic (really) positively impact the IPO market? an analysis of information uncertainty. Finance Research Letters, 46, 102372. https://doi.org/10.1016/j.frl.2021.102372
- [9] Grabow, J. (2022, February 9). Venture Capital continues to exhibit immunity to the COVID-19 pandemic. EY. Retrieved August 13, 2022, from https://www.ey.com/en_us/growth/venture-capital-continues-to-exhibit-immunity-to-the-covid-19-pandemic
- [10] Peterson, E. R., Toland, T., & Huddart, G. (2020, May). Read @kearney: Robots vs. covid-19: How the pandemic is accelerating automation. Global Business Policy Council (GBPC). Retrieved August 13, 2022, from https://www.kearney.com/web/global-business-policy-council/article/-/insights/robots-9-how-the-pandemic-is-accelerating-automation
- [11] Zribi, S. (2022). Effects of social influence on crowdfunding performance: Implications of the COVID-19 pandemic. Humanities and Social Sciences Communications, 9(1). https://doi.org/10.1057/s41599-022-01207-3
- [12] Eckart, K. (2021, June 16). Pandemic-era crowdfunding more common, successful in affluent communities. UW News. Retrieved August 13, 2022, from https://www.washington.edu/news/2021/06/16/pandemic-era-crowdfunding-morecommon-successful-in-affluent-communities/

- [13] Zhang X, Liu X, Wang X, Zhao H, Zhang W (2022) Exploring the effects of social capital on crowdfunding performance: a holistic analysis from the empirical and predictive views. Comput Hum Behav 126:1–17
- [14] Amoils, N. (2021, February 2). Security token industry in 2021. Forbes. Retrieved August 13, 2022, from https://www.forbes.com/sites/nisaamoils/2021/01/25/ security-token-industry- in-2021/?sh=261e67 3d61cb
- [15] Deloitte. (2020, October 19). Security token offerings: The next phase of financial market evolution? deloitte-cn-audit-security-token-offering-en-201009. Retrieved from https://www2.deloitte.com/content/dam/Deloitte/cn/Documents/audit/ deloitte-cn-audit- security-to ken-offering-en-201009.pdf
- [16] Allen, D. E. (2022). Cryptocurrencies, diversification and the covid-19 pandemic. Journal of Risk and Financial Management, 15(3), 103. https://doi.org/10.3390/jrfm15030103