

***Reconstructing Online Fiduciary Security Registration in Indonesia: Enhancing Legal Certainty and Digital Efficiency***

Sonny Mahar Budi Adityawan<sup>1</sup>, Budi Santoso<sup>2</sup>, Ery Agus Priyono<sup>3</sup>

<sup>1</sup>Doctoral Program in Law, Faculty of Law, Diponegoro University, Semarang

<sup>2,3</sup>Lecturer in Law, Faculty of Law, Diponegoro University, Semarang

Jl. Prof. Soedarto, SH., Tembalang, Semarang

[sonnymaharbudiadityawan@students.undip.ac.id](mailto:sonnymaharbudiadityawan@students.undip.ac.id)

**ABSTRACT**

This study discusses the reconstruction of online fiduciary security registration in Indonesia in order to improve legal certainty, digital efficiency, and accountability of public services. The online fiduciary registration system that has been implemented by the government has indeed succeeded in speeding up the administrative process and expanding access to services, but in practice there are still problems in the form of suboptimal regulatory harmonization, data validity, personal data protection, limited integration between agencies, and weak digital supervision mechanisms. This condition shows that administrative digitalization is not fully in line with the needs of modern legal certainty and governance. The formulation of this research problem includes: first, how effective the current online fiduciary registration system is in ensuring legal certainty for stakeholders; Second, what regulatory reforms are needed to improve efficiency and accountability in digital fiduciary registration. The research uses normative juridical methods with legislative, conceptual, comparative, and case approaches.

The results of the study show that the online fiduciary registration system in Indonesia is quite effective administratively because it is able to speed up registration, reduce transaction costs, and increase access to national services. The system is not fully effective in ensuring legal certainty because there are still problems with system reliability, data accuracy, regulatory synchronization, information disclosure, and the power of electronic evidence when disputes occur. The theory of legal certainty asserts that an ideal system should have clear rules, consistent procedures, predictable outcomes, and equal protection for creditors, debtors, notaries, and third parties. The conclusion of this study emphasizes that the reconstruction of online fiduciary registration must be carried out comprehensively on aspects of legal substance, institutional structure, and legal culture. The ideal digital fiduciary registration system is not only electronic-based, but also ensures legal certainty, economic efficiency, data security, and fairness for all stakeholders. Thus, the renewal of the digital fiduciary system is a strategic need in national legal development in the era of digital economic transformation.

***Keywords: Reconstructing, Online, Fiduciary, Security, Registration, Indonesia, Enhancing, Legal, Certainty, Digital, Efficiency.***

## INTRODUCTION

### Background

National economic development encourages an increase in the use of credit-based financing with the object of collateral for movable objects, especially motor vehicles, production machinery, inventory of goods, and accounts receivable. This practice places fiduciary guarantees as an important legal instrument in guaranteeing debt repayment without transferring physical control of the property to the creditor. The state then established Law Number 42 of 1999 concerning Fiduciary Guarantees as the basis for regulating legal relations between debtors and creditors. The development of modern transactions demands a fast, secure, and scalable registration process. The government responds to this need through the digitization of electronic-based fiduciary registration services. The online system is expected to be able to speed up the issuance of certificates, reduce administrative costs, and expand access to services for the public and business actors. The reality on the ground shows that digitalization is not always synonymous with legal certainty. Several administrative issues, data validity, and system integration remain major challenges in national fiduciary registration practices.

The concept of legal certainty requires procedures that are clear, transparent, consistent, and predictable by all stakeholders. The registration of fiduciary guarantees has a publication function so that third parties know that an object has been encumbered with certain security rights. This function becomes very important because physically moving objects remain in the debtor's control. If the registration system is inaccurate, the risk of ownership disputes, double fiduciaries, and conflicts of rights between creditors can increase. The presence of an online system should strengthen the publicity aspect through a national database that can be accessed according to authority. But the effectiveness of the system depends on the quality of data input, identity verification, and information security. Legal certainty is not born solely from digital platforms, but from legal governance that ensures the validity of each stage of the registration process. Therefore, evaluation of the effectiveness of the system is an urgent academic and practical need.<sup>1</sup>

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<sup>1</sup> Munir Fuady, *Debt Guarantee Law* (Bandung: Citra Aditya Bakti, 2013), p. 87.

