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The role of leverage in supporting the ability of private military companies to withstand financial risks

Oleh Semenenko
Doctor of Military Sciences, Professor
Deputy Commandant of the Central Research Institute
of the Armed Forces of Ukraine for scientific work
The Central Research Institute of the Armed Forces of Ukraine
03049, Povitrianykh syl avenue, 28 B, Kyiv, Ukraine
e-mail: aosemenenko@ukr.net
ORCID: 0000-0001-6477-3414

Serhii Baranov
Head of the Main Directorate of Missile Forces
Artillery and Unmanned Systems General Staff of the Armed Forces of Ukraine
03168, Povitrianykh syl avenue, 6, Kyiv, Ukraine
e-mail: sharada3699@gmail.com
ORCID: 0000-0002-3306-943X

Maryna Abramova
PhD in Economics, Senior Researcher
Senior Researcher
The Central Research Institute of the Armed Forces of Ukraine
03049, Povitrianykh syl avenue, 28 B, Kyiv, Ukraine
e-mail: Elaira3@gmail.com
ORCID: 0000-0001-7644-9988

Alevtyna Hetman
Senior Researcher
Military Institute of Telecommunications and Informatization
named after Heroes of Kruty Kyiv, Ukraine
e-mail: getman2017@gmail.com
ORCID: 0000-0002-6397-7412

Abstract. Financial leverage plays a crucial role in helping private military companies (PMCs) manage economic risks and maintain financial independence. In the context of enhancing the economic resilience of PMCs, the use of leverage improves the accumulation of own resources and capabilities, allowing them to better withstand the emergence of financial risks.

The authors consider that PMCs often operate in high-risk environments where they face various financial challenges, such as fluctuations in demand for their services, geopolitical uncertainty and regulatory changes, etc. By raising free cash, they can gain additional opportunities to expand their operations, invest in advanced technologies and diversify their service offerings. This increased financial flexibility can help them weather turbulent times and maintain their competitive edge in the industry. However, it is important for these companies to carefully manage their leverage levels to avoid excessive debt burdens that could potentially lead to financial difficulties.

The article presents the ontology of financial risks for private military companies: instability of

the geopolitical situation; legal and regulatory changes; liquidity support and cash flow management in a high-risk environment; variability of demand for security services; credit risk; operational risk. Some strategies to mitigate financial risks in PMCs (leverage effects) can be used to mitigate them, such as: diversification of services and geographic presence; implementation of strict credit control measures and due diligence; investment in robust operational infrastructure and risk management systems.

The authors provide an example of calculation of the financial leverage effect indicator for a potential private military company, which clearly reflects a possible general approach to assessing the financial capabilities of such companies (using the graphical method, the safe amount of borrowed funds is determined).

The results of using the financial leverage effect indicator for a potential private military company may include not only the current improvement of its operational performance, but also an increase in the realism of long-term planning.

Keywords: leverage, financial leverage, private military companies, financial risk, sustainability.

Introduction

The rational use of financial leverage can have a significant impact on the financial stability of PMCs, potentially supporting or undermining their operations. Private capital plays a crucial role in financing the development of PMCs in different countries, highlighting the positive aspect of leverage as a source of financing for their financial needs (Kohan, 2021). However, the use of leverage also creates financial risks that need to be carefully managed to maintain stability. Operating and production leverage indicators are important for the analysis of financial PMCs, which allows for a comprehensive assessment of potential risks and vulnerabilities (Prystash, 2022). When financial risks are not properly controlled, the risk profile is transformed from a locally managed one to a more widespread and influential level, which increases the vulnerability of these companies to financial shocks (Ilyashenko, 2017). In situations of armed conflict, PMCs are particularly concerned about maintaining their financial stability capabilities, which requires the assessment and implementation of best practices to effectively address these issues (Pushkarenko, 2023). Proper leverage management is crucial for these companies to ensure their financial resilience and sustainability in the face of diverse operational demands and risks.

