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Mitigation of Over-Indebtedness Risk in Online Lending: A Comparative Analysis of Regulatory Frameworks in China, Malaysia, and Thailand

Abstract

The rise of defaults and over-indebtedness in online lending reflects failures in credit risk management, mainly due to weak lending limitations and an imbalance between platforms and borrowers. This raises legal protection concerns for debtors, as aggressive lending practices are not based on repayment ability. Therefore, imposing restrictions on online lending is crucial to mitigate risks of default and over-indebtedness, through measures like setting maximum loan limits, conducting proportional creditworthiness assessments, and reinforcing prudence in fintech regulations. This research adopts a normative juridical approach with statutory, conceptual, and comparative methods, focusing on China, Malaysia, and Thailand. The study aims to identify an ideal framework for online lending limits to combat defaults and over-indebtedness. Findings show Indonesia lacks sufficient regulation, especially in real-time integration of cross-platform credit data, enabling debt-cycling. Indonesia's regulatory approach is reactive, while Malaysia's is proactive. Law enforcement against illegal lending is weak, and debt relief mechanisms are underdeveloped, unlike China and Thailand, which have implemented lending limits and consumer protections. This research recommends a new legal framework integrating national credit reporting with cross-platform debt limits to create a healthier digital financial ecosystem.

Keywords: *mitigation risk, over indebtedness, fintech lending*

Abstrak

Fenomena meningkatnya gagal bayar dan utang berlebihan dalam pinjaman online mencerminkan kegagalan pengelolaan risiko kredit, yang disebabkan oleh lemahnya pembatasan pinjaman dan ketidakseimbangan posisi hukum antara platform dan peminjam. Hal ini menimbulkan masalah perlindungan hukum bagi debitur akibat praktik pemberian kredit agresif yang tidak mempertimbangkan kemampuan membayar. Pembatasan pinjaman online menjadi penting untuk memitigasi risiko gagal bayar dan utang berlebihan, melalui mekanisme seperti batas maksimum pinjaman, penilaian kelayakan kredit proporsional, dan penguatan prinsip kehati-hatian dalam regulasi fintech lending. Penelitian ini menggunakan metode yuridis normatif dengan pendekatan perundang-undangan, konseptual, dan perbandingan dengan China, Malaysia, dan Thailand untuk menemukan konstruksi ideal pembatasan pinjaman online. Hasil penelitian menunjukkan Indonesia masih kekurangan regulasi, terutama dalam integrasi data kredit lintas platform secara real-time, yang memungkinkan praktik gali lubang tutup lubang. Pendekatan regulasi Indonesia cenderung reaktif, berbeda dengan Malaysia yang proaktif. Penegakan hukum terhadap entitas ilegal lemah, dan tidak ada mekanisme debt relief yang kuat, berbeda dengan China dan Thailand yang menerapkan batas agregat pinjaman dan perlindungan konsumen ketat. Penelitian ini merekomendasikan konstruksi hukum baru yang mengintegrasikan sistem pelaporan kredit nasional dengan batas akumulasi utang lintas platform untuk menciptakan ekosistem keuangan digital yang lebih sehat.

Kata Kunci: mitigasi risiko, utang berlebihan, pinjaman fintech

INTRODUCTION

Peer-to-Peer Lending financing was originally utilized as an alternative to overcome conventional credit distribution barriers for micro and medium enterprises. Bank Indonesia states that as many as 60-70% of MSME players do not yet have access to banking financing for business capital. In its development, the target debtors of Financial Technology companies are no longer MSMEs but rather individuals, solely for the sake of increasing credit distribution. Financial Technology companies are not utilizing the eligibility and capability screening for prospective recipients instructed by the Financial Services Authority to mitigate the risk of default, which has caused the debtor default rate to be very high and increasing every year. Financial Technology Peer-to-Peer (P2P) Lending providers exploit the conditions of people experiencing economic hardship by applying very high interest rates that exceed the principal amount of the loan. The number of online loan borrowers in Indonesia continues to rise. Based on data from the Financial Services Authority, the total outstanding loans from borrowers to online lending platforms reached 50.63 trillion rupiah as of 2024, 30.8% increase from the 38.7 trillion rupiah recorded in 2023.

