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Due Diligence and Directors' Liability for Startup Investment Losses: Evaluating the Business Judgment Rule in Indonesian Venture Capital Companies

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Abstrak

Artikel ini menganalisis peran due diligence dalam penilaian tanggung jawab direksi perusahaan modal ventura atas kerugian investasi pada perusahaan rintisan dengan kerangka Business Judgment Rule. Penelitian hukum normatif ini menggunakan pendekatan perundang-undangan dan konseptual serta membedakan penyertaan modal dari pembiayaan berbasis utang. Hasil analisis menunjukkan bahwa kerugian investasi saja tidak membuktikan kelalaian, sedangkan telah dilakukannya due diligence juga bukan pembelaan otomatis. Penilaian harus menelusuri informasi yang tersedia sebelum keputusan, risiko material, proses verifikasi, konflik kepentingan, respons direksi, dan hubungan sebab-akibat dengan kerugian. Kerangka indikator yang diusulkan tidak menggantikan unsur pertanggungjawaban perdata Pasal 97 Undang-Undang Perseroan Terbatas maupun pembuktian tindak pidana.

Kata Kunci: due diligence; direksi; Business Judgment Rule; modal ventura; tanggung jawab perseroan

Abstract

This doctrinal study examines the evidentiary relevance of due diligence when assessing the liability of venture-capital directors for startup investment losses under the business judgment rule. Using statutory and conceptual approaches, it differentiates equity investment from financing and identifies proportionate standards of pre-investment verification. An investment loss alone does not establish negligent management, while the mere existence of a due-diligence report does not automatically protect directors. The proposed ex ante assessment links information available at the decision date, material red flags, independent verification, documented board responses, conflicts of interest, and causal relationships to the loss. It also distinguishes corporate liability under Article 97 of the Limited Liability Company Law from separate criminal-law questions.

Keywords: *due diligence; directors; business judgment rule; venture capital; corporate liability*

Introduction

Startup financing is characterized by uncertain markets, incomplete operating histories, high rates of technological change, and valuations that depend on future rather than established revenues. Venture capital companies seek

economic upside in such settings, yet their directors must make investment decisions through a legally defensible process. The central question is not whether the outcome turned out to be profitable, but whether the board exercised its responsibilities on the information reasonably available at the time.[1]

Due diligence commonly evaluates legal existence, ownership, commercial assumptions, financial records, management quality, material contracts, litigation, and regulatory exposure. It is therefore relevant to directors' duty of care. Nonetheless, an investment memorandum can be formally complete and substantively unreliable, especially if it merely reproduces untested statements by startup founders. Adequate due diligence must be assessed by the procedures performed, their limits, and the board's actual response to identifiable risks.[2]

Article 97 of Law No. 40 of 2007 on Limited Liability Companies provides a legal starting point for directors' duties and responsibility for company losses. Paragraph (5) sets cumulative conditions relevant to avoiding personal liability. The formulation should not be reinterpreted as a categorical ban on risky investments or as a promise that preparation of a consultant's report always insulates management from suit. Risk-taking may be legitimate, but uninformed or conflicted decision-making is a different matter.[3]

Public reporting on the TaniHub investment controversy illustrates the importance of distinguishing commercial failure from alleged governance breaches and criminal conduct. The Hukumonline report dated May 25, 2026 describes a prosecutorial demand; it is not evidence of a final conviction or of the civil liability of every director involved. Without transaction records and authoritative judgments, the example cannot determine whether a particular board satisfied its duties.[4]

Prior studies address venture-capital screening, agency conflicts, directors' fiduciary duties, and the business judgment rule. Miraza and Shauki study venture capital and startup development; Mustikoningsih and Frensidy examine agency control; and Raffles discusses directors' responsibility. This article contributes a practical analytical bridge between documented pre-decision inquiries and the cumulative requirements of Article 97(5), rather than merely restating that due diligence is desirable.[5]

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[1] Chairanisa Natasha Miraza and Elvia R Shauki, "The Effect of Venture Capital on the Growth of Startups in Indonesia: A Case Study on BRI Ventures," *Journal of Economics, Business, & Accountancy Ventura* 25, no. 3 (2023): 358–368, https://doi.org/10.14414/jebav.v25i3.2927.