Methodological Framework

The role of leverage in enhancing the financial stability of PMCs is closely linked to the broader financial ecosystem, how these firms manage and mitigate risk. Financial leverage, or the use of borrowed capital, can increase both potential returns and risks, making it a critical tool in the strategic arsenal of PMCs. The emergence and spread of financial shocks can seriously affect the financial stability of these companies, requiring a robust risk management system to navigate the controlled and uncontrolled financial environment (Bielova, 2015). This is especially true for PMCs operating in unstable regions where the geopolitical landscape can change rapidly, thus transforming their risk profile from localised manageable risks to widespread systemic threats. Effective risk management strategies, as described in the financial risk classification for insurance companies, can provide a valuable template for PMCs to develop their own methodologies. These strategies can help identify, assess, and mitigate various financial risks, thereby enhancing overall stability (Private Military Companies, 2007). In addition, the global and national contexts of financial stability, as outlined in the textbooks, highlight the importance of understanding the multifaceted nature of financial risks and the interconnectedness of global financial systems. By integrating these perspectives, PMCs can better anticipate and respond to financial disruptions, thereby ensuring the safety of their operations and long-term sustainability (Kaletnik, Kostiuk, Voznyi, 2021). Overall, the effective use of financial

instruments requires a keen understanding of both the macroeconomic environment and the specific operating environment in which PMCs operate. This dual focus can help to develop tailored financial strategies that not only enhance stability, but also promote growth and sustainability in an increasingly complex and interconnected world.

Therefore, there is a need to analyse the potential role of leverage in supporting the capability of PMCs to withstand the emergence of financial risks.

Results

Understanding the nature of financial risks for PMCs (Table 1) is the basis for good decision-making when it comes to their operations. They operate in complex, high-risk environments, often providing security and military services to clients in conflict zones or unstable regions. As such, they face a variety of financial risks that must be carefully managed to ensure their sustainability. One of the main financial risks faced by PMCs is the unpredictability of their revenue streams. Contracts with clients can be suddenly cancelled or modified, especially in unstable regions where the political situation can change rapidly. To reduce the impact of this risk, PMCs can diversify their client base and seek long-term contracts that provide greater stability. Another financial risk for PMCs is the high operational costs associated with providing security and military services in insecure environments. PMCs need to invest in training, equipment, logistics and insurance to ensure the safety and efficiency of their operations. These costs can rise quickly, especially if the security situation deteriorates or unexpected events occur.

Table 1. Ontology of financial risks for PMC

Potential risk	Brief description
Unstable geopolitical situation	As PMCs are increasingly used alongside national armed forces, their importance and vulnerability to geopolitical changes are growing (Kinsey, 2002). This dependence on an unstable geopolitical environment can lead to abrupt changes in the scale of operations, sudden withdrawal from regions or unexpected contract renewals, creating significant financial risks. Key points to consider include: the broad scope of PMCs means that they are deeply affected by geopolitical changes; the increasing use of PMCs as a complement to national armed forces increases their vulnerability to geopolitical risks; and financial implications may include sudden changes in contracts or adjustments to the scope of operations due to changes in the geopolitical situation.
Legal and regulatory developments	The legal frameworks governing PMCs are far from uniform and can change without prior notice, significantly affecting their global operations. Issues related to legitimacy and accountability are of paramount importance, as PMCs often operate in countries with weak legal systems and ineffective oversight (Renou, 2005). The absence of a standardised global regulatory environment for them leads to unpredictability and financial instability, as companies have to navigate disparate national laws and international regulations. This problem is highlighted by the fact that: PMCs face diverse legal and regulatory environments around the world; issues of legitimacy and accountability arise, especially in regions with weak legal oversight; and the constantly changing legal environment creates significant financial risks, requiring PMCs to adapt quickly.
Maintaining liquidity and managing cash flows in a high-risk environment	The nature of PMCs operations, often in volatile and unpredictable environments, makes effective liquidity risk management essential (Principles for Sound Liquidity Risk Management and Supervision, 2018). Techniques such as cash flow modelling and liquidity ratios are important tools to help PMCs navigate the uncertainty of their operating environment (Banks, 2005). Key strategies include: using cash flow modelling to forecast and manage liquidity positions; using liquidity ratios to assess a company's ability to meet short-term obligations; and adapting financial management practices to the unique challenges of operating in a high-risk environment.