Loans are dominated by individual borrowers, accounting for 88.4% or approximately 44.34 trillion rupiah, while corporate entity borrowers recorded only 5.8 trillion rupiah. This increase in online loan borrowers is accompanied by high outstanding financing, or the remaining unpaid loan balance of the borrowers. OJK stated that outstanding online loan financing reached 51.36 trillion rupiah in May 2024, with a year-on-year growth of 28.13%. Of this amount, 38.39% was utilized as financing for Micro, Small, and Medium Enterprises (MSMEs), with distributions of 15.63 trillion rupiah to individual MSMEs and 4.13 trillion rupiah to corporate MSMEs. As of September 2024, the Financial Services Authority (OJK) recorded that the outstanding balance, or the total active credit of online loans in Indonesia, reached 74.48 trillion rupiah, accompanied by a very high TWP 90—the rate of defaults exceeding 90 days. Based on the statistical data of Information Technology-Based Joint Funding Services (LPBBTI) released by the Financial Services Authority, as much as 68.38 trillion rupiah was distributed to non-productive individual debtors, classified as non-MSME or consumer credit. The high percentage of Peer-to-Peer (P2P) Lending defaults is caused by Financial Technology companies perceiving creditworthiness screening for prospective borrowers as unnecessary. The absence of in-depth credit analysis tends to result in extremely high default rates among borrowers.

The phenomenon of over-indebtedness is exacerbated by the policies of several Fintech companies that disregard the principle of prudence. In pursuit of credit disbursement targets, the screening process for potential borrowers is often superficial or even entirely ignored. Consequently, the risk of default shifts completely onto the shoulders of the consumer. The Financial Services Authority has issued various regulations through the POJK. However, current regulations are considered to have legal gaps, particularly regarding the limitation of total loan ceilings across multiple platforms. A single borrower can easily take out loans from ten different platforms simultaneously. The absence of a mandatory integrated credit scoring system for all providers accelerates the debt cycling cycle. Without a maximum debt limit based on the Debt Service to Income (DSTI) ratio, the

public remains vulnerable to falling into extreme poverty due to debt traps. When compared to other Asian nations, Indonesia lags behind in consumer protection against excessive debt. China has implemented a massive crackdown on the P2P lending industry to mitigate social risks. The Chinese government enforces strict rules regarding interest rate caps and minimum capital requirements.

Bank Negara Malaysia (BNM) takes a more measured approach. Every digital funding provider must ensure that a borrower's debt burden does not exceed reasonable limits. This is supported by a much more organized and integrated credit data infrastructure. Thailand has introduced Responsible Lending regulations. Financial authorities require creditors to provide transparent risk information and perform rigorous repayment capability assessments. This measure aims to protect macroeconomic stability from the threat of household sector non-performing loans (NPLs). The legal vacuum in Indonesia is evident in the lack of firm sanctions for platforms that approve loans to borrowers who are already financially incapacitated. Indonesian law focuses predominantly on the legal status of the platform, yet remains weak in regulating the substance of consumer debt burden protection. Furthermore, dispute resolution instruments and debt relief mechanisms for individuals in Indonesia are not as comprehensive as those in China, Malaysia, and Thailand. Borrowers who default often lack a legal recourse for debt restructuring. This research intends to discuss the legal construction and mitigation of over-indebtedness risks through the implementation of restrictions on fintech lending.

RESEARCH METHODS

The type of research utilized is legal research (doctrinal research), with legal norms as its material object. The approaches employed in this research include the statutory approach and the conceptual approach. Additionally, a comparative study approach is utilized to examine the regulations concerning Financial Technology and Peer-to-Peer Lending financing in China, Malaysia, and Thailand. In this research, the collected primary and secondary legal materials are analyzed qualitatively, utilizing the method of legal interpretation.

RESULTS AND DISCUSSION

Over-Indebtedness and the Debt Cycling Phenomenon in Indonesia

The phenomenon of over-indebtedness in Indonesia cannot be viewed merely as a personal financial failure; rather, it is an implication of a flawed risk assessment system within the Fintech Lending ecosystem. This situation creates a cycle sociologically known as debt cycling, a debt management practice where individuals take out new loans to settle existing debts. In banking and finance law, the prudential principle is the primary pillar for maintaining financial system stability. However, a paradigm shift has occurred within online lending practices in Indonesia. For the sake of pursuing growth and credit disbursement targets, many platforms have excessively simplified the screening process. The eligibility assessment of prospective borrowers is often based merely on cellular data

access (contacts, location, or app usage) rather than real financial capacity or cash flow. Platforms possess algorithms far more sophisticated than the average consumer's financial literacy; however, these algorithms are frequently optimized to approve loans rather than to mitigate default risks. The absence of cross-platform lending ceilings creates a loophole where an individual can have debt exposure across dozens of applications simultaneously.