[2] Alexandra Moritz et al., "VC investors' venture screening: the role of the decision maker's education and experience," *Journal of Business Economics* 92, no. 1 (2022): 27–63, https://doi.org/10.1007/s11573-021-01042-z.

[3] Indonesia, Law No. 40 of 2007 concerning Limited Liability Companies, art. 97.

[4] Hanifah Dwi Jayanti, "Nicko Widjaja Dituntut 11 Tahun dalam Kasus Investasi TaniHub, Penasihat Hukum Singgung Kriminalisasi BJR," Hukumonline, 25 May 2026, https://www.hukumonline.com/berita/a/nicko-widjaja-dituntut-11-tahun-dalam-kasus-investasi-tanihub--penasihat-hukum-singgung-kriminalisasi-bjr-lt6a13c821e5710/. Diakses 31-10-2026

[5] Ratih Mustikoningsih and Budi Frensidy, "Pengendalian Konflik Agensi dalam Tahapan Investasi pada Startup dengan Pendanaan Modal Ventura," *E-Jurnal Akuntansi* 35, no. 2 (2024): 581–95, https://doi.org/10.24843/eja.2025.v35.i02.p19.

Table 1. Selected Prior Studies and the Research Gap

Study	Focus	Contribution	Residual question
Miraza and Shauki (2023)	Startup development and venture funding	Provides an economic-sector setting	Not a test of directors' legal responsibility
Mustikoningsih and Frensidy (2025)	Agency conflicts in venture investment	Identifies investment governance risks	Does not automatically satisfy Article 97(5)
Raffles (2020)	Directors' liability and protection	Examines fiduciary and corporate duties	Not specifically a venture-capital due-diligence matrix
Present study	Due diligence and statutory liability	Links ex ante records to legal conditions	Requires transaction records for case application

Source: Authors' doctrinal analysis of the primary and secondary materials identified in the accompanying text.

Research Method

This is normative legal research based on Law No. 40 of 2007, financial-sector legislation and the applicable OJK regulatory framework for venture capital, together with doctrinal and academic sources on investment screening and directors' duties. The statutory analysis focuses on the relationship between board discretion and the elements of liability; the conceptual analysis separates business risk, information failure, conflicts of interest, and causal responsibility. It does not purport to conduct a financial forensic audit of any startup.[6]

The research treats the ex ante decision point as its unit of evaluation. Evidence is categorized into independently verified information, founder declarations requiring corroboration, disclosed and tolerable uncertainties, and red flags requiring targeted escalation. The comparison then evaluates the particular board response against the four conditions under Article 97(5). A subsequent decline in enterprise value is not substituted retrospectively for proof that the earlier decision was negligent.[7]

Equity subscriptions, convertible instruments, venture debt, and other permitted venture-capital activities require different checks. This framework primarily addresses equity exposure in early-stage enterprises, while identifying adjustments for debt claims and repayment obligations. OJK Regulation No. 25 of 2023 provides the sectoral framework for venture-capital business and prudential management. A proposed amendment must be distinguished from an enacted instrument.[8]

[6] Indonesia, Law No. 40 of 2007 concerning Limited Liability Companies, art. 92(1).
[7] Indonesia, Law No. 40 of 2007 concerning Limited Liability Companies, art. 97(5).
[8] Financial Services Authority (OJK), Regulation No. 25 of 2023 concerning the Conduct of Business by Venture Capital Companies and Sharia Venture Capital Companies.

Results and Discussion

1. Directors' Duty of Care and the Limits of the Business Judgment Rule

Directors manage the company for its corporate purposes under Articles 92 and 97 of the Limited Liability Company Law. Management discretion is essential where information is imperfect and commercial opportunities expire quickly. That discretion, however, operates alongside an obligation to act in good faith and with full responsibility. An investment loss cannot be evaluated in isolation from the processes used to approve the transaction.[9]

Article 97(5) articulates conditions that must be considered cumulatively: the loss is not attributable to the director's fault or negligence; management was performed in good faith and with prudence for the interests and purposes of the company; no direct or indirect conflict of interest existed; and action was taken to prevent the loss from arising or continuing. These are statutory conditions rather than optional management recommendations. Which party bears a particular evidentiary burden must be assessed within the relevant corporate proceedings, not imported mechanically into criminal litigation.[10]

