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## Legal certainty in the conformity of smart contracts with the Indonesian civil code

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### ABSTRACT

This research is motivated by the rapid development of blockchain technology and the increasing use of smart contracts in modern business transactions in Indonesia, while the national legal framework does not yet provide regulations that comprehensively regulate the validity, automatic execution mechanism, and legal accountability of smart contracts. The absence of clear technical rules raises various problems, especially related to the suitability of smart contracts with the legal terms of the agreement in the Civil Code, ranging from the aspects of the agreement, the competence of the parties, certain objects, and *halal causa*. To answer these questions. This study uses a normative juridical method with legislative and conceptual approaches. Various regulations, including the Civil Code, ITE Law, PP 71/2019, and POJK 77/2016, as well as provisions governing electronic systems and transactions, were analyzed to assess the extent to which smart contracts can be recognized in the Indonesian legal system. The results show that although smart contracts can be positioned as legitimate agreements based on the principle of freedom of contract and the open nature of Indonesian contract law, there are still significant regulatory loopholes that have the potential to create legal uncertainty. The main challenges include the validity of digital agreements, verification of the skills of parties who are only identified through public addresses, potential errors in oracles as an external data source, and potential misuse of technology due to blockchain anonymity, which makes it difficult to prove *causa* that is *halal*. In addition, the lack of technical standards regarding code audits, automatic dispute resolution mechanisms, and accountability flows in the event of a bug in smart contracts adds to the legal vulnerability of the parties to the transaction. Thus, this study emphasizes the need to develop special regulations or integrated technical guidelines that can ensure legal certainty, protect parties, and support the safe and sustainable use of smart contracts in Indonesia's digital economy ecosystem.

**Keywords:** Smart Contracts; Blockchain; Electronic Contracts; Legal Certainty; Civil Code

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RESEARCH & PUBLISHING



## 1. INTRODUCTION

Development cannot be separated from the influence of globalization and the rapid development of science and technology that develops so quickly (Puspitasari, 2018). This phenomenon is clear evidence that the massive digital transformation that has occurred in the last two decades has caused structural changes in almost all aspects of people's lives (Fatah et al., 2025). These developments have driven significant changes in the way people communicate, work, and access information (Diana & Sari, 2024). The advancement of information technology is marked by the rampant use of electronic media, ranging from mobile phones to increasingly sophisticated computers (Kristiyono, 2015). In addition, blockchain technology and the adoption of smart contracts have changed the way parties reach consensus (Setiawan, 2024) and carrying out contractual obligations (Patoboda, 2014)

The escalation of the global digital economy has brought the legal community to the brink of a fundamental paradigm shift, where conventional legal instruments are beginning to transform into an autonomous digital form (Disantara, 2024). Amidst the onslaught of technological innovation that exceeds the speed of positive legal adaptation (Ulya & Musyarri, 2020), smart contracts are present not only as an efficient transactional protocol (Situmorang, 2025), but also as an existential challenge to the classical doctrines of treaty law. This phenomenon places us at the crossroads between legal certainty, which has been built on textual foundations, and algorithmic legitimacy, which offers execution without interpretation gaps. This is characterized by the massive integration of *blockchain technology* and *smart contracts* (Mufidah & Surur, 2025). Entering the discourse in 2026, this phenomenon has exceeded the boundaries of the crypto asset sector, which now has more than 21 million investors (Hidayah et al., 2025) and has penetrated into strategic sectors such as supply chain management, procurement of construction services, and *Decentralized Finance* (DeFi). This massive expansion in various strategic sectors confirms that blockchain technology is no longer just a speculative instrument but a fundamental infrastructure that revolutionizes the way legal subjects interact. This phenomenon shows that industry players are now starting to abandon the traditional agreement model in pursuit of absolute efficiency and transparency through protocols that can execute themselves autonomously. We now move on to smart contracts.

Smart contracts are agreements executed automatically using blockchain-based protocols (Rukman et al., 2024). Smart contracts, also known in English as "*smart contracts*," are a technological innovation that emerged as part of the Blockchain revolution and have the potential to transform many aspects of our digital lives (Kinanti et al., 2023). Smart contracts were first introduced by a cryptographer and computer scientist named Nick Szabo in 1994, who stated that this technological innovation can be done without a third party but cannot be separated from the blockchain. Smart contracts provide a medium that can automate contract execution according to predetermined provisions, providing greater freedom and flexibility to the parties. This innovation offers higher efficiency, transparency, and data security than conventional agreements (Mufidah & Surur, 2025). First, smart contracts create an environment in which the freedom of contract can be realized in a more efficient and transparent manner. The involvement of third parties, such as notaries or financial institutions, can be reduced or even eliminated, providing the ability to create and execute contracts without traditional bureaucratic constraints.