Continuation of the table 1. Ontology of financial risks for PMCs

Potential risk	Brief description
Variability in demand for security services	This demand is inextricably linked to global security concerns, which, according to a recent annual report, are growing due to various threats to national security around the world (Permanent Select Committee on I. (house), 2024). The key role of PMCs, ranging from protecting infrastructure abroad to providing close protection to high-ranking officials, underscores their importance in the current geopolitical climate. However, this also exposes them to market risks, as their operational viability is largely dependent on the unpredictability of the global security landscape. The main argument in favour of privatising security companies is their cost-effectiveness and efficiency compared to traditional armed forces (Cumming, Mohammadi, Zambelli, 2021). However, the demand for their services remains sensitive to sudden geopolitical changes, regulatory shifts and economic downturns, which can significantly affect their financial stability. The report highlights the steady growth in demand for PMC services driven by increasing global security concerns (Vestner, 2019), but this demand is not immune to sudden downturns, which creates a significant market risk for PMCs.
Credit risk	Delayed payments or non-performance of contracts by clients can have a serious impact on the cash flow and overall financial position of a PMC. The concept of contract financing is vital in this context, as it allows government payments to contractors in advance of acceptance of supplies or services, mitigating some aspects of credit risk (Fama, 1990). However, this mechanism does not cover all scenarios or clients, especially in the private sector or in international contracts. In addition, the MoD's policy is to ensure that contractors, including PMCs, have a fair opportunity to succeed and are adequately compensated for their services (Defense Department awards synfuel contract, 2007). Despite these measures, PMCs still face significant financial risks if a client delays payment or fails to fulfil its obligations, which underscores the importance of careful risk assessment and mitigation strategies in financial planning.
Operational risk	Operational risk for PMCs covers a wide range of potential internal failures, including inefficiencies in processes, systems or human error, which can lead to significant financial losses. The Risk Management Association defines this type of risk as arising from inadequate or failed internal processes, people and systems (Aloqab, Alobaidi, Raweh, 2018). Operational risk management is crucial for PMCs, focusing on identifying, assessing and mitigating risks that arise during day-to-day operations (Association, 2008). This includes everything from logistical failures, cybersecurity breaches to regulatory violations, which can not only lead to financial losses but also damage reputation. Thus, operational risk summarises the many uncertainties that PMCs face during their operations, highlighting the need for robust risk management strategies to protect against these potential pitfalls (Raanan, Kenett, Pike, 2010).

Therefore, exploring strategies to mitigate financial risks in PMCs is crucial to ensure their sustainability and effectiveness in fulfilling their missions.

Some strategies for mitigating financial risks in the PMC (leverage effects):

1. Diversification of services and geographical presence is a strategic approach for PMCs to effectively mitigate risk. By offering a wide range of services, such as strategic planning, intelligence, investigations and operations on land, sea or air, PMCs can serve a broader client base and reduce their dependence on a single revenue stream. This diversification strategy also extends to geographic expansion, allowing PMCs to spread their risks across different regions. The benefits of adopting this approach include reduced exposure to local economic downturns; access to a wider range of contracts and opportunities; and reduced risks associated with political instability in certain regions. Expanding the range of services and geographical presence allows the PMC to build a more sustainable business model that can withstand various financial risks.

2. Implementing strict credit control measures and conducting thorough customer due diligence are crucial for managing financial risks in the activities of PMCs. Credit risk, liquidity risk and operational risk are serious issues that can be addressed through a comprehensive risk assessment (Spivack, 2001). Due diligence plays a vital role in this process, providing a clear understanding of the history, financial position and potential risks associated with doing business with PMCs and their

clients. The key aspects of an effective due diligence and credit control system are the following: comprehensive assessment of the creditworthiness and financial stability of clients; regular review of lending terms and conditions to bring them in line with current risk assessments; implementation of a risk-based approach to client verification, adjusting measures based on the assessed level of risk (Project Risks, 2016). These measures help the PMCs to minimise the risk of financial losses due to non-payments or contractual disputes, ensuring a more stable financial position.