This phenomenon is exacerbated by: (1) Unrestricted Debt Aggregation: Without a mandatory integrated credit scoring system (such as the OJK's SLIK, which does not yet fully cover all small or illegal fintechs), platforms remain unaware of a prospective borrower's actual debt burden elsewhere. (2) High Interest Rates and Service Fees: Although the OJK has set interest rate caps, the accumulation of administrative fees and late penalties often exceeds the loan principal, triggering borrowers to seek loans from other platforms as a short-term solution. Legally, the failure to regulate debt limits based on the Debt Service-to-Income (DSTI) ratio constitutes a form of neglect in consumer protection. When the installment ratio exceeds 30-40% of income, public purchasing power for primary need such as food, education, and healthcare is eroded. Over-indebtedness leads to the loss of productive assets and social vulnerability, where individuals become trapped in structural poverty due to debt snares that are procedurally legal yet substantively unethical. Although the Financial Services Authority (OJK) has endeavored to organize the fintech lending industry through OJK Regulation (POJK) Number 10/POJK.05/2022 concerning Information Technology-Based Joint Funding Services, this legal instrument is considered to remain administrative-centric.

Current regulations focus primarily on the governance of the platforms but have yet to address the substantive aspects of protecting the accumulative debt burden borne by the borrower. In conventional banking regulations (for instance, regarding mortgages or vehicle loans), there are strict parameters concerning the debt-to-income ratio. However, in the fintech lending sector, OJK Regulations have not explicitly mandated platforms to limit monthly installments to a specific maximum percentage of income (for example, a maximum of 30%). The absence of such a limit means that platforms are under no legal obligation to reject prospective borrowers who are already over-leveraged. Doctrinally, this indicates that Indonesian law still emphasizes the principle of freedom of contract, without considering the unequal bargaining power between platforms and individuals driven by urgent economic needs. The effectiveness of risk mitigation depends heavily on data accuracy. In Indonesia, the mandatory reporting of borrower data to the Fintech Lending Data Center and its integration with SLIK (Financial Information Service System) still face technical and compliance hurdles, namely: (1) Inconsistencies in Real-time Data, A non-real-time synchronization process allows borrowers to engage in loan stretching, submitting multiple loan applications across various platforms almost simultaneously before the previous debt data is recorded in the system. (2) Exclusion of Illegal Fintech, OJK regulations only reach licensed providers. However, in reality, consumers often mix loans from both legal and illegal platforms; consequently, the risk profile captured by the official system never reflects the true debt burden.

Comparative Study: Risk Mitigation in China, Malaysia, and Thailand

In the effort to find an ideal regulatory model, Indonesia must review the legal frameworks of Asian countries that have previously encountered digital debt crises. Such comparisons demonstrate that deeper state intervention is necessary to maintain social and macroeconomic stability. Lending limits are a crucial regulatory instrument for preventing the phenomenon of over-indebtedness. Without clear caps, borrowers tend to engage in debt cycling across multiple digital platforms simultaneously. China was once the world's largest peer-to-peer lending market before undergoing a massive cleanup. This transition was driven by a systemic crisis that threatened social stability due to mounting bad debt and aggressive collection practices. Chinese authorities established strict individual limits, where a borrower is permitted to borrow a maximum of 200,000 Yuan from a single platform. Accumulatively, the total debt across various platforms must not exceed 1 million Yuan to ensure repayment capacity is maintained. Beyond individual limits, China also tightened rules for tech platforms collaborating with banks; these platforms are required to contribute at least 30% of the capital for every joint loan to ensure they have skin in the game. As a result of this regulatory tightening, thousands of platforms unable to meet capital standards and lending limits were forced to cease operations. The Chinese government took this extreme measure to eliminate high-risk actors from the digital financial ecosystem.