In the context of implementing smart contracts, commands written in the code are executed automatically without human intervention, speeding up transactions and minimizing the need for intermediaries. This phenomenon raises a key question regarding the principle of legal certainty in Indonesia because the Civil Code (Atmoko, 2024) was designed in the pre-digital era and emphasizes the traditional elements of treaty formation.

In the context of civil law, the validity of an agreement rests on the conditions for the validity of the agreement as stipulated in Article 1320 of the Civil Code and the principle of freedom of contract Article 1338 of the Civil Code (Sinaga, 2018). The conditions include the agreement of the parties, the ability to make an engagement, certain objects, and *causa* that is *halal*. Meanwhile, in the implementation of smart contracts (Ahmad, 2024), it works through a series of codes that automatically contain the parameters of the agreement and does not always involve the expression of the will of the parties in a

conventional form (Anovanko et al., 2025). This raises the question of whether the elements of agreement, skill, and object and causa can be identified and verified in a manner consistent with the provisions of classical civil law. Therefore, analyzing the conformity of smart contracts with the Civil Code is important to ensure that the implementation of digital contracts remains within the applicable legal corridor (Madali, 2024). However, Law No. 1 of 2024 concerning the Electronic Information and Transaction Law (Zainuddin, 2025) strengthens the position of electronic information and documents as legal evidence (Ali et al., 2024), thus opening up the space for interpretation that electronic evidence from the blockchain can be considered to support the legal certainty of digital contracts (Wardana, 2023). However, this recognition does not automatically resolve all issues of proving and authenticating identity in court (Viana, 2026).

However, regulatory developments in several countries show that the legal adaptation of smart contracts is a global trend (Shacheendran et al., 2025). Countries such as the United States, Singapore, and the European Union have begun to develop legal frameworks that recognize the validity of smart contracts and clarify their position in the modern civil law system (Muslim et al., 2025). Indonesia needs to consider similar measures, given the increasing use of *blockchain technology* in the financial, logistics, and government sectors (Setyowati et al., 2023). Lagging behind in providing legal certainty in the use of digital technology (Onḡanu, 2022), especially in smart contracts, has the potential to hinder innovation and reduce public trust in the use of digital technology in various sectors (Singh et al., 2020). In the context of smart contracts, technical issues such as the validity of electronic signatures, the reliability of *timestamps*, and the role of *oracles* as an external data provider are crucial because these three elements determine the legitimacy of a digital alliance while ensuring the authenticity and accuracy of the data used in the automatic execution of the contract. For example, electronic signatures must meet certain standards to be recognized as a valid form of consent in accordance with the provisions of laws and regulations (Kutyłowski, 2023). Meanwhile, *timestamps* are needed to ensure the certainty of the time of making and executing contracts so that disputes about the validity or chronology of legal events do not arise (Governatori et al., 2018). However, the existence of *oracles* that function as a bridge between the digital world and real-world data raises new problems regarding the reliability of information sources and responsibility if the data provided are incorrect or cause losses to the parties (Dong, 2026). There is no legal clarity on these technical aspects, and business actors and the public may be hesitant to adopt smart contracts because of concerns about potential disputes that are difficult to resolve (Kshetri, 2017) and uncertainty regarding available legal protections (Sheng et al., 2015). Therefore, regulatory reform and harmonization with the civil legal system are urgently needed so that digital innovation can develop without abandoning the principles of legal certainty (Katsoulacos & Ulph, 2017).

The next challenge of legal certainty arises in terms of the form and strength of proof. Although the Civil Code admits proof in writing, it does not specifically regulate the legal force and evidence of a computer code distributed on *the blockchain* (Zahra et al., 2025). The Indonesian government has sought to respond to this dynamic through a series of recent policies. Meanwhile, Law Number 11 of 2008 concerning Electronic Information and Transactions (ITE Law) as amended into Law No. 1 of 2024 concerning the Law on Electronic Information and Transactions, has recognized electronic signatures and electronic documents as valid evidence (Tarigan, 2021). based on Law No. 4 of 2023 (P2SK Law), where as of January 2025, the supervision of digital financial assets will officially shift from Bappebti to the Financial Services Authority (OJK). This step is strengthened by the issuance of POJK Number 27 of 2024 concerning the implementation of technological innovations in the financial sector, which demands stricter governance of every digital instrument. Although sectoral regulations are constantly updated, the fundamental challenge of harmonizing digital codes with the classical doctrine of Indonesian Civil Law remains a crucial issue that remains unresolved (Zainudin, 2025).

