

**AMERICAN UNIVERSITY KYIV**

**DECISION-MAKING AND RISK MANAGEMENT IN THE UKRAINIAN VENTURE  
CAPITAL ECOSYSTEM DURING WARTIME**

**(ПРИЙНЯТТЯ РІШЕНЬ ТА УПРАВЛІННЯ РИЗИКАМИ В УКРАЇНСЬКІЙ  
ЕКОСИСТЕМІ ВЕНЧУРНОГО КАПІТАЛУ В УМОВАХ ВОЄННОГО СТАНУ)**

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## **Abstract**

Venture capital has played a significant role not only in the success of individual companies and industries but as evidenced by the experience of the United States, in the economic success of entire countries. This study explores the decision-making and risk management strategies employed by venture capital firms within Ukraine's venture capital ecosystem. Specifically, it examines the impact of war on the functioning of this ecosystem and its players. The analysis draws on a combination of literature focused on venture capital and risk management, as well as practical insights gathered from survey interviews conducted with ten top executives of venture capital firms. By integrating both theoretical and practical perspectives, this study offers a comprehensive understanding of the subject.

*Keywords: venture capital, decision-making, risk management.*

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## **Glossary**

<b>Abbreviation</b>	<b>Meaning and Definition</b>
GP	General Partner – a VC firm that is the founder and managing partner of a VC fund
LP	Limited Partner – an investor into a VC fund
M&A	Mergers and acquisitions
VC	Venture capital
VC firm	Venture capital firm
VC fund	Venture capital fund

## 1. INTRODUCTION

The topic of decision-making and risk management in the VC sector, two closely interrelated activities, has been gaining increasing attention from the international academic and professional communities. One major reason behind this interest is the significant impact and success of some VC-backed companies, many of which have evolved into "unicorns" (companies with a market capitalization exceeding one billion U.S. dollars) and even some of the world's largest firms, such as Apple, Google, and Amazon. In fact, out of every hundred publicly traded companies founded since 1970s in the United States, fifty were backed by VC funds, while also VC-backed companies accounted for three quarters of the total market value of all of these publicly traded companies (Strebulaev and Dang, 2024).

Some of the fundamental studies on risk management within the VC industry include the 2004 research by Steven N. Kaplan and Per Strömberg, the 2016 work by Dorian Proksch, Wiebke Stranz, Andreas Pinkwart, and Michael Shefczyk. While the most comprehensive research on the decision-making in VC is the 2016 study by Paul Gompers, William Gornall, Steven N. Kaplan, and Ilya Strebulaev. Among others, these studies have analyzed and confirmed that risk management and decision-making in VC is often based on the principles, which might be considered as unconventional in other more traditional businesses.

VC investments *per se* are inherently high-risk due to their focus on high-growth yet uncertain ventures. VC investments are perceived as high-risk investments since VC firms make their investments in companies, often startups, with high growth but also high-risk potential. Therefore, in addition to managing investments, managing risk is a key activity of VC firms (Proksch, Stranz, Pinkwart and Shefczyk, 2016).

At the same time, the high-risk level of VC investments should not be exaggerated. As the studies referred above have shown, the industry has developed a wide range of institutional

tools and practices for risk management and decision-making. These tools and practices arguably give VC firms, including Ukrainian VC firms, a greater degree of control over their investments, compared to, for instance, investments in public markets. As a result, the scope for risk management and control for VC is also greater.

The importance of risk management in VC goes beyond ensuring the success of the portfolio companies that VC firms invest in. It is also driven by the fiduciary duties of VC firms' managers and executives, known as general partners (GPs), to their investors, called limited partners (LPs): *"The fund manager of a limited partnership owes fiduciary duties to the limited partners, which is generally defined as a combination of duty of loyalty and duty of care."* (Morgan Lewis, 2015). The duty of care requires a fiduciary, such as a GP, to act on a fully-informed basis, in good faith, with due diligence and care. The duty of loyalty, it arises from the dual nature of fiduciary duty of VC firms: when VC firms take board seats in their portfolio companies (which is oftentimes the case in many countries including Ukraine), in addition to the fiduciary duty to GPs, VC firms bear fiduciary duty to the other common shareholders of these companies (Kupor, 2019). Thus, the duty of loyalty relates to an obligation of equitable treatment of shareholders, managing and avoiding conflicts of interest and acting in the interest of shareholders (Dumych, 2021).

When it comes to Ukraine's VC ecosystem, despite the fact that this topic is not unfamiliar to Ukrainian academic circles, generally substantial gaps remain in the research. Furthermore, studies of some Ukrainian scholars arguably tend to approach the Ukrainian VC ecosystem in a narrower sense, viewing it primarily as a domestic ecosystem (Lytvyn and Bulak, 2022). However, as the present research has shown, the Ukrainian VC ecosystem has evolved into a more international network, with significant components, including VC firms and startups, operating outside Ukraine.

In addition to the research by Ukrainian universities, in 2024 the Centre for Business Research of the University of Cambridge completed a study (for which the author of this paper was one of the contributors) on the legal framework for venture capital in Ukraine (Deakin S., Sitchenko H., 2024). However, the risk management strategies employed by the management of VC firms (including development of strategies and concrete procedures and practices) in the wartime conditions, which are the subject matter of this paper, remain generally unexplored.

Despite the challenges and relative immaturity, Ukraine's VC sector has become increasingly important. While the country is still considered part of the frontier markets, several Ukrainian startups, such as Ajax Systems, Petcube and Fintech Farm just to name a few have achieved international success thanks to VC investment and were able to significantly expand their products' offerings internationally. Furthermore, a number of startups which were co-founded by Ukrainian founders, such as GitLab, Grammarly and Creatio have become unicorns with their valuation exceeding USD 1 billion (DealBook of Ukraine, 2024).

The purpose of this study and paper is to analyze the risk management and decision-making strategies of VC firms that are part of or investing in the Ukrainian VC ecosystem, particularly in how they manage their existing and potential portfolio companies and their relations with LPs. The research focuses on the risk management strategies and decision-making processes employed by the management teams of these VC firms. To achieve this, the study incorporates a literature review and survey interviews with VC firm managers, including managing partners and investment managers. The findings of this research are presented through an analysis and conclusions on how the ongoing war has impacted VC firms' risk management and decision-making and how it has impacted the environment of Ukrainian VC ecosystem in which VC firms operate in.

## 2. GLOBAL AND UKRAINIAN VC ECOSYSTEMS AND THEIR PLAYERS

Before looking into the specifics of the Ukrainian VC ecosystem, it is important to briefly consider what VC actually is. The National Venture Capital Association (“NVCA”), a US based association of VC professionals, in its 2024 Yearbook refers to VC as a *“high-risk, high-reward asset class that supports entrepreneurs in their quest to turn ideas and basic research into high-growth companies”*.

As to the more formal definition, of VC, the NVCA 2024 Yearbook refers to it as *“a segment of the private equity industry which focuses on investing in new companies with high growth potential and accompanying high risk”*. As to the “private equity”, it is defined as *“equity investments in non-public companies, usually defined as being made up of venture capital, growth equity, and buyout funds”* (2024 NVCA Yearbook).

While the study of private equity is not the subject matter of this research, referring to private equity when considering VC is not improper, especially since, as will be discussed in greater detail further below, VC funds are structured similarly to private equity funds. Furthermore, many of the risk management strategies employed in private equity are also used in VC.

At the same time, it is important to differentiate private equity from VC: VC supports startup and early-stage companies, while private equity investors focus on more mature companies. What VC and private equity share is that they inject capital, provide counsel and governance, devise and implement stock and compensation systems, assist with strategy and tactics, and, in most cases, prepare their portfolio companies for private or public sale (Finkel, 2010).