Turning to Malaysia, the primary challenge faced is the high household debt-to-GDP ratio. This has prompted Bank Negara Malaysia (BNM) and relevant authorities to strengthen oversight of consumer credit products, including Buy Now Pay Later (BNPL). Malaysia recently passed the Consumer Credit Act (CCA) in 2025. This legislation is designed to close regulatory loopholes for non-bank credit providers, including online lending platforms that previously operated outside BNM's stringent supervision. Under the Consumer Credit Act, lending providers in Malaysia are required to conduct more rigorous creditworthiness assessments. Lending limits are based on a proportion of the borrower's fixed income to ensure that installments do not interfere with basic living expenses. Malaysia has also implemented caps on additional fees. The latest regulations demand full transparency regarding interest charges and late fees, preventing borrowers from being trapped in an accumulation of debt that they were unaware of from the outset.

Bank Negara Malaysia also mandates that financial institutions, including digital funding providers, comply with Responsible Lending guidelines. They must ensure that a borrower's total debt obligations do not exceed a reasonable repayment capacity relative to their net income. Malaysia holds an advantage with its highly organized CCRIS (Central Credit Reference Information System). This data integration allows platforms to view a comprehensive profile of an individual's total debt, making it virtually impossible for a tenth loan to be granted to the same person. Given these challenges, the Bank of Thailand has introduced highly specific regulations. Lenders are obligated to provide transparent debt simulations and risk assessments before a contract is signed. Unlike Indonesia, where such practices remain largely optional, Thailand mandates strict repayment capacity assessments. If a platform is proven to have granted loans to individuals who clearly cannot afford them, it may face severe sanctions. Thailand's primary focus is to prevent household debt from damaging domestic consumption and long-term economic growth. The Bank of Thailand introduced the Responsible Lending framework, which began intensive implementation in 2024–2025. This policy emphasizes that lending should not merely chase

volume but must consider the borrower's long-term financial health. For borrowers with incomes below a certain threshold (e.g., 30,000 Baht per month), the BoT limits the maximum credit ceiling to 1.5 times their monthly income. This rule is specifically designed to protect vulnerable groups from falling into debt traps.

In addition to nominal limits, Thailand also prohibits loan advertisements that encourage excessive consumption. This measure serves as a non-physical restriction aimed at reducing the psychological temptation for the public to take on unnecessary debt. There is a striking difference in philosophy among other regionals: China tends to use a drastic, top-down approach, Malaysia prioritizes legal synchronization across various authorities and Thailand focuses on consumer protection through education and income-ratio limits. Risk mitigation in all three countries relies heavily on data integration. The use of Credit Bureaus which include telecommunications and utility data helps platforms in China, Malaysia, and Thailand determine accurate lending limits. One of the challenges of strict restrictions is the potential for people to return to the black market or illegal moneylenders. All three countries must balance protection against excessive debt with the need for financial inclusion for the unbanked. In China, the use of AI algorithms to assess risk profiles is more advanced. However, regulators still impose limits to ensure these algorithms do not provide credit limits exceeding actual capacity based on verified income data. Thailand has introduced a Persistent Debtors category for those trapped in a cycle of paying interest without ever reducing the principal debt. Restrictive policies here include automatic restructuring into term loans with lower interest rates.

Given that many online lending platforms operate regionally, cooperation between authorities in China, Malaysia, and Thailand is essential to prevent borrowers from seeking loopholes in jurisdictions with looser regulations. While the primary focus is on lending ceilings, interest rate caps also serve as indirect lending restrictions: China sets judicial interest limits, Malaysia operates through ministerial regulations and Thailand utilizes a ceiling rate set by the Bank of Thailand (BoT).

Interestingly, China, Malaysia, and Thailand allow for higher lending limits if the funds are used for productive purposes, such as SMEs (UMKM). This demonstrates that mitigation efforts against excessive debt are primarily focused on consumptive credit that does not generate added economic value. Authorities in Malaysia (CCOB) and Thailand routinely evaluate the effectiveness of lending limits. If Non-Performing Loan (NPL) levels rise, these authorities have the power to instantly tighten the loan-to-income ratios. While online lending platforms in all three countries tend to complain about stricter limits due to decreased profitability, these regulations create a more stable and sustainable ecosystem for the industry in the long run. Lending restrictions are merely a technical solution. China, Malaysia, and Thailand agree that mitigating excessive debt risk must be paired with financial literacy programs so the public understands the risks associated with the credit limits they receive.