The business judgment rule is most appropriately understood as protecting the space for reasonable business choice rather than guaranteeing a result. Courts evaluating a decision should avoid judging solely from later market collapse, regulatory change, or failed forecasts. At the same time, genuine deference to commercial judgment does not excuse concealment of conflicts, disregard of material warnings, or a decision reached without reasonable attention to obtainable evidence.[11]

A venture-capital investment may be financially volatile without being improperly managed. Conversely, an apparently profitable investment may still involve governance breaches if insiders deliberately withheld information or arranged transactions for undisclosed benefit. This distinction prevents the legality of the decision process from being reduced to a financial scorecard. It also distinguishes the company's commercial loss from any separate allegation of corruption, fraud, or another criminal offence.[12]

2. Proportionate Due Diligence: Sources, Verification, and Risk Response

A defensible diligence process should be proportionate to transaction size, stage of development, intended security, and the startup's risk profile. Legal review should confirm legal personality, founders' authority, shareholder records, material approvals, intellectual-property ownership, regulatory permissions, key contracts, and pending claims. Financial review should identify cash burn, runway, liquidity, contingent liabilities, forecasts, and the basis for valuation. Operational

[9] Indonesia, Law No. 40 of 2007 concerning Limited Liability Companies, arts. 92 and 97.

[10] Indonesia, Law No. 40 of 2007 concerning Limited Liability Companies, art. 97(5).

[11] Raffles, "Tanggung Jawab dan Perlindungan Hukum Direksi dalam Pengurusan Perseroan Terbatas," *Undang: Jurnal Hukum* 3, no. 1 (2020): 107–137, https://doi.org/10.22437/ujh.3.1.107-137.

[12] Chandra Noviardy Irawan, Pujiyono, and Irma Cahyaningtyas, "Implementation of Business Judgement Rules in Indonesia: Theories, Practices, and Contemporary Cases," *Indonesian Journal of Advocacy and Legal Services* 4, no. 1 (2022): 1–24, https://doi.org/10.15294/ijals.v4i1.23273.

review should test concentration risks, data governance, personnel dependence, and milestones.[13]

Proportionality does not permit treating unsupported statements as verified facts. The board should distinguish information checked against independent records from representations provided by management, and record the limits of access. A material discrepancy in share ownership, title to core software, or regulatory authorization may call for further documents, conditions precedent, independent expertise, adjustment to price, contractual protection, or rejection. The decision memorandum should say what was done and why the remaining risk was accepted.[14]

Warnings should be classified by materiality. A minor administrative omission that can be remedied before closing is not equivalent to an unresolved claim that the startup does not own its main technology. Materiality depends on probability, potential impact, detectability, and the feasibility of correction. A board's response is adequate only when the action taken is reasonably fitted to the nature of the warning; a generic resolution stating that all risks are accepted would be insufficient as an analytical explanation.[15]

Documents relevant to knowledge and diligence include dated board minutes, independent legal opinions, financial diligence reports, risk committee notes, investment memoranda, correspondence requesting clarification, and conditional approvals. These sources may show that particular risks were identified, discussed, mitigated, or knowingly accepted after informed deliberation. Mere reference to outside consultants does not prove that the directors understood or acted on their findings.[16]

The core reasoning sequence is traceable: identify each material proposition, explain how it was tested, classify the residual uncertainty, locate the board response, and assess the decision against Article 97. Where a company later loses money, the inquiry must then determine whether the specific alleged breach is causally connected with the loss. A decline in startup value occurring for unrelated market reasons should not be treated as sufficient proof of a prior failure of diligence.[17]

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[13] Mochammad Tanzil Multazam et al., "Standards for conducting legal due diligence: Current developments," *Indonesian Journal of Law and Economics Review* 15 (2022): 1–14, https://doi.org/10.21070/ijler.v15i0.762.

[14] Keith Arundale and Colin Mason, "Business angel groups as collective action: an examination of the due diligence process," *International Entrepreneurship and Management Journal* 21, no. 1 (2025): 39, https://doi.org/10.1007/s11365-024-01052-7.