Scott Kupor in his reference to VC and VC life cycle states that VC firms raise investment funds from a broad range of LPs, and the capital raised is then invested in great

entrepreneurs and startup companies with breakthrough ideas, where there is some decent revenue coming in and the focus is on effectively scaling the business. Typically, a company exits the VC ecosystem in one of three ways: via an initial public offering, a merger or acquisition, or, in unfortunate cases, bankruptcy and a wind down (Kupor, 2019). Another, relatively unconventional definition of VC is that VC funds invest early money (i.e. early-stage investments) in seemingly crazy ideas, and sometimes these ideas succeed spectacularly (Strebulaev and Dang, 2024).

The foundation of the modern VC industry began after World War II with the incorporation of the American Research and Development Corporation (“ARDC”), which encouraged institutional investors to support companies founded by returning servicemen (2024 NVCA Yearbook). However, some authors argue that even earlier examples of VC-like investments date back even further, citing instances such as Queen Isabella of Spain funding Christopher Columbus and J.P. Morgan financing Thomas Edison (Kupor, 2019).

The roots of the modern VC industry, dating back to the end of World War II, are symbolic in relation to Ukraine’s current situation amidst the full-scale Russian aggression. The aggression has driven VC firms operating in the Ukrainian VC ecosystem to explore and make investments in defense technology and dual-use sectors. While the Ukrainian VC ecosystem in the defense sector is still evolving, there are already active players in this space. These include D3, the first Ukrainian defense technology VC firm, and the Brave1 cluster, created by Ukrainian government agencies to provide grants to Ukrainian startups operating in defense and dual-use technology sectors (DealBook of Ukraine, 2024).

Another example of how VC can play an important role in contributing to a country’s national security is the VC firm In-Q-Tel, which was originally founded in the United States by

the Central Intelligence Agency (CIA) to invest in security- and intelligence-related technologies. It has since evolved into a global VC firm with offices in multiple countries.

Overall, VC has historically been regarded as filling the void between sources of funds for innovation and traditional, lower-cost sources of capital available to ongoing concerns (Zider, 1998). This way, VC became another choice of financing for companies, which do not or cannot obtain funds from bank loans, private placement, or public equity market (Padilla, 2001).

A typical VC fund structure includes the following elements: (i) VC Firm, which acts as the GP for the VC fund responsible for its management. A GP is also founder and initiator of the VC fund; (ii) LPs, who are the investors into the VC fund. These are usually institutional investors such as financial institutions, family offices, pension funds, insurance companies, sovereign wealth funds, or high-net-worth individuals; (iii) VC fund itself which, depending on the jurisdiction of where the fund is structured, is established as a limited partnership. A VC fund is basically a pool of money invested by LPs and sometimes GPs too, contractual terms in the form of a partnership agreement between the GP and LPs, and vehicles through which investments are made by a VC fund; and (iv) the investments of VC fund into various portfolio companies, such as startups and more advanced companies.

The above VC fund structure is considered within the VC industry an institutional VC Fund. In addition to institutional VC funds, which are managed by independent institutional GPs, there are also corporate VC funds, managed internally by large corporations (Ramsinghani, 2021). Examples of corporate VC funds include Google Ventures, Intel Ventures, M12 (of Microsoft), Qualcomm Ventures, TDK Ventures and GM Ventures, which were established within and by their respective corporations, as well as Taiwan Capital, established by the National Development fund of the Executive Yuan in Taiwan. In-Q-Tel, the

VC fund of the CIA which was mentioned above, could be considered as another example of a corporate VC fund. In Ukraine, Kormotech Ventures is an example of a corporate VC fund launched by a Ukrainian corporation.

It would not be improper to state that the development of the VC industry in the United States has set the global standard for organizational frameworks, and Ukraine is no exception. Ukrainian VC firms not only adhere to this typical VC fund structure, but many founders also register their VC firms and funds in the United States (most commonly in the state of Delaware) or in other foreign jurisdictions with well-developed legal frameworks for VC, such as the Netherlands, Cayman Islands and British Virgin Islands.

When it comes to Ukraine, in 2013, the Law of Ukraine “*On Mutual Investment Institutions*” (“Mutual Investment Institutions Law”) was passed, establishing a national framework for VC funds. However, it is important to note that the “venture funds” created under this law should not be conflated with the globally operating VC firms and funds, including those active in Ukraine. As Ukrainian scholars have rightly noted, the primary purpose of these venture vehicles is to serve as investment and tax optimization mechanisms for Ukrainian industrial and financial groups investing within Ukraine (Riabovolik & Stratan, 2018).

Another major flaw of the venture vehicles under the Mutual Investment Institutions Law regime is their restricted ability to invest in companies registered abroad. Given that most tech and innovative companies, including those operating in the Ukrainian VC ecosystem, are structured through foreign holding companies, these vehicles seldom invest in the tech sector. Finally, the Ukrainian civil code, being the main body of the codified private law of Ukraine, lacks an exact equivalent to the limited partnership from which VC funds, generally use to structure their activities (Deakin and Sitchenko, 2024). Consequently, the venture vehicles

established under the Mutual Investment Institutions Law are not considered to be a part of the Ukrainian VC ecosystem.

For the purposes of this paper, the following actors are considered to be part of the Ukrainian VC ecosystem:

- VC firms founded by Ukrainian founders (GPs);
- VC firms founded by foreign (non-Ukrainian) founders (GPs) that invest in portfolio companies (startups) associated with the Ukrainian VC ecosystem;
- Portfolio companies (startups) founded or co-founded by Ukrainian founders;
- Portfolio companies (startups) founded by non-Ukrainian founders but whose growth and operations heavily depend on Ukrainian teams;
- Ukrainian limited partners (LPs) or investors who invest in VC funds managed by firms that are part of the Ukrainian VC ecosystem.

The nexus to Ukraine is the key element that qualifies a VC firm, portfolio company, or LP as part of the Ukrainian VC ecosystem. Although many VC firms and a significant number of portfolio companies are structured as foreign entities, this connection to Ukraine provides sufficient grounds to include them in the Ukrainian VC ecosystem, despite their foreign domiciliation.

### **3. RISK, FAILURE AND RISK MANAGEMENT IN VC**

Scholars and VC practitioners generally agree that VC is a risky investment strategy, primarily because each individual investment in a startup carries a significant risk of failure. Research on Silicon Valley VC investments indicates that the probability of a startup becoming a unicorn is less than 1 percent, while approximately 70 percent of startups ultimately fail

(Lazarow, 2020). Consequently, effective risk management, both general and VC-specific, is central to the operations of a VC firm and VC investments.

As the risk of failure is referred with respect to startups, it is important to understand what “to fail” may mean in VC and how the significant risk of failure, as observed by Lazarow, as the VC industry specific risk, could be addressed in both risk management and decision-making. At the same time, one should agree with the fact that other industries, which are not backed by VC funds, are not immune from the risk of failure either.

Interestingly, one does not often hear about the failures of venture-backed companies which would lead those companies’ high-profile bankruptcies, or bankruptcies of VC funds that invested in those companies. In contrast, one could consider the failures and consequences of traditional businesses such as Lehman Brothers, Enron, Blockbuster, Pan American, and others.

There are, of course, exceptions among venture-backed companies, with high-profile examples like Theranos and FTX. However, the failures of these companies were not due to flawed business models, risky or costly innovations, or other business challenges, but rather due to fraud perpetrated by their founders.

In his interview to the New York Times, a well-known venture capitalist and author Randy Komisar, who has written extensively on the topic of VC, said that the VC industry has developed a culture that does not personalize failure: *“If you’re not corrupt, stupid, or lazy, we see failure as learning – learn from it, and reapply it”* (Lohr, 2011).

The attitude of VC firms towards possible failures has been the subject matter of the study carried by not only VC professional but also scholars. According to findings of some scholars, VC firms do not worry about protecting capital from failures and losses. They fear missing out on an opportunity that might change the destiny of a company or an entire sector (Strebulaev and Dang, 2024).

On the other hand, as one respondent from the survey interviews conducted during the course of this research noted, failure in the VC context may mean that a company did not achieve the expected level of VC-type returns, being the returns that are multiples of the investment made by the VC fund. However, the company may still continue to operate as a business, and the VC fund may be able to exit with small or no losses, even if the return on investment falls short of VC-level expectations.