3. Investing in a robust operational infrastructure and risk management systems is essential to effectively address and mitigate the financial risks of a PMC. An integrated approach to risk management involves assessing different types of risks (e.g. credit, liquidity, operational) and integrating risk assessment across different geographical regions, legal entities and business lines of the firm (Leverage, Financial Stability, and Deflation, 2016). This involves developing and implementing advanced risk assessment tools and methodologies; continuously monitoring and updating risk management practices to reflect the changing risk landscape; and training and raising awareness of staff on risk awareness and mitigation strategies. Such investments not only enhance the ability of a PMCs to manage risk, but also help build trust with clients and stakeholders, thereby supporting business continuity and financial stability.

All the above strategies are the consequences of the use of financial leverage, which plays a crucial role in strengthening the operational capabilities of PMCs, providing them with the necessary capital to expand their asset base and obtain a higher return on risk capital (Mahoney, Tkach, Rethmeyer, 2022). However, this leverage is associated with significant risks that may affect the financial stability of these companies. Empirical evidence suggests that defence contractors backed by private equity are more prone to bankruptcy, indicating that the use of debt capital can lead to financial difficulties under certain market conditions (Inspectorate, 2003). This is especially true in the context of PMCs, where the volatile nature of defence contracts and geopolitical changes can quickly alter their revenue streams. Thus, while financial leverage can enhance operational capabilities by allowing them to invest in advanced technologies and expand their range of services, it also requires sound financial management strategies to mitigate the associated risks. Thus, striking a balance between raising capital for growth and maintaining financial stability is essential for the continued operation of PMCs.

The benefit of calculating the leverage effect is that it allows PMCs to assess the impact of debt financing on their overall financial performance. By calculating the leverage effect, they can determine how changes in interest rates or operating income will affect their own profits and return on equity. Financial leverage refers to the use of debt to finance a PMCs operations and investments. While debt can increase profits when the business is booming, it can also increase losses during economic downturns. Therefore, understanding the effect of financial leverage is crucial for making informed decisions on capital structure and risk management. In addition, calculating the leverage effect can help the PMCs determine the optimal level of debt. By analysing different scenarios and modelling the impact of debt on profitability, PMCs can find a balance between maximising shareholder returns and maintaining financial stability.

The strategic use of financial leverage greatly enhances PMCs' capabilities by enabling them to invest in the most advanced military technologies and equipment. By borrowing capital, PMCs can acquire advanced weapons, surveillance systems and protective equipment that they would otherwise be unable to afford. This not only increases their operational efficiency, but also makes PMCs competitive in the global market for military and security services. In turn, the use of financial leverage is an important tool for modernising and expanding their technological assets without dispersing ownership in PMCs through equity financing (Andreopoulos, Brandle, 2012). The procurement of advanced technologies ensures that PMCs can offer higher-level services, such as high-tech surveillance and reconnaissance missions; advanced cybersecurity defences; and the deployment of sophisticated unmanned aerial vehicles. These technological advances, funded by

financial leverage, allow PMCs to conduct operations more efficiently and with greater accuracy, thereby increasing their attractiveness to potential customers, including governments and multinationals (Galai, 2019).

Financial leverage plays a key role in facilitating the global expansion of PMCs. With access to debt, they can scale their services across borders, establishing a presence in strategic locations around the world. This expansion is not only geographical, but also entails an increased portfolio of services to meet a variety of security needs. The use of debt allows PMCs to quickly mobilise resources, personnel and equipment to conflict zones or areas in need of immediate security assistance, thereby taking advantage of emerging opportunities (Fahn, Hadjer, 2015). Global expansion strategies that can be implemented with the help of financial levers include establishing operational bases in conflict-affected regions; diversifying services, including logistics support, training and consulting; and participating in international cooperation and security contracts. The ability to respond quickly to global security needs and participate in international operations enhances the reputation of PMCs and strengthens their position as key players in the international security landscape (O'Brien, 2008).