Furthermore, restrictions on online loans must align with regulations for conventional banks. Otherwise, debt risk will simply shift from one sector to another without resolving the individual's total debt accumulation. In determining loan limits, platforms often access extensive personal data. Malaysia and China are now tightening privacy laws, ensuring that credit limits are not determined through data exploitation that violates consumer rights.

Studies show that following the tightening of regulations in China, default rates in the retail sector decreased significantly, even though consumption growth slowed slightly. This proves that restrictions are effective in deflating debt bubbles. With the implementation of the CCA in Malaysia and new rules in Thailand, it is expected that household debt ratios can be pushed down to safer levels (below 80% of GDP) in the coming years through more precise lending controls.

Policy Formulation for Maximum Debt Limits Based on the Debt Service-to-Income (DSTI) Ratio

Indonesia is currently facing a massive financial digitalization phenomenon. While this has increased financial inclusion, it has also accelerated the accumulation of household debt. Although Indonesia's household debt-to-GDP ratio remained around 16%–17% in 2025, the growth of consumptive loans through digital platforms serves as an alarm for financial system stability. The Debt Service-to-Income (DSTI) ratio is a prudential instrument that measures a borrower's repayment capacity by comparing total debt installments to monthly income. Unlike Loan-to-Value, which focuses on collateral, DSTI directly targets an individual's cash flow health. This makes it a more precise tool for mitigating default risks within the retail sector. In current banking practices, the application of DSTI remains internal and varies across institutions. The absence of rigid, standardized regulations from Bank Indonesia (BI) or the OJK regarding a national DSTI ceiling for the digital lending sector has created a loophole. This allows individuals to take out multiple loans simultaneously without aggregate control.

Lessons from the Thailand Debt Crisis Thailand serves as a crucial case study due to its exceptionally high household debt ratio, which exceeds 80% of its GDP. This condition forced the Bank of Thailand (BoT) to move away from optional approaches and shift toward specific regulatory mandates through the Responsible Lending Framework of 2024–2025.

One of the core strengths of Thailand's regulation is the mandatory debt simulation. Prospective borrowers must be provided with a clear visual representation of their total interest burden and the repayment period before signing a contract. This aims to mitigate information asymmetry between fintech platforms and the general public. Thailand has also implemented strict limits: for individuals with an income below 30,000 Baht, the maximum credit ceiling is capped at 1.5 times their monthly income. This policy directly restricts debt expansion among vulnerable groups with high income volatility, such as informal workers. Furthermore, Thai policy targets Persistent Debtors, borrowers who are only able to pay interest without reducing the principal. Regulations require platforms to restructure such debt into installment loans with lower interest rates to ensure the debt is eventually paid off in full. Malaysia has pursued legal synchronization through the Consumer Credit Act (CCA). Its primary focus is to eliminate regulatory overlaps between conventional banks, leasing companies, and Buy Now Pay Later (BNPL) platforms. This ensures that the same DSTI standards apply across the entire industry. The formation of the Consumer Credit Oversight Board (CCOB) under Malaysia's Ministry of Finance demonstrates that debt limit regulation is not just a matter of monetary policy, but also consumer protection. The CCOB has the authority to intervene if Non-Performing Loan ratios in specific sectors show anomalies.

Malaysia provides flexibility for loans that are productive in nature. Credit for MSMEs (Micro, Small, and Medium Enterprises) often utilizes different DSTI parameters compared to purely consumptive credit. This ensures that debt restrictions do not stifle the economic growth of the real sector. China demonstrates a more drastic and centralized approach. Following the uncontrolled growth of Peer-to-Peer (P2P) lending, Chinese regulators implemented strict caps on the total credit limit a single platform can grant to an individual, as well as an aggregate limit across all platforms. Chinese authorities now mandate the use of responsible AI algorithms. Risk assessment models are no longer permitted to prioritize transaction volume alone; they must integrate verified income data from tax systems and social insurance to determine accurate DSTI limits. Furthermore, China strictly regulates credit marketing. Advertisements promising instant, unconditional loans or those that psychologically encourage luxury consumption are banned to curb the temptation of taking on debt beyond one's means. Compared to these three countries, Indonesia is still in the stages of literacy and report-based supervision. Indonesia's primary challenge is the prevalence of unverified income data (informal income), which often results in DSTI calculations being based on a platform's subjective estimation.