In this regard, one could ask a question as to whether the risk management policies in VC investment and activities differs from the general risk management strategies and approaches followed in other investments related sectors. This is a genuine question considering how certain authors consider decision-making by VC investors and due diligence processes that they employ to support their decisions. There are views that venture capitalists cannot analyze the information obtained the way investment bankers analyze investment opportunities, by simply crunching numbers. Instead, venture capitalists must rely largely on gut feeling and instincts (Camp, 2002). While this perspective might challenge conventional wisdom regarding decision-making, it may align closely with reality, particularly in the context of early-stage VC investments, such as pre-seed and seed funding. Certainly, this view does not discount the importance of data analysis in VC decision-making whenever feasible. To explore this, among other aspects, this paper will examine whether VC firms investing in the Ukrainian VC ecosystem primarily rely on gut feeling and instinct for decision-making and risk management, or if their approach is predominantly data-driven.

Risk management is at the core of every asset management discussion and in the VC context risk management is becoming an increasingly important and more sophisticated function of all players of the VC ecosystem. In the risk management study in the private equity industry (as we discussed above, VC is a segment of private equity), the scholars found that risk is naturally a core consideration for institutional investors managing large and globally

diversified portfolio (Zeisberger, Prahla and White, 2017). VC investors are certainly this type of institutional investors.

Since VC investments primarily focus on innovation, a key characteristic of innovation is its inherent connection to risk. Innovation involves transforming established ideas or practices into something entirely new, which carries the possibility that it may not be accepted or understood. Despite these risks, innovation is essential for achieving success in modern business (Savchuk, 2024). As a result, VC firms, as investors, are inherently at the forefront of the risks associated with innovation.

For the general risk management system it is useful to understand the qualitative distinctions among the types of risks that an organization faces. In their risk management study and research, Kaplan and Mikes outline three categories of risks: preventable risks, strategy risks and external risks (Kaplan and Mikes, 2012).

Preventable risks include an organization's internal risks that are controllable and should be eliminated or avoided. In reference to VC firms, such risks could include breaches of the established investment decision-making and due diligence processes. Arguably, the case of VC investments in FTX serves as an example of preventable risk materializing. In this instance, some institutional VC firms and professional VC investors failed to conduct adequate due diligence on FTX and overlooked weaknesses in the FTX's own risk management practices.

Strategy risks, on the other hand, are defined as "*those a company voluntarily assumes in order to generate superior returns from its strategy.*" Unlike preventable risks, strategy risks are not inherently undesirable and as discussed above on the risks related to innovations, it would not be improper to conclude that taking strategy risks is at the core of VC firms' activities. In particular, this conclusion may also be supported by the findings of scholar who studied integrated risk management and concluded that integrated risk management does not focus only

on the minimization or mitigation of risks, but also supports activities that foster innovation, so that the greatest returns can be achieved with acceptable results, costs and risk (Berg, 2010).

Finally, external risks arise from events outside the company's influence and control. These include natural disasters, political risks, and major economic shifts. While companies cannot prevent external risks, they still need to identify and address them (Kaplan and Mikes, 2012). The Russian full-scale invasion of Ukraine could be considered an external risk. Among other aspects, the present research is focusing on how VC firms were addressing this risk.

In addition to risks, VC firms and their portfolio companies are not immune to uncertainty. While it would not be incorrect to state that VC players around the world, not just in Ukraine, are often at the epicenter of VUCA (i.e., Volatility, Uncertainty, Complexity, and Ambiguity) situations, these situations, particularly the ones related to uncertainty, should not necessarily be avoided. In his article titled *“What is ‘Uncertainty’ and How It Differs From Risk”*, published by the Institute of Strategic Management, Christian Fjader refers to the work of prolific risk theorist Frank Knight. As early as 1921, Knight distinguished between “risk,” which he described as observable and measurable, and “uncertainty,” which operates at the limits of our knowledge, making the assignment of probabilities impossible (Fjader, 2020).

When examining the relationship between risk and uncertainty, some scholars argue that while the two are closely related, they are not identical and should not be considered as synonyms either. Uncertainty serves as the source of risk, whereas risk represents the measurable aspects of uncertainty. Managers face the challenge of making decisions under conditions of uncertainty (Savchuk 2024). As uncertainty may range from the chances of a startup or product being successful to the emergence of new technologies and disruptors (Strebulaev and Dang, 2024), it can simultaneously represent both risk and opportunity for a VC investor. Thus, uncertainty should not, in itself, be considered a factor that precludes a VC

firm from investing in a startup. On the contrary, the risk management system of VC firms should involve seeking out startups whose innovative and disruptive ideas or products inherently include a certain degree of uncertainty.

In the VC ecosystem, all participants assume VC-related risks. VC firms, as GPs, face risks not only related to investing capital but also the fundraising related risks. LPs take on the risk of investing in VC funds managed by GPs, with the expectation of returns and profits on their investments. Startups accepting VC investments bear the risk associated with the terms under which these investments are made by VC funds.

This research primarily focuses on the risks that VC firms undertake and manage. These include risks associated with fundraising for VC funds, identifying and examining investment opportunities, investing in portfolio companies, shareholder-related risks, operational risks within portfolio companies (to the extent that VC firms are involved in their management), exit risks, and risks stemming from both the Ukrainian and global VC ecosystems.

Based on the findings of the authors whose studies were referred above, one could conclude that, despite the high risk and uncertainty inherent in the VC business, risk management strategies employed by VC firms should not be overly constrained by risk-averse policies, particularly those centered on potential failures. Instead, VC firms should prioritize identifying and managing risks while also embracing uncertainties as opportunities to drive the success of their portfolio companies and achieve significant returns on investments. While these conclusions are largely drawn from studies of the U.S. VC ecosystem, the survey interviews conducted in the course of this research aims to explore whether the same decision-making and risk management principles can be effectively applied in the Ukrainian VC ecosystem and whether their application could lead to success.

While numerous studies and publications by Ukrainian scholars address general risk management (including those referenced above) and industry-specific risk management studies such as in finance, insurance, and production, there is a noticeable lack of research specifically focused on risk management in the context of VC investments. This study seeks to address this gap by examining risk management practices within the Ukrainian VC ecosystem.

## **4. SURVEY DESIGN, METHODOLOGY AND DATA COLLECTION**

### ***4.1 Survey Design and Methodology***

The survey interview aims to examine the impact of the war outbreak on the Ukrainian VC ecosystem, with a primary focus on VC firms and their relations with other VC ecosystem participants. The survey, which formed the basis for interviews with VC firms, comprises open-ended questions designed to elicit qualitative responses that cannot be adequately captured through predefined choices or quantitative data.

The objective of these questions is to encompass all aspects of VC operations in wartime Ukraine and, importantly, to address the broader impact beyond Ukraine's borders. Specifically, the survey explores how VC firms: (i) responded to the initial outbreak of the war, (ii) have been managing their operations throughout the conflict, (iii) are maintaining relationships with their investors (LPs), (iv) are engaging with their portfolio companies, (v) are handling investments and exits, and (vi) are strategizing and managing fundraising efforts for their funds.

As previously mentioned, the nature of VC investments is inherently riskier than other types of investments, necessitating rigorous risk management by VC firms. The war has introduced a new layer of risk, which, although not purely business-related or commercial, still requires VC firms to adopt robust risk management and mitigation strategies on both strategic and operational levels. The responses to the survey questions offer practical examples of how VC firms are navigating and managing these wartime risks while sustaining their operations.

#### ***4.2 Interview Participants and Data Collection***

The interviews included ten participants, comprising C-level executives and investment managers from VC firms operating within Ukraine's VC ecosystem. These participants included managing partners and general partners of VC firms, most of which are members of the Ukrainian Venture Capital & Private Equity Association. The list of interviewed VC firms and professionals is provided in Appendix 3.

Many of the interviewed individuals are also serial entrepreneurs who, in addition to managing their VC firms' investments and the VC funds, personally invest in startups at the pre-seed stage as "angel investors." Consequently, their insights provide an additional perspective on investor-startup relationships, even before VC investments come into play.