While financial leverage offers significant advantages, it also carries significant risks, especially in the volatile environment in which PMCs typically operate. High levels of debt increase their financial exposure, making them vulnerable to market fluctuations and economic downturns. In scenarios where contract operations are suddenly cancelled or reduced due to political or military events, PMCs may be unable to cover their debt obligations, leading to financial distress or even bankruptcy (Clauss, 2012). In addition, reliance on debt financing requires careful risk management strategies to mitigate interest rate risks, which can unexpectedly increase the cost of borrowing; liquidity risks, which affect the ability of an PMC to meet short-term financial obligations; and reputational risks, if financial instability jeopardises operational capabilities. The unstable balance between borrowing for growth and managing the associated risks highlights the difficulty of using financial leverage in a security environment characterised by uncertainty and rapid change (Nebolsina, 2019); (Armanious, Zhao, 2022).

Therefore, to clearly evaluate the financial performance of a PMC, we will present a step-by-step calculation of the financial leverage effect (ЕФВ) for a potential PMC (ПВКх). For this purpose, it is necessary to estimate the economic profitability (EP) and the average estimated rate of interest (CPCB):

$$ЕФВ = 2/3 (EP - CPCB) * ПК / ВК,$$

where PEI = net operating result of the investment / (Own funds + Borrowed funds),

CPCB = Interest expense / Borrowings * 100%.

PMCs Input data (ПВКх):

1. Revenue from operations - USD 1,231.8 million.
2. Variable expenses - USD 10970.5 million.
3. Fixed costs - USD 687.6 million.
4. Own funds (BK) - USD 1130.4 million.
5. Borrowed funds (ПК) - USD 180 million.
6. Financial costs on borrowed funds (ФВПК) - USD 32.4 million.

ПВКх performance indicators:

1. Profit - USD 573.7 million.
2. Net investment performance (PEI): financial expenses on borrowed funds (ФПК) + Profit - USD 606.1 million.
3. Gross margin (BM) - USD 1261.3 million.
4. Gross margin (BM/Revenue) - 0.103.
5. Share of fixed assets - 9.241%.
6. Profitability of services - 4.69%.

To calculate the **financial leverage effect** (ЕФВ), it is necessary to calculate the economic profitability (EP) and the average estimated interest rate (CPCB):
EP = PEI / Assets * 100 = 606.1 / (1130.4 + 180) * 100 = 46.25%.
СРСВ = ФПК/ ПК * 100 = 32.4 / 180 * 100 = 18%.
ЕФР = 2 / 3(ЕР - СРСП) * ЗС / СС = 2 / 3(46.25% - 18%) * 180 / 1130.4 = 3.0%.
РСС = 2/3 * ЕР + ЕФР = 2/3 * 46.25 + 3.0 = 33.84%.

The volume of ЕФВ reflects the increase in the return on equity resulting from the use of borrowed capital.

The ability of debt to leverage a company's assets for more significant projects is a strategic advantage that PMCs can take advantage of. By using debt capital, they can expand their operational capabilities and embark on larger and more ambitious projects, which are often integral to their growth and success in the highly competitive defence sector (Ilyashenko, 2017). This approach not only demonstrates the tactical use of financial instruments to achieve business goals, but also highlights the importance of managing the balance between raising assets and maintaining financial health. Strategic deployment of debt capital, when managed effectively, allows PMCs to maximise the use of their assets and project scale without compromising their financial stability.

In our case, the ЕФВ was 3.0%, and since the leverage is less than 1 (0.159), this ПВКх can be considered creditworthy.

Let's use the graphical method to determine the safe amount of borrowed funds. Typical differential curves are shown in Fig. 1.