[15] Ratih Mustikoningsih and Budi Frensidy, "Pengendalian Konflik Agensi dalam Tahapan Investasi pada Startup dengan Pendanaan Modal Ventura," *E-Jurnal Akuntansi* 35, no. 2 (2024): 581–95, https://doi.org/10.24843/eja.2025.v35.i02.p19.

[16] Ratih Mustikoningsih and Budi Frensidy, "Pengendalian Konflik Agensi dalam Tahapan Investasi pada Startup dengan Pendanaan Modal Ventura," *E-Jurnal Akuntansi* 35, no. 2 (2024): 581–95, https://doi.org/10.24843/eja.2025.v35.i02.p19.

[17] Indonesia, Law No. 40 of 2007 concerning Limited Liability Companies, art. 97(3).

Table 2. Risk-Based Due-Diligence Evaluation Matrix

Review area	Evidence or red flag	Expected director response
Corporate authority	Company register, cap table, approvals	Verify title and authority; document exceptions
Intellectual property	Unproven ownership of essential software	Obtain original assignments or independent legal advice
Financial reporting	Inconsistent accounts, unsustainable cash burn	Independent reconciliation and stress testing
Conflicts	Related-party contracts or self-dealing	Disclosure, disinterested consideration, recorded safeguards
Regulatory compliance	Missing sector permit or unresolved dispute	Condition precedent, mitigation, repricing, or refusal
Decision trail	Incomplete minutes or unexplained override	Record concerns, deliberation, decision and risk owner

Source: Authors' doctrinal analysis of the primary and secondary materials identified in the accompanying text.

3. Ex Ante Evaluation, Evidence Matrix, and Separate Liability Regimes

An ex ante assessment helps prevent hindsight bias. Consider a hypothetical startup with valid incorporation, verified IP rights, and transparent financial records, but an uncertain forecast for customer adoption. A board that documents the commercial assumption, sizes its investment appropriately, and approves staged funding may act with reasonable prudence even if the product later fails. The example is illustrative, not a reconstruction of an actual Indonesian investment.[18]

Consider instead a hypothetical case in which a diligence report identifies a serious disputed ownership claim over the platform's essential source code, and board records show that the directors approved full payment without securing clarification, legal protection, or a commercial justification. Those facts would call for a closer examination of care, conflict, and the connection between the identified risk and the ensuing loss. They do not automatically establish civil or criminal guilt; the statutory elements and evidentiary record remain controlling.[19]

A structured evidence matrix can make the distinction operational. The judge or corporate decision-maker should identify the relevant warning, the information available when the board acted, the director's documented response, the alternatives considered, the mitigation actually undertaken, and the causal

[18] Chairanisa Natasha Miraza and Elvia R Shauki, "The Effect of Venture Capital on the Growth of Startups in Indonesia: A Case Study on BRI Ventures," *Journal of Economics, Business, & Accountancy Ventura* 25, no. 3 (2023): 358–368, https://doi.org/10.14414/jebav.v25i3.2927.

[19] Faisal Fajar Nugraha and Inda Rahadiyan, "The Responsibility of the President Director for Breaches of Fiduciary Duty (Case Study of PT Multidaya Teknologi Nusantara)," *Journal of Private and Commercial Law* 5, no. 2 (2026): 159–182, https://doi.org/10.20885/jpcol.vol2.iss2.art2.

pathway alleged. This is a test of the quality of decision-making, not the commercial outcome alone.[20]

A prosecutorial demand must be distinguished from a final judicial finding. Article 97(5) concerns directors' personal liability for company losses and cannot, by itself, dispose of a separate criminal allegation. Each criminal charge requires proof of its own elements and legally attributable conduct. The same transaction may raise both corporate-law and criminal-law questions, but the two proceedings do not apply an identical test.[21]

The article therefore proposes two complementary practices: investment committees should preserve a decision trail proportionate to the risk, and legal analysis should identify which statutory condition each piece of evidence supports or undermines. Regulators and lawmakers may strengthen operational requirements for recordkeeping and independent review, but such proposals must be separated from duties already imposed by the Limited Liability Company Law and applicable OJK regulation.[22]