All interview participants, except for one, are Ukrainian nationals. Some are primarily based in Ukraine, where effective wartime travel restrictions have limited their ability to travel internationally, while others are currently based abroad.

All interview participants are actively involved in all areas and stages of VC firm operations: internally within the VC firm and VC fund, in the VC firm's interactions with LPs, status screening, and portfolio companies' operations.

#### ***4.3 Survey Questions***

The Survey consists of the following questions:

**Question 1.** *How has the outbreak of the war and associated risks influenced your firm's overall investment strategy in Ukraine?*

**Question 2.** *Has your firm started doing anything different since the outbreak of the war to help you manage risks associated with the wartime?*

**Question 3.** *What communication strategy has your firm employed with respect to current limited partners and investors regarding the wartime risks in Ukraine? What is the purpose of employing this particular communication strategy?*

**Question 4.** *Has your firm experienced any shifts in your fundraising efforts due to the war? What challenges did you encounter and what did you do to address them?*

**Question 5.** *What types of support, did you decide to provide to your portfolio companies (their founders and teams) in order to help them navigate wartime challenges (e.g., financial, operational, governance or strategic)? What was the rationale behind this type of support?*

**Question 6.** *What strategies do you suggest to your portfolio companies in order to mitigate the risks associated with war?*

**Question 7.** *To what extent do you prioritize involving co-investors (such as other venture capital firms, international aid programs, governmental organizations, etc) in your investment prospects, and how does this help with risk management?*

**Question 8.** *How has the outbreak of the war influenced your exit strategies? Are you more focused on long-term holdings of your investments in the portfolio companies, or are you actively looking for exits from them?*

**Question 9.** *How is your firm and your firm's investors perceiving current overall situation in the Ukrainian VC ecosystem?*

The explanations of and rationale behind the survey questions are provided in Appendix 1.

The summary of the summarizes the respondents' answers to each survey question is provided in Appendix 2.

## 5. DATA ANALYSIS AND RESULTS

This section of the paper analyzes the responses gathered from respondents interviewed during the course of this research. For ease of use, the analysis is organized into subsections.

### *5.1 The Impact of the War's Outbreak on VC Firms' Investment Strategies*

The impact of the war's outbreak on VC firms and their investment strategies can be analyzed in two dimensions: short-term, and long-term. Additionally, the launching of new VC firms and the development and implementation of investment activities in or in relation to Ukraine leveraging VC investment tools, have emerged as innovative wartime investment strategies.

In the short-term, or even immediate dimension, VC firms faced and had to address significant risks arising from the outbreak of the war. Their initial actions focused on ensuring the survival of their portfolio companies and their teams. Efforts to support these teams on a human level (as frequently mentioned in interviews) were also efforts to safeguard the VC firms' investments, both for themselves and their investors (LPs).

As one interview respondent noted, VC firms had to pivot rapidly, adopting roles and strategies that are typically beyond their expected scope of action. While such an approach could be considered unconventional, it ultimately proved to be the correct one. It demonstrated that VC firms not only prioritize the interests of their investors and portfolio companies but are also capable of acting decisively in response to unforeseen challenges.

Moreover, this strategy underscored the human-centric value approach that is foundational to VC investments. Founders and their teams are at the core of these investments, and addressing the survival and security of portfolio companies inherently meant addressing the existential crises faced by these individuals. Notably, none of the respondents reported any

portfolio companies shutting down, nor is there public evidence of Ukrainian venture-backed companies ceasing operations. This short-term investment strategy proved effective, showcasing the ability of VC firms to manage crisis situations successfully.

In the long-term dimension, it is reasonable to conclude that the globalization of VC firms and the broader Ukrainian VC ecosystem, which began years before the outbreak of the war (dating back to at least 2014, as noted by one respondent), continues to serve as a foundational long-term investment strategy. This globalization encompasses both the VC firms themselves and their portfolio companies.

At the level of VC firms and VC funds, all are structured as foreign vehicles, enabling them to leverage specific instruments to attract and deploy investments. At the portfolio company level, globalization involves more than just establishing corporate domiciles abroad. It also includes relocating Ukrainian founders and key team members internationally and expanding their customer base beyond domestic markets. As highlighted in the interviews, a significant portion of the portfolio companies' customers and business operations are situated abroad. Additionally, VC firms play an active role in supporting their portfolio companies by facilitating communication with customers and helping maintain and even expand their business relationships.

Importantly, the outbreak of the war has further shifted the focus of VC firms toward investments in defense and dual-use technology startups. This focus has been driven by all of the stakeholders within the VC ecosystem, including VC firms, certain LPs, and startups themselves. In some instances, the launching of new VC firms has been motivated by the desire to invest specifically in the defense and dual-use tech sectors. In this regard, the investment strategy of VC firms now includes not only providing capital but also bringing in expertise in

the form of drawing on the skills of experienced VC professionals and collaborating with other VC firms beyond the Ukrainian VC ecosystem.

### ***5.2 Communication and Relations of VC Firms with LPs and Investors***

The relationships between VC firms and their LPs were critical for managing existing portfolio companies and raising investments for new VC funds. Respondents from the VC firms emphasized maintaining full transparency in communicating with their LPs. This included updates on the status of portfolio companies, the support being provided to founders and teams, and the measures implemented to sustain portfolio companies' operations and sales.

This transparent communication demonstrates the integrity of VC firms toward their LPs. Transparency should not only fulfill existing partnership obligations but also serve to build and solidify the VC firm's reputation. This is relevant not only for VC funds with multiple investors, but also for VC firms with a sole LP, as their approach to managing portfolio companies can help establish their credibility and professionalism, which will be helpful in the case or when those VC firms decide to raise capital from multiple LPs.

Successful, to the extent possible, addressing the wartime challenges faced by both VC firms and their portfolio companies has also created opportunities for VC firms to raise new funds or additional investments from existing and potential investors. While the experiences of VC firms in this regard were mixed, as discussed during the survey interviews, most were able to secure additional capital or are in the process of doing so. Maintaining transparency about the risks faced and the strategies employed to manage them has been crucial to successful fundraising efforts.

Additionally, some respondents noted that capital-raising initiatives also serve as a way to promote their VC firms, showcasing their investment expertise and track record. Even if such

efforts do not always lead to immediate success, they contribute to building long-term relationships with LPs.

Finally, diversification of the LP base appears to be as important as diversification of the portfolio companies. Specifically, onboarding large institutional investors and international development organizations enhances confidence in VC funds that were able to onboard such LPs, making it easier to attract investments from smaller private investors.

### ***5.3 The Effect of the War's Outbreak on the VC Firms' Decision-Making and Risk Management Strategies***

Survey interviews with respondents revealed how VC firms have sought effective ways to manage their own businesses, as well as those of their portfolio companies, under conditions of uncertainty and unpredictability (Savchuk, 2024).

Since this research focuses on risk management and decision-making during wartime, it is worth noting that, while VC firms could not have predicted the outbreak of the war, the risk of such an event was *de facto* already on their risk management agenda. To address this risk, VC firms expected founders and critical team members of their portfolio companies to be located abroad. Additionally, a focus on globalization, particularly in terms of consumers, sales, and, to some extent, operations, proved beneficial for risk management. Although this globalization trend was not solely driven by war-related risks and had been a natural course of development for the portfolio companies, it nevertheless contributed to risk mitigation. These actions by VC firms and their portfolio companies can be regarded as proactive risk management.

Once the war began, VC firms acted promptly and effectively to address and mitigate the risks that emerged. They identified which of their own teams, as well as the teams within their portfolio companies, were most exposed to direct war-related risks. Immediate efforts

were made to relocate affected teams and their family members to safer areas within Ukraine or, when feasible, abroad. In some cases, this also included relocating the tangible assets of portfolio companies.