The position of the potential ПВКх on the graph is determined: EP / CPCB = 46.25 / 18 = 2.57, then EP = 2.57CPCB.

With additional possible borrowing, it is necessary that the financial capacity of the ПВКх does not fall below the main curve (ПВКх is between EP = 3CPCB and EP = 2CPCB). Thus, at the level of tax neutrality at the point of ЕФВ/РСС = 1/3, the permissible leverage of the ПК/ВК is 1.0.

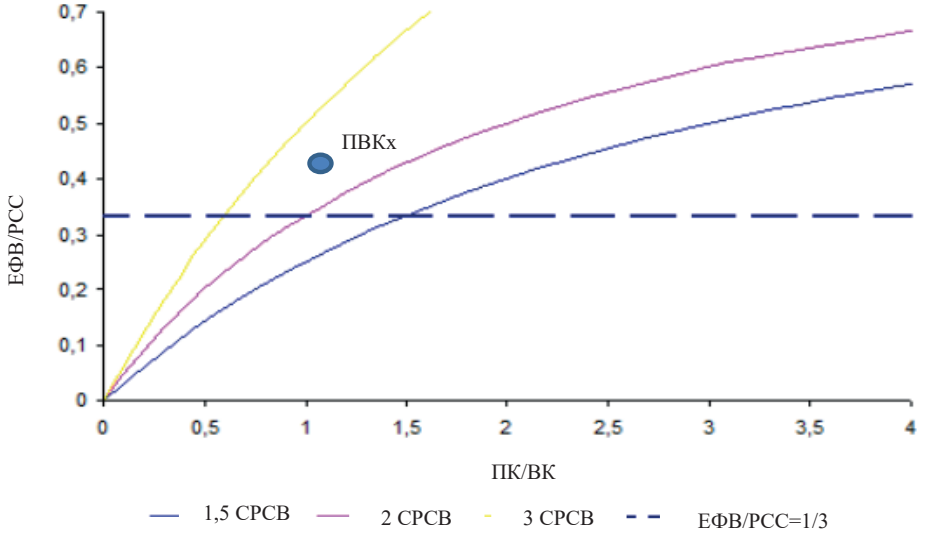


Figure 1. Differential curves (results of the authors' calculations)

Thus, borrowed funds can be increased by USD 950.4 million and reach USD 1,130.4 million.

Let us determine the upper bound of the cost of debt:

ЕР = 2СРСВ, i.e., СРСВ = 46.25% / 2 = 23.13%, and СРСВ = ФВПК / ПК.

Hence, ФВПК = СРСВ * ПК = 23.13% * 1130.4 = USD 261.422 million.

Thus, without increasing the level of economic risk, this ПВКх can borrow an additional USD 950.4 million. The additional borrowing will cost the ПВК $219.795 million if the average interest rate on the loan capital does not exceed 23.13%.

The critical value of the net investment performance is the value at which the ЕФВ = "0", and therefore the return on equity is the same for both the options with borrowed funds and using only equity. Then PEI critical = 1310.4 * 18 = USD 235.872 million.

In our case, the threshold value is passed, which indicates that it is profitable for the ПВКх to attract borrowed funds.

The correct interpretation of the results of the calculation of the financial leverage effect to counter financial risks can help the PMCs to make informed decisions about its operations and strategy. Financial leverage refers to the use of debt to finance operations and investments to increase the potential return on investment. However, this strategy is also associated with increased financial risks, as the company must pay regular interest on the debt, which can be a burden for reduced profits. By accurately calculating the impact of financial leverage on a PMC's operations, managers can assess the level of risk they are exposed to and adjust their financial structure accordingly. For example, if the calculations show that a PMCs is heavily reliant on debt financing, it may need to consider reducing its leverage to mitigate potential risks. On the other hand, if the calculations show that the company can comfortably manage its debt obligations while still achieving the desired profitability, it may decide to maintain or even increase its borrowing base. A clear understanding of the impact of financial leverage can also assist the PMCs in budgeting and forecasting. By incorporating this information into their financial planning, they can make more accurate forecasts of future cash flows and make strategic decisions that are more aligned with their goals.

