Free Markets v Financial Stability; Critically Examining Commercial Private Debt Regulation.

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1. Introduction

Since the 2008 financial crisis, private debt has rapidly expanded, emerging as a vital source of financing for middle-market companies and a potential systemic risk within financial markets.[1] In response to the crisis, regulators introduced frameworks such as the Dodd-Frank Act in the U.S. and Basel III globally, aimed at strengthening traditional banks' resilience by imposing stricter capital adequacy and lending restrictions.[2] These regulations led banks to scale back on middle-market lending, creating a financing gap that private debt funds increasingly filled.[3] Unlike traditional banks, private debt funds are lightly regulated and rely on securitization to raise capital from institutional investors, sidestepping deposit-based funding models.[4]

Private debt structures, including Collateralised Loan Obligations (CLOs), Business Development Companies (BDCs), and Direct Lending Funds (DLFs), now play a crucial role in funding middle-market firms. These companies collectively generate approximately $18 trillion annually across the U.S., U.K., and EU, while employing around 70% of the workforce in these regions.[5] Ensuring these firms have stable access to financing is therefore essential for sustained economic growth and employment. However, traditional regulatory frameworks fall short in managing the unique risks of private debt markets, which operate with minimal transparency and may exploit regulatory gaps.[6]

This regulatory gap poses systemic risks, as private debt entities can evade banking rules through structures not designed to ensure stability. Existing frameworks, rooted in conventional banking models, fail to account for the evolving and decentralized nature of private debt markets.[7] The theory of economic regulation highlights the limitations of static, one-size-fits-all policies, which often lag market innovation and inadvertently foster regulatory arbitrage.

Given these regulatory shortcomings, this study examines whether alternative theoretical frameworks—specifically evolutionary game theory and Stafford Beer's Viable System Model (VSM)—can offer a more adaptable approach to private debt regulation. Evolutionary game theory suggests that regulators and market participants can co-evolve, with each adapting to the other's strategies to achieve a balance between growth and stability.[8] Meanwhile, Beer's VSM emphasizes a system's capacity for real-time feedback, coordination, and adaptive responses, which could enable regulatory bodies to respond dynamically to emerging risks in private debt markets.[9] Together, these approaches could improve the resilience and flexibility of financial regulation, ensuring that private debt markets contribute to economic growth without undermining stability.

This research will gather qualitative data from key market participants—including bankers, fund managers, lawyers, borrowers, and regulators—through targeted interviews to assess the current regulatory landscape's effectiveness. Insights from these stakeholders will inform recommendations on whether private debt regulation should remain as it is, be enhanced, or be replaced by a more dynamic regulatory model, capable of addressing the systemic risks posed by private debt.

2. Aims and Objectives

This research aims to critically assess the adequacy of current regulatory frameworks governing private debt and to explore alternative regulatory models that could better address systemic risk. Specifically,

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[1] Itzhak Ben-David and others, 'Do Hedge Funds Manipulate Stock Prices?' (2013) 68 The Journal of Finance 2383.
[2] Matthew Richardson and Viral V Acharya (eds), *Restoring Financial Stability: How to Repair a Failed System* (John Wiley & Sons 2009); 'Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems - Revised Version June 2011' <https://www.bis.org/publ/bcbs189.htm> accessed 4 November 2024.
[3] Victoria Ivashina and Bo Becker, 'Cyclicality of Credit Supply: Firm Level Evidence' (23 August 2011) <https://papers.ssrn.com/abstract=1572699> accessed 4 November 2024.
[4] Tobias Adrian and Hyun Song Shin, 'The Shadow Banking System: Implications for Financial Regulation' [2009] SSRN Electronic Journal <http://www.ssrn.com/abstract=1441324> accessed 31 October 2024.
[5] National Center for the Middle Market, 'The U.S. Middle Market Power Index' (2016) <https://www.middlemarketcenter.org/Media/Documents/MiddleMarketIndicators/PastReports/NCMM_MMI_2016_Final.pdf> accessed 4 November 2024; CARSA and others, *Annual report on European SMEs 2018/2019: research & development and innovation by SMEs : background document* (Publications Office of the European Union 2019) <https://data.europa.eu/doi/10.2826/603707> accessed 4 November 2024.
[6] George J Stigler, 'The Theory of Economic Regulation' (1971) 2 The Bell Journal of Economics and Management Science 3.
[7] The Financial Stability Board, 'Key Attributes of Effective Resolution Regimes for Financial Institutions'.
[8] MA Nowak, *Evolutionary Dynamics: Exploring the Equations of Life* (Belknap Press of Harvard University Press 2006).
[9] Stafford Beer, *Brain of the Firm* (2. ed., reprinted, John Wiley & Sons 1995).