However, the application of this provision to *complex smart contracts* has not been widely tested in court (Zainudin, 2025). Uncertainty regarding the status of *smart contracts* as evidence equivalent to authentic deeds or deeds under hand poses significant procedural risks in dispute resolution, thereby weakening the legal position. This study identifies a gap in normative studies related to the implementation of *smart contracts* in the perspective of Indonesian civil law, considering that previous studies have focused more on the global landscape or *common law countries* without dissecting in depth how these autonomous

contracts must be subject to the rigidity of the legal terms of the agreement in Article 1320 of the Civil Code (Janinoto, 2025), especially regarding the aspects of the expertise of the parties in the anonymous ecosystem and the halal conditions of cause contained in the binary code (Situmorang, 2025). The juridical problem becomes more complex when the deterministic *self-executing* mechanism clashes with the fundamental principles of treaty law and its inability to accommodate judicial intervention in the event of default or coercive circumstances (Sofia & Umiyati, 2025), while the conventional approach has only classified *smart contracts* as ordinary electronic contracts under the regime of the ITE Law (Ayu et al., 2025). By placing the issue at the tangent between technological autonomy and national legal sovereignty, this study aims to fill this gap through normative analysis that not only tests the legal certainty of autonomous contracts within the framework of the Civil Code, but also formulates adaptive parameters that are able to bridge technological efficiency with the principle of procedural justice, so that it can ultimately make a theoretical contribution to the development of digital agreement law that is responsive to innovation without ignoring the principle of legal protection mandated by the national legal system (Putra, 2025).

Based on these various issues, the study of legal certainty in the conformity of smart contracts with the Indonesian Civil Code is very important. Efforts to place *smart contracts* in the national legal system are not only about adapting technology to old laws, but also encouraging the evolution of responsive legal interpretation (Sinaga, 2024). This research is expected to make a theoretical and practical contribution to the development of national civil law so that it remains relevant to technological developments. In addition, this research can be a foundation for policymakers in formulating regulations that are responsive and adaptive to digital innovation, while ensuring legal protection for parties involved in smart contract-based transactions. Thus, strengthening legal certainty not only supports technological advancements, but also ensures that these developments remain in line with the fundamental principles of Indonesian civil law.

## 2. METHOD

The legal research method used to analyze legal certainty in the suitability of *smart contracts* with the Indonesian Civil Code (KUHPerdata) is normative legal research (Zainuddin & Karina, 2023), which focuses on doctrinal studies of laws and regulations, legal principles, and related scientific literature. This study examines the positive norms that apply, in particular the provisions of the Civil Code regarding the legal terms of agreements, contract implementation mechanisms, and the basic principles of relevant engagement to assess whether the characteristics of *smart contracts* can be accommodated within the civil law framework. In terms of the selection of legal materials, this study uses a purposive sampling *technique on the literature and regulations*, not the human population. The research subjects (legal materials) include key regulations such as the Civil Code, the ITE Law (including Law No. 1/2024), the P2SK Law, and POJK 27/2024. The reason for selecting this sample is based on the direct relevance to the latest aspects of digital legality and financial supervisory authorities in Indonesia. The inclusion criteria in this study are laws and regulations and court decisions that are still in force (positive) as well as reputable scientific journals published in the last ten years to maintain the novelty of the data. Exclusion criteria include regulations that have been repealed or declared invalid, as well as legal opinions from non-scientific sources (such as personal blogs or non-official news portals) that do not have a strong legal argument basis. The time for data collection and analysis was carried out intensively in the period from December 2025 to January 2026. This period was strategically chosen to capture the dynamics of the transition of digital asset supervision from Bappebti to OJK which officially takes effect in January 2025. The data collection process is carried out through document studies (*library research*) by collecting primary, secondary, and tertiary legal materials through official legal *databases* (such as the National JDIH) and international journal repositories. To ensure objective and unbiased data, this study applies legal triangulation, which is by examining a legal issue through three different perspectives: the text of the law (legislative approach), expert views/doctrines (conceptual approach), and comparison of technological practices. The analysis was carried out qualitatively to draw comprehensive conclusions regarding the urgency, challenges, and opportunities for setting up *smart contracts* in the civil law system.