Conclusion

Financial leverage plays a crucial role in the stability of a PMC, offering both opportunities and risks. Managing it effectively is essential to navigate the complexity of financial transactions in volatile regions. PMCs face financial risks such as unpredictable revenues and high operating costs, which require strategic planning and risk mitigation. Diversifying the customer base and securing long-term contracts can increase revenue stability, while prudent management of operating costs is vital to sustain operations in a challenging environment.

PMCs face a variety of financial risks due to an unpredictable geopolitical environment, legislative and regulatory changes, liquidity management challenges, demand volatility, credit risk and operational failures. To mitigate these risks, PMCs can diversify their services and geographic presence, implement strict credit control measures, conduct due diligence, and invest in robust operational infrastructure and risk management systems. These strategies help PMCs to overcome uncertainties, enhance financial stability and ensure business continuity in a high-risk environment.

Research shows that financial leverage plays a crucial role in increasing the operational capacity of a PMC, providing the necessary capital to expand and increase profits. However, it also creates significant risks, such as increased vulnerability to bankruptcy. By strategically using financial leverage, PMCs can invest in advanced technology, expand globally, and respond effectively to security needs. Balancing debt is essential for sustainable operations in the volatile security industry.

The use of the ЕФЛ involves considering the economic profitability and the average interest rate. Using the methodology presented in the article, PMCs can assess the impact of debt on their profitability. (In the example, the authors demonstrate a situation with a 3.0% increase in profitability

due to the use of borrowed capital.) The analysis also determined the company's creditworthiness and the safe amount of borrowed funds. Thus, the correct interpretation of the ЕФЛ helps to make informed decisions on financial risk management and optimisation of the financial structure of a PMC.

References

1. Kohan, H. L. (2021). Private military companies in the context of hybrid warfare. *Knowledge of European law, (3),* 144–150. https://doi.org/10.32837/chern.v0i3.116
2. Prystash, A. (2022). Private military companies as a factor of influence on the security of states. *Grail of Science, (17),* 284–286. https://doi.org/10.36074/grail-of-science.22.07.2022.051
3. Ilyashenko, S. M. (2017). Methodological principles of organisational knowledge management [Thesis, Sumy State University]. eNTUKhPIIR – Electronic repository of the National Technical University "Kharkiv Polytechnic Institute". http://repository.kpi.kharkov.ua/handle/KhPI-Press/45844
4. Pushkarenko, S. (2023). Human rights: the institutional aspect. *Theoretical and applied issues of state-building, (29),* 351–353. https://doi.org/10.35432/tisb292023289744
5. Bielova, I. V. (2015). *Methodological framework for managing systemic financial risk in Ukraine* [Thesis, Ukrainian Academy of Banking of the National Bank of Ukraine]. eSSUIR – Electronic Sumy State University Institutional Repository. http://essuir.sumdu.edu.ua/handle/123456789/51372
6. Private Military Companies. (2007). *Handbook of Military Administration* (с. 187–216). Routledge. https://doi.org/10.1201/9781420016970-13
7. Kaletnik, V. V., Kostiuk, I. A., & Voznyi, O. O. (2021). Private military companies as an asymmetric deterrent to the enemy. *Weapons systems and military equipment*, *2* (66), 144–153. https://doi.org/10.30748/soivt.2021.66.19
8. Kinsey, C. (2002). Private military companies: options for regulation. *Conflict, Security & Development*, *2* (03), 127–137. https://doi.org/10.1080/14678800200590624
9. Renou, X. (2005). Private Military Companies Against Development. *Oxford Development Studies*, *33* (1), 107–115. https://doi.org/10.1080/13600810500099717
10. Principles for Sound Liquidity Risk Management and Supervision. (2018). *Bank Asset and Liability Management* (с. 143–146). John Wiley & Sons Singapore Pte. Ltd. https://doi.org/10.1002/9781119444497.app1
11. Banks, E. (2005). Liquidity Risk Defined. *Liquidity Risk* (с. 3–13). Palgrave Macmillan UK. https://doi.org/10.1057/9780230508118_1
12. Permanent Select Committee on I. (house), United States House of Representatives & United States United States Congress. (2024). *Annual Threat Assessment of the U. S. Intelligence Community*. Independently Published.
13. Cumming, D. J., Mohammadi, A., & Zambelli, S. (2021). Misconduct risks, legal enforcement and venture capital networks. *European Financial Management.* https://doi.org/10.1111/eufm.12346
14. Vestner, T. (2019). Targeting Private Military and Security Companies. *The Military Law and the Law of War Review*, *57* (2), 251–278. https://doi.org/10.4337/mllwr.2019.02.02
15. Fama, E. F. (1990). Contract Costs and Financing Decisions. *The Journal of Business*, *63* (S1), S71. https://doi.org/10.1086/296494
16. Defense Department awards synfuel contract. (2007). *Focus on Catalysts*, *2007* (8), 2. https://doi.org/10.1016/s1351-4180(07)70418-x