Conclusion

Due diligence has evidentiary value because it can reveal whether directors sought, verified, and responded to information material to a startup investment. It is neither a guarantee against loss nor an automatic shield against liability. The business judgment rule must be considered through Article 97's cumulative statutory conditions and an ex ante account of how the particular decision was reached.[23]

The proposed framework classifies evidence by verification status, risk materiality, board response, and causation. It preserves the distinction between legitimate commercial risk, corporate-governance failure, and criminal allegations. Further work requires transaction-specific primary documents and authoritative judgments before the model can be applied conclusively to any named investment controversy.[24]

References

AINI, UMI and Mugiyati. "Analisis Risiko Modal Ventura Syariah di Indonesia." *El-Mal: Jurnal Kajian Ekonomi & Bisnis Islam* 5, no. 9 (2024): 3829–37. https://doi.org/10.47467/elmal.v5i9.2837.

Ari Utomo Saputra, Ari Ayu, Anisatun Humayrah Rais, Hasma, and La Ode Abdul Rakhman. "Ketika Startup Gagal: Analisis Red flags untuk Membedakan

[20] Adi Putra Prajitna, Suartini, and Aris Machmud, "Esensi Tanggung Jawab Direksi Perseroan Terbatas: Penerapan Dan Batasan Hukum Business Judgment Rule Di Indonesia," *Jurnal Supremasi* 16, no. 2 (2026): 251–265, https://doi.org/10.35457/supremasi.v16i2.5786.

[21] Hanifah Dwi Jayanti, "Nicko Widjaja Dituntut 11 Tahun dalam Kasus Investasi TaniHub, Penasihat Hukum Singgung Kriminalisasi BJR," Hukumonline, 25 May 2026, https://www.hukumonline.com/berita/a/nicko-widjaja-dituntut-11-tahun-dalam-kasus-investasi-tanihub--penasihat-hukum-singgung-kriminalisasi-bjr-lt6a13c821e5710/. Diakses 31-10-2026

[22] Mochammad Tanzil Multazam et al., "Standards for conducting legal due diligence: Current developments," *Indonesian Journal of Law and Economics Review* 15 (2022): 1–14, https://doi.org/10.21070/ijler.v15i0.762.

[23] Indonesia, Law No. 40 of 2007 concerning Limited Liability Companies, art. 97(5).

[24] Chandra Noviardy Irawan, Pujiyono, and Irma Cahyaningtyas, "Implementation of Business Judgement Rules in Indonesia: Theories, Practices, and Contemporary Cases," *Indonesian Journal of Advocacy and Legal Services* 4, no. 1 (2022): 1–24, https://doi.org/10.15294/ijals.v4i1.23273.

Business Failure, Governance Failure, dan Fraud Risk pada TaniHub, Investree, dan eFishery." *AKUA: Jurnal Akuntansi dan Keuangan* 5, no. 3 (2026): 884–898. https://doi.org/10.54259/akua.v5i3.8603.

Arundale, Keith and Colin Mason. "Business angel groups as collective action: an examination of the due diligence process." *International Entrepreneurship and Management Journal* 21, no. 1 (2025): 39. https://doi.org/10.1007/s11365-024-01052-7.

Financial Services Authority (OJK). Regulation No. 25 of 2023 concerning the Conduct of Business by Venture Capital Companies and Sharia Venture Capital Companies.

Henin Dyah Syafrina. "Business Judgment Rule from the Perspective of Director's Liability: A Comparative Study of Indonesia and the United States." *Krtha Bhayangkara* 20, no. 1 (2026): 137–154. https://doi.org/10.31599/krtha.v20i1.4985.

Indonesia. Law No. 40 of 2007 concerning Limited Liability Companies.

Irawan, Chandra Noviardy, Pujiyono, and Irma Cahyaningtyas. "Implementation of Business Judgement Rules in Indonesia: Theories, Practices, and Contemporary Cases." *Indonesian Journal of Advocacy and Legal Services* 4, no. 1 (2022): 1–24. https://doi.org/10.15294/ijals.v4i1.23273.