### 3. RESULT AND DISCUSSION

#### 3.1. Research Arguments

##### 3.1.1. The Legitimacy of Smart Contract and Its Conformity with the Legal Terms of the Agreement in the Framework of National Civil Law

The smart *contract* innovation, as a maneuver of fundamental *blockchain* technology, represents a *self-executing* computing program that runs on top of a decentralized system such as Ethereum. *Smart contracts* are digital agreements written in computer code, designed to automatically facilitate, verify, or enforce the negotiation or performance of a contract without the need for third-party intervention (Valentino et al., 2023). Each term of the agreement is encoded into a *script* that will be executed automatically and irrevocably, when the prerequisite conditions are met. These decentralization and immutability characteristics promise increased transparency, operational efficiency, and reduced risk by eliminating the need for intermediaries, while minimizing potential manipulation. Therefore, *smart contracts* can be seen as a digital manifestation of an agreement that not only defines the contractual relationship, but also actively manages and executes the obligations arising from it through algorithmic consensus, opening up a new paradigm in agreement administration and business interactions.

In its application, Smart Contracts have two models, namely the external model and the internal model which can be explained as follows; (1) In the external model, conventional or textual agreements can be created by the parties to the smart contract before being converted into cryptographic code; (2) In the external Smart Contract model, the role of the code is as the executor of the contract terms that have been changed to code, where when certain conditions are met, the Smart Contract will automatically execute the contract.

In its development in the application of smart contracts, it has expanded to various business sectors in the Indonesian legal system, thus presenting fundamental challenges related to its conformity with the principles of classical civil law regulated in the Civil Code (Anovanko et al., 2025). Article 1320 of the Civil Code, is a legal act in which one party or more binds itself to another party or more. As well as those that contain the legal conditions of the agreement, namely the existence of agreements, skills, certain objects, and *causa* that are *halal* which become the essence of smart contracts which is the main basis in assessing the validity of smart contracts. Although smart contracts are not physically signed, the parties' agreements can be reflected through digital actions such as authorizing blockchain-based platforms. Challenges arise when such expressions of intent must be legally proven, given that not all digital mechanisms have strong authentication standards.

The definition of an agreement or contract in national civil law refers to Article 1313 of the Civil Code (KUHPercivil), which defines it as a legal act in which one or more people bind themselves to one or more other people. Under this provision, the parties' involvement in an agreement has inherently created a legally binding obligation. Therefore, an interpretation and expansion of the concept of "deals" to include cryptographic-based digital approvals is needed. Regulations regarding this can be found in Article 49 paragraphs (1), (2), and (3) of Government Regulation Number 71 of 2019 concerning the Implementation of Electronic Systems and Transactions which aims to secure and protect infrastructure facilities and electronic information. In addition to the Civil Code, the ITE Law provides a legal basis for electronic contracts. Article 18 of the ITE Law states that electronic contracts are valid if they meet the valid conditions of the agreement. However, these regulations are still general and do not regulate automatic execution, the potential *immutability* of the *blockchain*, and the legal status of code errors (bugs) that can cause losses. The absence of detailed technical arrangements creates legal ambiguity, especially regarding who is responsible if the contract runs automatically according to the code but goes against the will of the parties or factual circumstances.

Thus, derivative regulations or technical guidelines are needed that explicitly regulate the minimum standards for smart contracts in Indonesia. The legal capacity of the parties in the implementation of *smart contracts* is difficult to ensure comprehensively. Verification of legal subject proficiency in *smart contracts* becomes ambiguous because the system only identifies parties based on public addresses (which can be

linked to the identity of the owner) and, ironically, those public addresses also potentially refer to *other* smart contract entities. An in-depth review of this proficiency issue is very important, he said, the public address also has the potential to refer to other *smart contract* entities attached to this platform that risk facilitating a situation where a capable party can inadvertently contract with a legally incompetent party. Therefore, if such a situation proves to occur, the recognition of the right to cancel the *smart contract* can be justified based on the principle of treaty legal protection.