17. Aloqab, A., Alobaidi, F., & Raweh, B. (2018). Operational Risk Management in Financial Institutions: An Overview. *Business and Economic Research, 8* (2), 11. https://doi.org/10.5296/ber.v8i2.12681
18. Association, M. G. M.. (2008). *Risk management.* Medical Group Management Association.
19. Raanan, Y., Kenett, R. S., & Pike, R. (2010). Operational Risk Management: An Overview. *Operational Risk Management* (c. 19–38). John Wiley & Sons, Ltd. https://doi.org/10.1002/9780470972571.ch2
20. Spivack, J. (2001). The Challenges of Risk Management in Diversified Financial Companies. *CFA Digest, 31* (4), 82–84. https://doi.org/10.2469/dig.v31.n4.984
21. Project Risks. (2016). *Project Management Simplified* (c. 87–102). CRC Press. https://doi.org/10.1201/b19130-12
22. Leverage, Financial Stability, and Deflation. (2016). *What Have We Learned? The MIT Press.* https://doi.org/10.7551/mitpress/10005.003.0017
23. Mahoney, C. W., Tkach, B. K., & Rethmeyer, C. J. (2022). Defense Contractors, Private Equity Firms, and US National Security. *Journal of Global Security Studies, 7* (4). https://doi.org/10.1093/jogss/ogac018
24. Inspectorate, N. S. (2003). *Directory of NSI approved companies guarding and cash services*. National Security Inspectorate.
25. Andreopoulos, G., & Brandle, S. (2012). Revisiting the Role of Private Military and Security Companies. *Criminal Justice Ethics, 31* (3), 138–157. https://doi.org/10.1080/0731129x.2012.743339
26. Galai, K. (2019). Private military companies, a contemporary problem? *Regulating Private Military Companies* (c. 11–32). Routledge. https://doi.org/10.4324/9780429465888-2
27. Fahn, M., & Hadjer, T. (2015). Optimal contracting with private military and security companies. *European Journal of Political Economy, 37,* 220–240. https://doi.org/10.1016/j.ejpoleco.2014.10.004
28. O'Brien, J. M. (2008). *Private military companies an assessment* [Thesis, Monterey, Calif.: Naval Postgraduate School]. http://edocs.nps.edu/npspubs /scholarly/theses/2008/Sept/08Sep_OBrien.pdf
29. Clauss, P. (2012). Hedge Funds and Leverage: Financial Crisis Consequences. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.2109601
30. Nebolsina, M. A. (2019). Private Military and Security Companies. *Russia in Global Affairs, 17* (2), 76–106. https://doi.org/10.31278/1810-6374-2019-17-2-76-106
31. Armanious, A., & Zhao, R. (2022). Stock Liquidity and Leverage: The Role of Debt Security, Financial Constraint, and Risk Around the Financial Crisis. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.4195763