After addressing the physical risks faced by portfolio companies' founders and team members, VC firms turned their attention to managing operational risks. This included maintaining relationships with existing and potential customers, partners, and other investors. In some cases, VC firms provided follow-up or bridge financing to their portfolio companies when necessary. Some respondents also highlighted their involvement in helping portfolio companies address operational risks, such as power and internet outages. They also assisted these companies with financial planning to ensure sustainability and to prevent running out of cash before securing another round of investment.

According to respondents, starting in 2023, some VC firms gradually resumed considering new startups and making new investments. As part of this process, they heightened their focus on screening and due diligence, dedicating more time to evaluating startups, identifying potential risks, and developing strategies to manage and mitigate those risks. This heightened scrutiny covered both business-related risks, such as innovation, the professionalism of founders and teams, intellectual property, customer relationships, and financial data (where applicable), and specific war-related risks, such as the safety of founders and teams, levels of digitalization, and the degree of diversification and globalization.

Additionally, VC firms that chose to explore investments in defense and dual-use technology startups began developing industry, technological, and regulatory expertise in these areas. To achieve this, they hired or contracted professionals with relevant experience. This approach allowed firms to make calculated risk assessments before committing to investments. For the same reason, some VC firms decided to invest in defense and military technology

startups only in partnership with other VC firms, including from outside the Ukrainian VC ecosystem, that already had expertise in these sectors.

In summary, Ukrainian VC firms generally had proactive risk management strategies in place before the outbreak of the war to address potential risks. By globalizing and structuring themselves in VC-friendly foreign jurisdictions, as well as structuring their portfolio companies in such jurisdictions, VC firms gained the ability to rely on enforceable contractual arrangements and terms, such as liquidation preferences, antidilution provisions, redemption rights, veto rights, and board presence, that play a favorable role in their risk management strategies. Had VC firms and their portfolio companies chosen to operate exclusively within the Ukrainian jurisdiction, they would not have been able to fully rely on such arrangements and terms.

Once Russia's full-scale invasion of Ukraine began, these firms quickly adapted by implementing practices to manage evolving risks and adjusting their core activities (i.e., VC investing) to align with the new realities. Over the years, the decision-making and risk management strategies of VC firms have evolved to place people-centric driven risk management (i.e. focused on founders and teams) at their core.

#### ***5.4 The Impact of the War on VC Firms' Investment Holdings and Exit Strategies***

Exits from portfolio companies are a critical phase in the VC investment cycle, directly influencing returns for VC firms and their LPs. These exits are often shaped by the decision-making and risk management strategies employed by VC firms during earlier stages of the investment process. These stages include the initial investment decision and the period during which the VC firm may actively contribute to the growth and operations of the portfolio company, if it chooses to be actively involved in the latter. Ultimately, the decision to exit a

portfolio company can determine whether the VC firm realizes a profit or a loss on its investment.

According to respondents from survey interviews, none of the VC firms expressed a sense of urgency to exit their portfolio companies due to the war. Moreover, LPs generally have not pressured VC firms to accelerate their exit timelines. Only one respondent indicated that their VC firm was pursuing exits, but this was driven not by the war but by the approaching maturity of their fund, which was raised in 2014. This case reflects a normal business cycle for VC firms, their LPs, and their portfolio companies.

Respondents highlighted several VC-specific factors affecting exit decisions. First, VC firms typically hold minority stakes in their portfolio companies, which limits their ability to unilaterally influence decisions about early exits. Second, successful exits often depend heavily on the dynamics of the M&A market and the availability of potential acquirers. In this context, a recent example of a favorable exit involved Creatio, a leading Ukrainian company specializing in digital solutions and products. This exit was beneficial for both the VC funds and Creatio, as it brought new institutional investors into the company, strengthening its shareholder base.

### ***5.5 The Current Status and Future Prospects of the Ukrainian VC Ecosystem***

The Ukrainian VC ecosystem, while relatively small compared to ecosystems in countries like Israel and Estonia (the countries mentioned by the respondents as the comparison to the Ukraine's VC ecosystem), has demonstrated its ability to produce "unicorns." A recent example of this is Creatio. Despite the ongoing war and traditional challenges such as legal and political risks, the primary task for the Ukrainian VC ecosystem is to maintain strong connections between its unicorns, other portfolio companies, and the ecosystem itself.

Globalization offers a potential solution, particularly regarding decision-making, risk management, and forward-looking investment strategies. For instance, portfolio companies can

explore entering international markets, expanding their product sales abroad, and establishing global teams. In fact, VC firms have been expecting their existing and potential portfolio companies to do so, and often are helping them with the implementation of these tasks.

However, globalization also poses challenges, as VC firms and their startups may seek to weaken their ties with the Ukrainian ecosystem. Nonetheless, it would be counterproductive to discourage globalization; instead, Ukrainian VC firms and state authorities should focus on fostering a business and legal environment that remains attractive and supportive for ecosystem participants operating both within and outside Ukraine.

From the perspective of VC firms, it appears that the most viable strategy is to position themselves as global players. This includes maintaining a presence in international hubs like Silicon Valley while operating across multiple VC ecosystems. Such a global approach not only keeps these firms attractive to potential LPs but also strengthens their access to other investors in international markets.

Respondents from the survey interviews emphasized the critical role of Ukrainian educational institutions in fostering innovation within the Ukrainian VC ecosystem. In this regard the respondents noted that universities must learn to commercialize and market innovation. While this trend is emerging at some private universities in Ukraine, it has not yet taken hold at state universities.

In addition, the growing number of defense and dual-use technology startups presents a unique opportunity for Ukrainian VC firms. Investing in this sector not only supports Ukraine's efforts to counter aggression but also strengthens its position as a global hub for defense and dual-use technologies. To capitalize on this trend, VC firms must develop specialized expertise in both technology and regulatory frameworks, build relationships with international experts

and VC firms, and assist their portfolio companies in expanding their customer base both domestically and internationally.

Overall, survey respondents highlighted growth, optimism, and the elimination of biases as key drivers for the success of the Ukrainian VC ecosystem. They also expressed confidence in the Ukrainian VC ecosystem's ability to play a pivotal role in rebuilding Ukraine.

## 6. CONCLUSIONS AND FUTURE RESEARCH

In a recent stage interview at the New York Times DealBook Summit, Jeff Bezos, the founder of Amazon and Blue Origin, said that “*generally, human nature is to overestimate risk and to underestimate opportunity.*” One could argue that VC owes its success to embracing the opposite mindset. Using legal terminology, this specific VC “*modus operandi*” may be the key to VC's enduring achievements.

This study examined the phenomenon and role of VC, with a particular focus on Ukraine's VC ecosystem. It explored how conventional risk management strategies are adapted and applied to VC investments in Ukraine during wartime. Defining and analyzing the characteristics of the Ukrainian VC ecosystem players, as done in this paper, is vital because these characteristics appear to play a critical role in shaping their risk management strategies.

One of the findings of this paper is that Ukraine's VC ecosystem should not be narrowly defined. Ukraine's VC ecosystem should include companies formally incorporated abroad (both VC firms and their portfolio companies), which are founded by Ukrainians or investing in Ukrainian founders and Ukraine-based teams. In fact, this globalization of VC firms and their portfolio companies has proven to be an effective risk management strategy, benefiting both VC firms and their portfolio companies. These benefits are evident in the VC firms' ability to generate returns on investments and the portfolio companies' capacity to grow operations and attract new investors.

The study further demonstrated how traditional risk management strategies can be effectively applied within Ukraine's VC ecosystem. Previous studies on risk management in Ukraine have either been general in nature or focused on industries other than VC. This created a gap in understanding how VC firms manage risk in Ukraine, particularly during wartime. By conducting survey interviews with industry executives, this study has filled that gap.

Additionally, this research addressed a common perception about VC investments, namely, the belief that investing in VC is a high-risk activity akin to gambling. In reality, VC investments are underpinned by well-developed institutional processes, legal tools, rigorous due diligence, and careful attention to human factors. VC firms generally take calculated risks, supported by their expertise and knowledge. This explains why the investors in VC funds (limited partners, or LPs) often include conservative institutions and individuals who, while avoiding such risks on their own, entrust their capital to VC firms capable of making investment decisions and managing these calculated risks effectively.