In terms of the object of the agreement, the provisions of Articles 1332 and 1333 of the Civil Code require that the object must be certain or at least determinable. Smart contracts, which are structured in the form of code, usually contain clear parameters. However, the reliance on *external data source oracles* that determine when contractual conditions are met becomes a vulnerable point. Inaccurate, biased, or compromised data can trigger erroneous automated execution. This condition raises the issue of liability, both to the system developer, *the oracle provider*, and the parties who sign the contract. The absence of regulation regarding oracle technical standards in Indonesian law is a legal loophole that can reduce legal certainty and protection.

Meanwhile, Article 1337 of the Civil Code, which regulates *halal causa*, is very relevant in the context of digital transactions. Anonymity in *blockchain* technology opens up opportunities for the misuse of smart contracts for illegal activities such as money laundering or illicit funding. When the identity of the party is unclear, it becomes difficult to prove a *halal causa*. The ITE Law and its derivative regulations have indeed regulated certified electronic signatures and the obligations of electronic system operators to ensure data security, but have not specifically regulated the identities of parties in *blockchain transactions*. Thus, the integration of biometrics-based technology or verified digital identity can be an innovative solution to ensure that smart contracts are created for legitimate purposes.

Smart contracts are electronic agreement innovations whose position is supported by the open characteristics or adherents of the open system from the Third Book of the Civil Code in Indonesia. This open nature, reinforced by the Principle of Freedom of Contract, allows for the birth and recognition of different types of new agreements beyond those already regulated. Thus, *smart contracts* are accommodated in the realm of Indonesian contract law because of their compliance with the Principle of Freedom of Contract and the complementary nature of the provisions of the Civil Code. Ultimately, the conformity of smart contracts with the Civil Code can be achieved through a combination of progressive legal interpretation, regulatory updates based on technological needs, and strengthening secure digital infrastructure. Harmonization between technology and law must be carried out carefully so that the fundamental principle of engagement is maintained without hindering the development of innovation. By creating a responsive and adaptive legal ecosystem, Indonesia can ensure that the use of smart contracts provides maximum benefits to the community while remaining within a clear corridor of legal certainty.

### **3.1.2. The Importance of Legal Certainty for the Implementation of Smart Contracts in Business in Indonesia**

The adoption *of smart contracts* as a digital agreement instrument that promises efficiency, transparency, and autonomy in contemporary business transactions, turns out to be faced with an ambiguous legal reality in Indonesia (Taufiq & Aziz, 2025). In specificity and detail, until now there is no regulation that comprehensively regulates the application, validity, and binding legal force of *smart contracts*. The absence of this explicit legal umbrella creates a *legal vacuum* that has the potential to cause legal uncertainty for business actors. However, this regulatory vacuum is not completely absolute, but rather partial. On the one hand, smart contracts as a legal construction of new contracts have not been specifically regulated, on the other hand, this technology, namely blockchain, has gained legal recognition indirectly.

Smart contracts in Indonesia specifically and in detail do not yet have regulations on their implementation, but blockchain technology which is an intermediary technology used in smart contracts has been regulated in POJK No. 77/POJK.01/2016 concerning Information Technology-Based Money Lending Services or about Fintech. Where it is stated in Article 23 "The Operator can cooperate and exchange data with information technology-based support service providers in order to improve the quality of Information Technology-Based Money Lending Services" It is a legal umbrella in the use of

technology that regulates blockchain as a technology-based financial transaction bookkeeping service that stores and records transaction proof data distributed through computer networks, both public and private. With the presence of various new technologies such as blockchain, the government currently also has Government Regulation (PP) Number 5/2021 concerning Risk-Based Business Licensing, one of the contents of which contains rules regarding blockchain technology. The rules regarding blockchain technology are discussed in the fifteenth part of the post, telecommunications, broadcasting, and electronic transaction sectors, in Article 149 number (5) business licensing in the sub-sector of system implementation and electronic transactions as referred to in paragraph (1) letter d which is determined based on the results of the analysis of the level of risk of business activities.

In relation to blockchain and smart contracts that are currently circulating in Indonesia, the government plays a role in providing protection by setting legal guidelines that must be in line with the progress of these developing electronic products. The government, which has a crucial role in managing risks in implementing regulations, should not only focus on the rules about cryptocurrencies, as a commodity asset that can be traded, but other interrelated things such as virtual currencies, blockchain, and smart contracts, also require special attention to legal regulations.