China, Malaysia, and Thailand have successfully integrated utility data (electricity, water) and telecommunications data into their credit bureaus. This integration is crucial for Indonesia, given its large unbanked population. Utilizing alternative data allows for a fairer DSTI calculation for individuals who lack formal payslips. One of the risks of tightening DSTI (Debt Service-to-Income) ratios is the potential for the public to turn to illegal moneylenders. The three case-study countries emphasize that debt restrictions must be accompanied by access to affordable formal credit for low-income groups to prevent them from falling into the black market. In addition to nominal debt limits, the implementation of a maximum interest rate (ceiling rate) in these three countries serves as a filter. Reasonable interest rates ensure that monthly installments remain within a healthy DSTI limit for the borrower. Given that many fintech companies operate at a regional level (Southeast Asia), cooperation between Bank Indonesia (BI)/OJK, the Bank of Thailand (BoT), and Bank Negara Malaysia is essential. This collaboration is necessary to prevent regulatory arbitrage, where platforms move their operations to countries with more lenient regulations.

Data from China indicates that following tightening measures, household consumption growth slowed slightly; however, financial system stability improved due to a significant decrease in default rates. This is a policy trade-off that Indonesia must carefully consider. Indonesia needs to formulate regulations requiring lending platforms to check an individual's total debt exposure in real-time—via SLIK (Financial Information Service System) or Pusdafil (Fintech Lending Data Center)—before approving new limits. It is proposed that the safe DSTI limit be set at 30% to 35% of monthly income. In the process of income verification to determine DSTI, platforms frequently exploit personal data. Indonesia should emulate the steps taken by Malaysia and China in strengthening Personal Data Protection laws to ensure that data access for credit assessment does not violate consumer rights. Technical restrictions will not be effective without education. All three case-study countries agree that the public must be taught how to calculate their own debt ratios. An inclusive financial literacy program is an absolute prerequisite for the success of any DSTI policy. DSTI policy in Indonesia should differentiate between consumptive credit (BNPL,

cash loans) and productive credit. For MSMEs, the DSTI ratio could be slightly higher, or the Debt Service Coverage Ratio (DSCR)—which focuses more on business cash flow—could be used as an alternative parameter.

Authorities must maintain a monitoring dashboard that allows them to adjust DSTI parameters dynamically according to macroeconomic conditions. If risk indicators rise, tightening measures can be implemented instantly without waiting for time-consuming regulatory revisions. Formulating a DSTI-based maximum debt limit policy in Indonesia is no longer an option, but a necessity to prevent a "debt bubble" in the household sector. Learning from Thailand and Malaysia, a transparent approach based on integrated data and oriented toward consumer protection is the primary key to creating a healthy and sustainable digital financial ecosystem for the future.

CONCLUSION

The financial digitalization phenomenon in Indonesia has triggered a shift in the function of Peer-to-Peer (P2P) Lending, moving from a productive financing tool for MSMEs to a massive engine for individual consumer loans. This condition has created a trend of over-indebtedness and a debt cycling culture, which is exacerbated by platforms neglecting prudential principles in pursuit of credit disbursement targets. The high rate of defaults (TWP 90) reflects regulatory gaps, where the absence of aggregate debt limits across platforms and the lack of real-time data integration allow a single debtor to become trapped in multiple simultaneous loans that exceed their financial capacity. As a mitigation step, Indonesia needs to adopt standardized Debt Service-to-Income (DSTI) instruments, as implemented by China, Malaysia, and Thailand. Learning from Thailand's Responsible Lending framework and Malaysia's Consumer Credit Act, it is recommended that Indonesia establish a safe repayment limit of 30% to 35% of monthly income. This assessment must be supported by the integration of alternative data, such as utility and telecommunications bills, to verify the income of the informal sector more fairly. Furthermore, this policy must be dynamic, differentiating parameters between consumptive and productive (MSME) credit, and must be reinforced by personal data protection and comprehensive financial literacy programs. The implementation of a strict and integrated DSTI is no longer merely an option, but a necessity to prevent a debt bubble explosion that could threaten national economic stability in the future.

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