The findings of this study reveal that Ukrainian VC firms have been actively and consciously addressing war-related risks and challenges. This proactive risk management has not only enabled the ecosystem to survive the war but has also created new opportunities, such as the emergence of new VC-financed privately-owned and innovative defense and dual-use technology sectors.

The war has also highlighted the importance of globalization for Ukraine's VC ecosystem. Globalization has been crucial for the ecosystem's survival and continued growth. Future research should focus on developing solutions that allow Ukrainian VC ecosystem players to maintain strong ties with Ukraine despite becoming global and diverse. These connections will be critical for Ukraine's post-war rebuilding efforts.

In this context, future research should strive to explore solutions that Ukrainian state authorities could consider employing to avoid jeopardizing the globalization aspirations of the Ukrainian VC ecosystem, as this process is inevitable, and, at the same time, to build a framework that would make Ukraine attractive not just to Ukrainian VC investors and startups but also to international VC investors. Borrowing a concept from the bilateral investment treaties framework, the Ukrainian government should develop and implement a “most-favored treatment” approach to facilitate innovation and investment, accommodate the contractual instruments commonly used in VC transactions to be enforceable under the Ukrainian legal system, and ensure a rule-of-law-driven Ukrainian legal and administrative system.

As discussed in this paper, VC investments are already inherently risky. Thus, the addition of high country-specific risks would naturally lead any investors, not just VC investors, to limit their exposure to a country that is a source of such risks. Future research should aim to identify and propose measures to lower Ukraine’s country risk to the greatest extent possible. Reducing these risks will help ensure that Ukraine-specific factors are not considered warning signs, or worse, “red flags”, in the decision-making and risk management processes of VC firms.

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## APPENDIX 1.

### Explanations of and Rationale Behind the Survey Questions

The following are the explanations of and rationale behind the survey questions:

**Question 1.** *How has the outbreak of the war and associated risks influenced your firm's overall investment strategy in Ukraine?*

The question seeks to understand the impact of the war and its associated risks on the investment strategies of VC firms. It aims to uncover how these unprecedented circumstances have shaped the decision-making processes of the firms, especially regarding risk assessment, investment priorities, and portfolio management.

**Question 2.** *Has your firm started doing anything different since the outbreak of the war to help you manage risks associated with the wartime?*

The question aims to explore any new or modified risk management practices that the VC firm has implemented since the outbreak of the war. The focus is on understanding whether the firm has adopted unique strategies or measures to manage risks that are specific to a wartime environment. These could include changes in investment evaluation criteria, enhanced due diligence procedures, geographic diversification of investments, tighter financial controls, changes in the relations with LPs, portfolio companies and startups.

The question also seeks to uncover how the VC firm has adapted its operations to address the uncertainty and instability caused by the war, thereby offering insights into the evolving risk management approaches within the Ukraine's VC ecosystem under the existing crisis conditions.

**Question 3.** *What communication strategy has your firm employed with respect to current limited partners and investors regarding the wartime risks in Ukraine? What is the purpose of employing this particular communication strategy?*

This question seeks to understand how the VC firm has approached communication with its LPs and investors about the risks arising from the wartime situation in Ukraine, particularly on any specific measures taken to keep stakeholders informed and reassured.

Additionally, the question explores the rationale behind this communication approach, aiming to uncover the VC firm's objectives, such as maintaining investor confidence, ensuring transparency, managing expectations, or mitigating concerns about investment stability.

**Question 4.** *Has your firm experienced any shifts in your fundraising efforts due to the war? What challenges did you encounter and what did you do to address them?*

This question explores how the outbreak of the war has influenced the VC firm's fundraising activities, particularly in terms of how the war has impacted the ability to attract new investors or raise funds from the existing investors. The question seeks to identify the challenges that the VC firm has faced in this process. Additionally, the question aims to uncover how the VC firm has responded to these challenges, including adjustments in their fundraising strategies, outreach efforts, and investor communications.

**Question 5.** *What types of support, did you decide to provide to your portfolio companies (their founders and teams) in order to help them navigate wartime challenges (e.g., financial, operational, governance or strategic)? What was the rationale behind this type of support?*

This question aims to understand the specific types of support that the VC firm has chosen to provide to its portfolio companies, their founders and teams, in response to the challenges posed by the war. Particularly, it seeks to uncover the nature of this support, whether it is financial,

operational, governance-related, or strategic, and how it is tailored to address the unique difficulties of operating during a conflict.

The question also explores the rationale behind these management decisions: why the VC firm chose this particular support strategy and what objectives it aimed to achieve. This insight helps reveal the firm's approach to value-added support and its role in helping portfolio companies adapt to the wartime environment.

**Question 6.** *What strategies do you suggest to your portfolio companies in order to mitigate the risks associated with war?*

This question is focused on the VC firm's relations with its portfolio companies and aims to explore the specific strategies recommended to the portfolio companies for mitigating the risks associated with the war. It seeks to focus on the disruptions to operations, supply chain issues, potential security concerns and customers relations. Additionally, the question seeks to identify the rationale behind these strategies and how they align with the VC firm's broader goals of safeguarding the portfolio's long-term value and ensuring business continuity during the wartime.

**Question 7.** *To what extent do you prioritize involving co-investors (such as other venture capital firms, international aid programs, governmental organizations, etc) in your investment prospects, and how does this help with risk management?*

This question seeks to understand the extent to which the VC firm prioritizes involving co-investors, such as other VC firms, international aid programs, or governmental organizations, in their investment prospects. It explores how the possible collaboration with these external partners is factored into the firm's investment and risk management strategies.

**Question 8.** *How has the outbreak of the war influenced your exit strategies? Are you more focused on long-term holdings of your investments in the portfolio companies, or are you actively looking for exits from them?*

This question aims to explore how the outbreak of the war has affected the VC firm's exit strategies, being an important element of the VC business overall. Particularly, the question seeks to understand whether the VC firm has adjusted its approach to exiting investments, such as by shifting focus towards long-term holding of investments rather than pursuing exits in the short term. The question also aims to uncover the factors influencing these decisions, such as geopolitical risks, market volatility, changes in the valuation of portfolio companies, or the portfolio companies' operations.

**Question 9.** *How is your firm and your firm's investors perceiving current overall situation in the Ukrainian VC ecosystem?*

This question serves as a summary of the survey, aiming to capture the broader perspective on the overall situation in the Ukrainian VC ecosystem as perceived by the VC firm and its investors. The question seeks to understand the view on the impact of the war on the ecosystem's stability, opportunities, and, importantly, the future prospects of the Ukrainian VC ecosystem.

The question encourages a reflection on the macro-level trends, including how the conflict has shaped the market, investment climate, and long-term outlook for VC in Ukraine. By addressing this question, the survey aims to gather insights into the strategic mindset of both the firm and its investors regarding the evolving landscape and how they are positioning themselves moving forward.

## APPENDIX 2.

### Summary of the Answers to the Survey Questions

This Appendix 2 summarizes the respondents' answers to each survey questions.

#### *5.1 Summary of the Responses to the Survey Interview Questions*

##### *Summary of the responses to Question 1:*

The VC firms that participated in the survey interviews can be categorized into three groups: (i) the firms that did not exist at the time of the war's outbreak, (ii) the firms that, due to different reasons, had already reduced their investment activities in the Ukrainian VC ecosystem yet before the start of the war, and (iii) firms that were deeply integrated into the Ukrainian VC ecosystem, including those with teams based in Ukraine at the time the war started.

In two instances, the outbreak of the war either caused or accelerated the launching of the VC firms. Largely, but not exclusively, the investment strategy of the VC firms that were launched after the outbreak of the war, focused on investing into dual use or defense technology focused startups.