the study examines the rapid growth of private debt markets since the 2008 financial crisis and the resultant vulnerabilities posed by minimal regulation of non-bank financial institutions. The objectives are threefold: (1) to analyse the structural factors contributing to private debt expansion post-2008; (2) to investigate whether current regulatory measures sufficiently mitigate systemic risk within this sector; and (3) to apply cybernetics via a Viable System Model (VSM) and evolutionary game theory to propose a more adaptable regulatory framework. This alternative model aims to enhance regulatory responsiveness to dynamic market behaviours, thus reducing regulatory arbitrage. Ultimately, this study seeks to contribute a theoretical basis for regulatory strategies that support financial stability within complex, adaptive private debt markets.

3. Research Questions

- What role does commercial debt play in supporting economic activity, and what are its broader societal benefits?
- How are private debt instruments currently regulated, and to what extent do they contribute to systemic risk?
- Despite existing regulations, what factors contribute to defaults among banks and private debt funds?
- Is current financial regulation grounded in effective theoretical principles, or would a different approach be more suitable for managing risks in a complex, adaptive system?
- Do market participants perceive a need for regulatory reform within the private debt sector, and if so, what changes do they recommend?

4. Justification for Research

The significant growth of private debt since the 2008 financial crisis underscores an urgent need to examine its implications for economic stability and societal wellbeing. Middle-market companies, which contribute an estimated $18 trillion in annual revenue and employ 70% of the workforce across the U.S., U.K., and EU, are major recipients of private debt financing. These firms provide vital economic and social benefits, including job creation, local community support, and innovation, which align with John Moores University's goals of advancing inclusive economic development and fostering resilient communities. However, the current regulatory frameworks, primarily designed for traditional banking, have not adapted effectively to the expanding private debt market. This market operates with limited oversight, posing risks of regulatory gaps and potential financial instability. This research seeks to evaluate whether current regulations adequately address these risks or if alternative approaches could better balance market growth with financial security. The findings will contribute to policy discussions on regulatory reform that supports sustainable economic development and minimizes systemic risk, in line with societal objectives of economic stability and opportunity.

5. Literature Review

5.1 Private Debt and Systemic Risk

Private debt markets have experienced rapid growth since the 2008 financial crisis, driven primarily by the tightening of banking regulations under frameworks like Basel III and Dodd-Frank Act, which raised capital requirements and incentivised banks to scale back on riskier loans. This shift created opportunities for non-bank financial intermediaries to fill the resulting credit gap. Research highlights that, as traditional banks pulled back, these alternative lenders stepped in, offering credit to middle-market firms and even riskier borrowers who could no longer access bank financing.[10] Attractive yields and lower regulatory constraints have also drawn substantial capital into private debt from institutional investors seeking higher returns in a low-interest-rate environment. Notably, the assets under management (AUM) in private debt funds is expected to grow to $2.8 trillion by 2028.[11] The expansion of private debt has raised concerns regarding systemic risk, given its opacity and the potentially leveraged nature of these loans.[12] The literature underscores that while this market growth supports economic activity, it might also increase systemic vulnerability in periods of economic downturns.

5.2 Regulatory Environment and Systemic Risk

The regulation of private debt remains substantially less stringent than that of traditional banking. This disparity arises from the difficulty in applying conventional financial regulation to shadow banks, which are inherently more flexible and decentralised. Current frameworks, such as the Dodd-Frank Act in the U.S. and the EU's Capital Requirements Directive, primarily address risk in traditional banking, leaving a significant regulatory gap for non-bank financial institutions. This gap could exacerbate systemic risk,

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[10] Viral V Acharya, Yakov Amihud and Lubomir Litov, 'Creditor Rights and Corporate Risk-Taking' (2011) 102 Journal of Financial Economics 150.

[11] 'Outlook: Private Credit' (*Morgan Stanley*) <https://www.morganstanley.com/ideas/private-credit-outlook-considerations> accessed 24 October 2024.