With strong legal certainty, Indonesia needs an adequate legal foundation, with the alternative being the formation of a specific law, as the right step in responding to the development of the digital economy that demands a comprehensive legal framework and functions as a strategic in consumer protection, prevention in illegal practices, and systemic risk mitigation efforts in the digital financial services industry in Indonesia. This is also to support the legitimacy of the use of smart contracts in the world of business agreements in Indonesia, including increasing Indonesia's competitiveness in the global market but also ensuring that Blockchain's technological innovations can contribute to inclusive and sustainable economic development.

#### **4. CONCLUSION**

Some of the main conclusions that can be drawn from the discussion described above, are that smart contracts have great potential to transform the treaty legal landscape in Indonesia through the automation, transparency, and efficiency it offers. However, its implementation still leaves fundamental challenges related to the conformity with the legal requirements of the agreement in the Civil Code, especially aspects of the agreement, competence, certain objects, and causa that are halal. The lack of rules regarding automatic execution, digital authentication standards, and accountability for code errors creates legal ambiguities that have the potential to weaken the protection of parties. To ensure that smart contracts can be recognized as an integral part of the national civil law system, a progressive interpretive approach is needed as well as strengthening a regulatory framework that is able to answer technical and juridical needs in the digital era.

Some of the main conclusions that can be drawn from the discussion described above, are that smart contracts have great potential to transform the treaty legal landscape in Indonesia through the automation, transparency, and efficiency it offers. However, its implementation still leaves fundamental challenges related to the conformity with the legal requirements of the agreement in the Civil Code, especially aspects of the agreement, competence, certain objects, and causa that are halal. The lack of rules regarding automatic execution, digital authentication standards, and accountability for code errors creates legal ambiguities that have the potential to weaken the protection of parties. To ensure that smart contracts can be recognized as an integral part of the national civil law system, a progressive interpretive approach is needed as well as strengthening a regulatory framework that is able to answer technical and juridical needs in the digital era.

#### **Importance of Research**

This research is very important because it makes a significant contribution to the development of laws and policies in Indonesia, especially in the context of the legitimacy and legal certainty of smart contracts within

the Indonesian legal framework lies in the urgency to bridge the gap between the development of blockchain technology and national regulations that are still partial and not comprehensive. Smart contracts, which have the potential to revolutionize business transaction mechanisms through automation and transparency, require a clear legal framework in order to function optimally and securely in practice. Without in-depth academic analysis, the risk of legal ambiguity, consumer protection weaknesses, and potential misuse of technology will be even greater. Therefore, this research has a strategic contribution in providing a theoretical basis and normative recommendations for policymakers, so that Indonesia can build a legal system that is adaptive, responsive, and able to accommodate digital innovation in a sustainable manner. This research makes a strategic contribution through the offering of a new theoretical foundation and normative recommendations for policymakers (legislators). By dissecting the intersection between the rigidity of civil law and the flexibility of digital codes, this study serves as a *roadmap* to the formation of an adaptive and responsive legal ecosystem. This contribution is expected to minimize the clash between "algorithmic certainty" and "contractual justice," so that Indonesia not only becomes a market for digital innovation, but also has legal sovereignty that is able to accommodate economic transformation in a sustainable, safe manner, and based on the principle of fair legal certainty.

### **Ethical Approval**

This research was conducted based on the ethical guidelines listed in the Helsinki Declaration. Ethical permission has been obtained from the Ethics Committee of the Faculty of Law, Selamat Sri University before the data was collected. Each event involving human participants is designed to respect the dignity, rights, and safety and well-being of respondents.

### **Informed Consent Statement**

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### **Authors' Contributions**

Not applicable.

### **Disclosure Statement**

No potential conflict of interest was reported by the author(s).

### **Data Availability Statement**

The data presented in this study are available on request from the corresponding author due to privacy reasons.

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## Notes on Contributors

### Ikka Puspita Sari

Ikka Puspita Sari earned her undergraduate degree from Diponegoro University, majoring in Law (S.H.), and a Master's degree in Law (M.H.) from Diponegoro University, concentrating in Economic and Business Law. She also earned her Doctorate in Law (Dr) from Sultan Agung Islamic University in Semarang. She's currently a lecturer at the Faculty of Law, Selamat Sri University. She's primary research expertise lies in Law, Civil Law, Criminal Law, and Employment Law.

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