The two most frequently used words in responses to this question were “survival” and “human.” These terms were particularly relevant to the short-term, or more accurately – immediate, decisions and actions undertaken by VC firms starting from the onset of the full-scale invasion until at least September 2024. During this period, VC firms had to prioritize their own teams' survival (especially those VC firms whose teams were predominantly based in Ukraine), ensure the survival of their portfolio companies, and assist founders and teams in mitigating the risks of active warfare. This included helping with relocation either to relatively safer regions within Ukraine or, when possible, outside of the country. During this period, there

was almost no investment activity by the VC firms, apart from providing financial support to achieve the aforementioned goals.

Once these immediate and critical goals were achieved for both the VC firms and their portfolio companies, the focus shifted to the growth of the portfolio companies' businesses and operations. When necessary and appropriate, VC firms provided follow-up financing to support their portfolio companies. Most notably, and perhaps unusually compared to VC firms in developed and developing countries, most of the Ukrainian ecosystem VC firms went beyond traditional investing by becoming more operationally involved. Their support included helping companies target new markets, maintain relationships with existing clients to ensure these were not jeopardized by the war, and expand operations into regions such as the EU, North America, and Latin America.

One of the respondents noted that the fact that Russian hybrid aggression against Ukraine began as early as 2014 allowed VC firms to start diversifying their investments and the operations of their Ukrainian portfolio companies well before the outbreak of the war in 2024. This early action helped mitigate war-related risks for both the VC firms and their LPs on one hand, and for the portfolio companies on the other.

Another respondent emphasized that there has been no impact on their VC firm's strategy regarding investments in Ukrainian founders. The firm continues to invest in Ukrainian founders who are either based abroad or whose businesses are focused on global markets.

Finally, one respondent highlighted that, starting in 2014, they had to address the perception of risks associated with Ukraine among their VC fund's foreign investors (LPs). Drawing a comparison to Israel, whose VC ecosystem has been highly active for decades, he has been telling both existing and prospective LPs that "the risk of losing two founders of a

venture-backed company to violence or war in Kyiv or Tel Aviv is actually much smaller than the risk of losing two founders on the streets of Chicago or San Francisco.”

*Summary of the responses to Question 2:*

Once VC firms addressed the immediate risks arising from the outbreak of the war, they were able to adapt to the new investment environment for both their existing and prospective investments. In particular, VC firms increased their emphasis on the geographical diversification of their portfolio companies. For some VC firms, this approach did not represent a significant shift, as diversification, driven by various factors, including non-war-related reasons, was already part of their investment strategy. For others, however, it became a new criterion to address in managing their existing portfolio companies and evaluating new opportunities and startups.

A notable development arising from the war was the emergence in a large scale of a new investment industry: military technology and dual-use technology with a strong focus on defense needs. VC firms that, under the terms of their investment memoranda (documents outlining the scope of the investment mandate, strategy, objectives, target sectors and industries, geographic focus, and other terms), were permitted to invest in military tech or dual-use startups, prioritized these investments and worked to develop expertise in this sector.

One of the respondents noted that the outbreak of the war has prompted their VC firm to engage more frequently with other VC firms in the EU and other countries. The war has drawn the attention of the global investment community to Ukraine, and the role of VC firms has been to address this interest and, often, concerns, and rebuild the trust of foreign investors. Despite the war, investing in the Ukrainian VC ecosystem remains viable because both the VC firms and their portfolio companies have implemented measures to mitigate war-related risks while maintaining the attractiveness of investments.

Most VC firms that continue investing in Ukrainian VC ecosystem startups have increased their focus on due diligence and investment processes. This includes VC firms' or LPs' investment committees (where such committees are part of the firms' or LPs' structures) spending more time evaluating startups, identifying potential risks, and determining strategies to manage and mitigate those risks. In this context, attention is given to both business-related risks – such as innovation, the professionalism of founders and teams, intellectual property, customer relations, and financial data (where applicable), and specific war-related risks, including the safety of founders and teams, levels of digitalization, and the extent of diversification and globalization.

*Summary of the responses to Question 3:*

There is no doubt that the outbreak of the war has not gone unnoticed for LPs and VC firm's investors. On their end, none of the VC firms avoided communication with their LPs and on the contrary, VC firms were proactive and transparent in their communication.

In this regard, one should factor that some of the VC firms have only sole LPs (investors), and in all cases at hand, these LPs were located in Ukraine. This way, these LPs were also affected by the war. In certain cases, the same was the case for the VC firms with multiple LPs who are (or where) located in Ukraine. In all cases, whether with sole or multiple LPs, VC firms were keeping them informed of how they are helping their portfolio companies, whether or not the particular portfolio companies are affected by the war.

As to the new potential LPs, some of the VC firms, that saw a practical opportunity to raise new funds, were approaching investors from the Ukrainian diaspora, reasonably expecting that its influence for Ukraine will become similar to those of the Armenian diaspora for Armenia.

In their communication with LPs, VC firms provided updates on the development of portfolio companies, including their profitability, sales expansion, and the locations of their teams. Regarding the founders of portfolio companies – a particularly sensitive issue for both VC firms and LPs – one respondent noted that close to 92 percent of the founders of Ukrainian companies are currently located abroad. This situation is viewed positively by LPs, in particular.

Finally, the communication with LPs, particularly during the first months of the war, involved the topic of empathy and support that they could provide directly or via VC firms to the portfolio companies and their teams both in Ukraine and abroad.

*Summary of the responses to Question 4:*

VC firms have had mixed experiences with their fundraising efforts. Fundraising was significantly constrained throughout 2022, though some firms were able to restart these efforts beginning 2023. Additionally, several respondents noted that even before the war, the ability to raise funds for investments in the Ukrainian VC ecosystem was negatively impacted by global VC trends and a general risk aversion toward Ukraine.

VC firms with single LPs were able to access funds for the best high-growth companies, as well as for investments in companies outside the Ukrainian VC ecosystem. However, some VC firms reported losing international LPs, while others lost Ukrainian LPs, particularly those whose businesses were adversely affected by the war. At the same time, new LPs emerged who specifically sought to finance military tech and dual-use startups through VC firms.

All the VC firms agreed that the level of effort required to raise funding has increased. While it has generally become more challenging to secure funding for VC investments in the Ukrainian VC ecosystem, the experience of the VC firms has shown that it is still possible. For instance, one of the VC firms reported that they have been successful to attract a large institutional investor into their VC fund.

The role and impact of institutional investors and international development organizations cannot be underestimated. According to one respondent, based on their experience, private investors now expect institutional investors to be part of the LP pool. When this is not the case, it becomes more challenging for VC firms to attract private investors.

*Summary of the responses to Question 5:*

All the VC firms were actively involved in supporting their portfolio companies to address the challenges posed by wartime conditions. In some cases, this support could be described as “institutional,” with VC firms providing assistance on strategic, financial, operational, and managerial sides. Notably, in situations where VC firms held seats on the boards of their portfolio companies, their involvement in governance matters became significantly deeper. On the operational side, when founders of portfolio companies sought to expand into dual-use technologies, such as drones, some VC firms facilitated this by helping them acquire the necessary expertise in this area.

When it comes to supporting the portfolio companies which had their operations and teams located in Ukraine at the time of the outbreak of the war, the word “human” was most frequently used in describing the involvement of VC firms. This included providing help to the teams, founders and families during the first twelve months of the war, including helping them with their relocation within Ukraine and abroad. Additionally, as Ukraine began facing electricity and internet connectivity issues due to Russian missile attacks, VC firms stepped in to help companies procure essential equipment such as power generators, batteries, and Starlink systems. One VC firm emphasized that they also facilitated knowledge sharing among their portfolio companies on how they deal with their challenges.

On the sales front, some VC firms assisted portfolio companies in hiring sales team members based abroad. In terms of financial support, VC firms were involved in follow-up

funding, preparation for subsequent investment rounds, advising on the creation of reserve funds, and financial planning.

One respondent reported that, on the operational front, their VC firm's support focused on identifying replicable business models for international markets, financial modeling for runway and cost optimization, and go-to-market strategy development. In another case, VC firms took the lead in M&A activities for portfolio companies, emphasizing that even when M&A efforts did not result in a closing, they opened doors for potential partnerships with the counterparties.