[12] Haris Muminović, 'The Rise and Risk of Private Credit' [2024] Studia Luridica Montenegrina 1.

as private debt markets lack mechanisms to manage liquidity risk, maturity mismatch, and leverage effectively.[13] Studies argue that while existing regulatory efforts are somewhat effective in containing risks in banking, they fail to encompass the complexities and dynamic behaviours of private debt markets.[14] The literature indicates that this regulatory shortfall has encouraged further risk-taking and may contribute to a buildup of systemic vulnerabilities. Given the opacity of private debt, information asymmetry increases, impeding the ability of regulators to monitor these markets adequately. Calls for enhanced regulation often include transparency mandates, stress testing, and capital buffers; however, the optimal regulatory framework remains debated.[15]

5.3. Evolutionary Game Theory and Regulatory Systems

Evolutionary game theory (EGT) provides an alternative lens through which to analyse the interactions between regulators and market participants. EGT posits that strategies evolve over time as agents adapt based on the success or failure of previous strategies, making it particularly relevant for complex, adaptive financial systems like private debt markets. Within the context of private debt, EGT could model how regulatory policies influence the strategies of non-bank lenders and investors, thereby shedding light on unintended consequences of current regulatory frameworks.

Current regulatory frameworks, based on static rules, do not account for the adaptive and competitive nature of non-bank lenders who may change strategies to circumvent regulatory burdens. By contrast, an EGT-informed regulatory approach could evolve in response to the behaviours of these lenders, potentially offering a more flexible and resilient system. For example, regulators could design adaptable rules that adjust automatically to changes in market behaviour, reducing incentives for regulatory arbitrage. Stafford Beer's cybernetic principles, particularly his Viable System Model (VSM), complement this by suggesting that a regulatory system should be capable of self-organization and adaptive response to maintain stability.[16] Applying VSM to private debt regulation would aim to create a responsive regulatory environment that can continuously monitor and adapt to market changes.

5.4. Cybernetics and Stafford Beer's Viable System Model

Stafford Beer's work in cybernetics, particularly the VSM, offers a theoretical framework to address the complexity of modern financial markets. The VSM outlines a model in which a system maintains viability through recursive feedback loops, enabling it to respond dynamically to changes in the environment. Applying Beer's model to financial regulation, some scholars argue that the current system lacks sufficient feedback mechanisms to detect early signs of systemic risk within private debt markets.[17] (9). According to Beer, a viable regulatory system would require subsystems dedicated to operations, coordination, monitoring, and policy adaptation. However, the present regulatory environment operates on a reactive, rather than proactive, basis and is thus unable to manage the rapid evolution and scale of private debt. This lack of adaptability suggests a need for a cybernetic regulatory approach where continuous feedback enables early detection and mitigation of emerging risks.[18] (10). Implementing cybernetic principles in private debt regulation could lead to a more self-correcting system capable of maintaining financial stability despite the adaptive and evolving behaviours within the market.

6. Conclusion

The rapid growth of private debt since the 2008 financial crisis has introduced new systemic risks, largely unaddressed by current regulatory frameworks. While traditional regulations have effectively increased the resilience of banking institutions, they have not evolved to encompass the dynamic and complex nature of private debt markets. Evolutionary game theory, combined with Stafford Beer's cybernetic principles, could provide an alternative regulatory framework. Such an approach would allow for more adaptive, responsive, and holistic regulation that better addresses the emergent and systemic risks posed by private debt. Future research should explore how these theoretical frameworks might be operationalized to create a more resilient regulatory system that can evolve in tandem with market behaviours.

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[13] Zoltan Pozsar and others, 'Shadow Banking' (Federal Reserve Bank of New York 2010) 458.
[14] Tobias Adrian and Adam B Ashcraft, 'Shadow Banking Regulation' (Federal Reserve Bank of New York 2012).
[15] Ming-Chang Lee and Li-Er Su, 'Evolutionary Game Analysis of Financial Innovation and Regulation' [2015] Journal of Economics, Management and Trade 287.
[16] Stafford Beer, 'The Viable System Model: Its Provenance, Development, Methodology and Pathology' (1984) 35 Journal of the Operational Research Society 7.
[17] Thiago Christiano Silva, Michel Alexandre Da Silva and Benjamin Miranda Tabak, 'Systemic Risk in Financial Systems: A Feedback Approach' (2017) 144 Journal of Economic Behavior & Organization 97.
[18] Raúl Espejo (ed), *The Viable System Model: Interpretations and Applications of Stafford Beer's VSM* (Repr, Wiley 1990).