Jayanti, Hanifah Dwi. "Nicko Widjaja Dituntut 11 Tahun dalam Kasus Investasi TaniHub, Penasihat Hukum Singgung Kriminalisasi BJR." Hukumonline, 25 Mei 2026. https://www.hukumonline.com/berita/a/nicko-widjaja-dituntut-11-tahun-dalam-kasus-investasi-tanihub--penasihat-hukum-singgung-kriminalisasi-bjr-lt6a13c821e5710/ . diakses 31-10-2026

Luvina Dien Auliya, Nadilla Asma Dzakiyah, Keisha Riyana, Ega Yonsu Al-Fauziah, Nadiya Indahnya Rahmadani, and Suryo Ediyono. "Batas Antara Risiko Bisnis Dan Tindak Pidana Korupsi Dalam Negara Hukum: Studi Kasus Investasi Tanihub Oleh Nicko Widjaja." *Jurnal Ilmiah Multidisiplin Ilmu* 3, no. 4 (2026): 107–115. https://doi.org/10.69714/w2beq616.

Miraza, Chairanisa Natasha and Elvia R Shauki. "The Effect of Venture Capital on the Growth of Startups in Indonesia: A Case Study on BRI Ventures." *Journal of Economics, Business, & Accountancy Ventura* 25, no. 3 (2023): 358–368. https://doi.org/10.14414/jebav.v25i3.2927.

Moritz, Alexandra, Walter Diegel, Joern Block, and Christian Fisch. "VC investors' venture screening: the role of the decision maker's education and experience." *Journal of Business Economics* 92, no. 1 (2022): 27–63. https://doi.org/10.1007/s11573-021-01042-z.

Multazam, Mochammad Tanzil, Rifqi Ridlo Phahlevy, Regita Amanah Huzairin, and Melati Indah Purnama. "Standards for conducting legal due diligence: Current developments." *Indonesian Journal of Law and Economics Review* 15 (2022): 1 –14. https://doi.org/10.21070/ijler.v15i0.762.

Mustikoningsih, Ratih and Budi Frensidy. "Pengendalian Konflik Agensi dalam Tahapan Investasi pada Startup dengan Pendanaan Modal Ventura." *E-Jurnal Akuntansi* 35, no. 2 (2024): 581–95. https://doi.org/10.24843/eja.2025.v35.i02.p19.

Nugraha, Faisal Fajar and Inda Rahadiyan. "The Responsibility of the President Director for Breaches of Fiduciary Duty (Case Study of PT Multidaya

Teknologi Nusantara).” *Journal of Private and Commercial Law* 5, no. 2 (2026): 159–182. https://doi.org/10.20885/jpcol.vol2.iss2.art2.

Pane, Viora, Pendih Junaedi, Ikhsan Ramadhan, and Rina Adilla. “Penerapan Business Judgment Rule dalam Pertanggungjawaban Direksi BUMN atas Risiko Bisnis and Kerugian Keuangan Negara.” *Jurnal Private Law, University of Mataram* 6 (2026): 541–58.

Putra, I Komang Arya, and Komang Widiana Purnawan. “Business Judgment Rule and Pertanggungjawaban Pidana Direksi Badan Usaha Milik Negara Pasca Berlakunya Kitab Undang-Undang Hukum Pidana 2023.” *Jurnal Media Akademik (JMA)* 4, no. 2 (2026): 1–17.

Putra Prajitna, Adi, Suartini, and Aris Machmud. “Esensi Tanggung Jawab Direksi Perseroan Terbatas: Penerapan Dan Batasan Hukum Business Judgment Rule Di Indonesia.” *Jurnal Supremasi* 16, no. 2 (2026): 251–265. https://doi.org/10.35457/supremasi.v16i2.5786.

Raffles. “Tanggung Jawab dan Perlindungan Hukum Direksi dalam Pengurusan Perseroan Terbatas.” *Undang: Jurnal Hukum* 3, no. 1 (2020): 107–137. https://doi.org/10.22437/ujh.3.1.107-137.

Sahara, Ira, and Resky Amelya Putry. “Analisis Peran Manajemen Risiko dalam Meningkatkan Efektivitas Pengambilan Keputusan Investasi pada Perusahaan Start-Up di Indonesia.” *Jurnal Masharif al-Syariah: Jurnal Ekonomi and Perbankan Syariah* 10, no. 1 (2025): 524–30.