In one notable case, a VC firm collaborated with a Ukraine-based university to launch an acceleration program. This initiative was not limited to the firm's portfolio companies only, but also extended to other startups aiming to secure VC financing in the future. The program offered training and advisory support while also requiring participating startups to meet specific commitments. Meeting these commitments by the startups served as a factor for VC firms during their own investment and due diligence processes.

Several respondents emphasized that VC firms had to essentially reinvent themselves and take on roles that VC firms typically do not undertake. However, this strategy proved to be the right one, not only for the VC firms and their portfolio companies, but also for the entire Ukrainian VC ecosystem.

*Summary of the responses to Question 6:*

The responses of VC firms can be categorized into two groups: war risk management strategies and operational strategies.

War risk management strategies emphasized minimizing the impact of power outages and potential internet disruptions on companies. On the team members front, companies were

encouraged to ensure that their founders were located abroad and to mitigate the risk of critical team members being drafted into the military. For this purpose, the companies were encouraged to consider avenues such as securing military reservations and enrolling in the DIIA City regime.

Operational strategies focused on the necessity of having a "Plan B" (as mentioned by several respondents) which entails diversification across customers, markets, and product development. For companies operating in military and dual-use technology sectors, joint ventures with partners outside Ukraine were highlighted as essential for diversifying production capabilities. Regarding additional investments and next investment rounds, some VC firms expressed a willingness to assist their portfolio companies in connecting with other VC firms specializing in military and dual-use technology investments.

Overall, the war risk management and operational strategies adopted by portfolio companies should focus at survival during the war, building traction to international markets and positioning themselves for rapid growth once the war concludes.

*Summary of the responses to Question 7:*

In their responses, VC firms generally agreed that co-investing with other VC firms, is not primarily a risk management strategy but rather a standard practice within the VC industry, particularly in emerging markets. When it comes to Ukrainian VC ecosystem, one respondent noted that co-investing helps keeping VC industry active and alive.

Co-investing was referred as a risk management tool in only one case: when a foreign VC firm, unfamiliar with and lacking experience in the Ukrainian VC ecosystem, should avoid investing alone and instead seek partnerships with Ukrainian VC firms to co-invest. The amount of investment capital available to VC firms in emerging and frontier markets is typically much smaller compared to their peers in developed countries, especially Silicon Valley. Consequently,

co-investing beyond the pre-seed or seed stages is a common industry practice, facilitating not only access to larger pools of capital but also the growth and diversification of networks for both VC firms and their startups.

Co-investing is also viewed as a way to attract specialized VC firms, such as those from Silicon Valley or those focused on specific sectors like biotech, medical technology, and defense technology. Among the respondents, only one VC firm reported a strategy of avoiding co-investors, while all others indicated that involving co-investors aligns with their investment strategies and preferences.

Regarding grants and governmental aid programs, some respondents noted that because they invest in startups beyond the pre-seed stage, such financing options are rarely relevant to their portfolio companies. In the limited instances when grants or aid are considered, they are generally viewed as a form of survival financing rather than a strategic source of capital.

*Summary of the responses to Question 8:*

In their responses, there was a consensus among VC firms that none were desperate to exit their portfolio companies at any cost due to the war. One respondent specifically noted that their firm has a mandate to seek out distressed situations as potential investment opportunities.

Regarding exits, respondents highlighted certain industry-specific factors: VC firms typically hold minority stakes in portfolio companies, which limits their influence over decisions related to early exits. Moreover, successful exits are heavily dependent on the dynamics of the M&A market and the presence of potential acquirers.

Only two respondents indicated that their firms would consider limited exit options, even if these involved some investment losses or discounts, and if so required by their LPs.

However, the majority of VC firms expressed a preference to hold their investments and continue supporting their portfolio companies.

Notably, in 2023 and 2024, there were successful exits by VC firms from Creatio, a leading Ukrainian company specializing in digital solutions and products. These exits demonstrated that, despite the wartime challenges, VC firms were able to achieve industry-standard returns on their investments.

One respondent noted that their firm is looking for exits, however, that is caused not by the war, but by the maturity of their fund, which was raised yet in 2014.

*Summary of the responses to Question 9:*

Firstly, several respondents noted that the Ukrainian VC ecosystem remains relatively small and is still evolving. At the same time, there is significant potential among promising founders and startups. Furthermore, in view of one of the respondents, VC ecosystem is even more active than before the war, which can be attributed to the fact that the ecosystem has become global in terms of the companies' operations and the locations of their founders and teams. This globalization has made the Ukrainian VC ecosystem more integrated into the global market.

Several respondents referenced Israel and Estonia as a model for Ukraine to aspire to. While these countries' domestic ecosystems and markets are small, a situation similar to Ukraine's, their startups and VC firms maintain strong global perspectives. Similarly, the Ukrainian VC ecosystem and startups must continue adopting a global outlook. This necessity is driven not only by the risks of war but also by the natural trajectory of the ecosystem's development.

One respondent remarked that the origin of the VC ecosystem itself is not particularly relevant to LPs. Instead, LPs tend to focus more on the origination (location) of the startup and its founders, as well as the target market of the startup.

Another respondent emphasized the importance of developing a defense-focused VC ecosystem. Such an ecosystem would include defense technology startups, specialized VC firms, accelerators, and pre-seed stage financing opportunities.

Only one respondent reported seeing fewer startups that qualify for seed or Series A investments. However, other respondents noted that they have not experienced any shortage of startups for evaluation. Furthermore, several respondents noted that the strong and rather sophisticated Ukrainian IT sector is now becoming a source of innovators who launch and develop startups. These startups will likely turn to VC firms for the assistance with the growth financing and support. Ukrainian VC firms will be the natural fit for this role.

There was broad consensus among the respondents that Ukrainian startups should prioritize a global focus in their development and place digitalization at their core. By doing so, they can remain attractive to VC firms and effectively overcome challenges related to the war and Ukraine's geographical and logistical limitations.

Several respondents noted that raising financing has become more challenging for VC firms. This difficulty is attributed not only to perceptions of war-related risks in Ukraine but also to broader global trends in the VC sector. At the same time, respondents highlighted successful fundraising efforts by some private equity players in Ukraine. However, they pointed out that these successes were, to some extent, influenced by political support from institutional financial organization that have ties to state agencies of various countries.

In this regard, several respondents highlighted the need for a fund of funds to emerge and serve as a source of financing for VC firms and their fundraising efforts. The establishment

of a fund of funds is currently a work in progress. Once fully operational, it will provide VC firms with access to a pool of capital to support the financing of their portfolio companies.

Most VC firms, particularly those with closer ties to Ukraine, emphasized the need to address the country's political, security, and legacy risks, including issues with the rule of law. Unless these risks are mitigated and the overall situation improves, there is a concern that if the war resumes, the Ukrainian VC ecosystem may experience an exodus of startups and talent, with many severing ties with the country altogether.

Two respondents underscored the vital role that education and universities play in supporting the VC ecosystem. They observed that universities must learn to commercialize and market innovation. While this trend is emerging at some private universities in Ukraine, it has not yet taken hold in state universities.

Finally, respondents referred to growth, optimism, and the need to eliminate biases as key ingredients for the success of the Ukrainian VC ecosystem, while also noting that VC industry is capable and will play an important role in rebuilding Ukraine.

### APPENDIX 3.

#### List of Interviewed VC Firms and Professionals

The list of interviewed VC firms and professionals (executives) – provided in alphabetical order:

No.	VC professional (executive)	VC firm
1.	Dovzhenko, Andriy	SMRK VC Fund
2.	Kachur, Artur	MITS Capital LLC
3.	Kolodyuk, Andrii	Aventures Capital
4.	Laquer, Joachim	Acrobator Ventures
5.	Nikitov, Roman	ICU Ventures
6.	Petrenko, Ivan	Angel One Fund
7.	Soroka, Alexander	Startup Network
8.	Sorokhan, Andrii	U.Ventures
9.	Sysoyev, Yevgen	Aventures Capital
10.	Yermolenko, Oleksii	Flyer One Ventures