Changes in consumer financing patterns in Indonesia show the dominance of fiduciary use in the motor vehicle and multipurpose financing sectors. Finance companies need collateral that is easy to form, quick to register, and strongly executed when the debtor defaults. Manual systems in the past often led to long queues, high transaction costs, and reliance on layered bureaucratic processes. The government then developed an electronic-based General Legal Administration system to answer these problems. Digitization of services provides benefits in the form of reduced face-to-face contact, acceleration of process times, and increased efficiency of state administration. However, the increase in the volume of applications also increases the need for supervision. Systems that serve millions of transactions require robust digital auditing standards so that they do not become a new space for abuse of authority or data manipulation. This research is important because the national financing sector is highly dependent on the quality of fiduciary registration services.<sup>2</sup>

Online fiduciary registration is basically a form of e-government-based public service transformation. The state uses information technology to streamline procedures and expand public access to legal services. This principle is in line with the needs of modern bureaucracy that prioritizes speed, accountability, and performance measurability. However, legal services are different from ordinary administrative services because each output of the system can have legal consequences for the assets of the parties. Errors in the entry of the vehicle's frame number, debtor's identity, collateral value, or agreement date can have serious repercussions. Certificates issued based on incorrect data have the potential to cause disputes in the future. This condition shows that digital reform must be accompanied by strengthening verification standards. The state needs to balance technological efficiency with the principle of legal prudence.<sup>3</sup>

The effectiveness aspect of the system can be measured by the platform's ability to generate fast services without compromising the quality of document legality. Applicants need certainty regarding the status of the application, the amount of the fee, the completion time, and the validity of the electronic certificate issued. Creditors need assurance that their preferential rights are perfectly protected from the date of registration. The debtor needs

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<sup>2</sup> Sutan Remy Sjahdeini, *Fiduciary and Fiduciary Guarantees* (Jakarta: Pustaka Utama Grafiti, 2010), p. 112.

<sup>3</sup> Richardus Eko Indrajit, *Electronic Government: Development and Development Strategy of Public Service Systems Based on Digital Technology* (Yogyakarta: Andi, 2016), p. 54.

assurance that his personal data is not misused and that the collateral value is recorded correctly. The state needs a system that is able to increase non-tax state revenue while reducing the potential for administrative irregularities. If one of these elements fails to be met, then the effectiveness of the system becomes questionable. Research on the level of effectiveness is relevant because the measure of digitalization success is not enough based on the number of transactions alone. The main measure remains in the quality of legal protection produced.<sup>4</sup>

Field practice shows that some of the obstacles to online registration arise at the stage of data validation and inter-agency synchronization. Motor vehicle data, population data, legal entity data, and tax data are often in different databases. When the system is not optimally connected, the applicant must re-upload the document or make manual corrections. This situation incurs additional costs and slow down the registration process. Delays in registration may affect the birth of fiduciary guarantee rights and the creditor's legal position vis-à-vis third parties. Integration between systems is an important element in the era of digital administration. Countries need to build data interoperability while respecting the protection of user privacy. Without such integration, efficiency goals are difficult to achieve optimally.<sup>5</sup>

Another problem is related to cybersecurity and personal data protection in digital fiduciary services. The registration system contains the debtor's identity, debt details, collateral value, and a description of objects of high economic value. Data leaks can cause financial losses, identity misuse, or threats to transaction security. The state already has Law Number 27 of 2022 concerning Personal Data Protection which requires data controllers to carry out the principles of security and accountability. The implementation of these norms needs to be translated specifically in online fiduciary services. Strengthening *encryption*, multi-layered authentication, and digital audit trails are urgently needed. This research is important to link the property guarantee legal regime with the modern data protection regime. Legal certainty in the digital era cannot be separated from information security.<sup>6</sup>

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<sup>4</sup> Lawrence M. Friedman, *The Legal System: A Social Science Perspective* (New York: Russell Sage Foundation, 1975), p. 15.

<sup>5</sup> Indroharto, *Efforts to Understand the Law on State Administrative Courts* (Jakarta: Pustaka Sinar Harapan, 2004), p. 203.

<sup>6</sup> Daniel J. Solove, *Understanding Privacy* (Cambridge: Harvard University Press, 2008), p. 97.

The accountability dimension also occupies a central position in the electronic registration system. Any data changes, cancellations, corrections, and deletions of warranties must be recorded in a transparent and traceable manner. A system that does not have a *trail audit* has the potential to open up room for administrative manipulation and conflicts of interest. The principle of the rule of law demands that the use of administrative authority must be testable and accountable. The applicant has the right to know the reason for the rejection of the application or the correction of data made by the authorized official. An objection and administrative dispute resolution mechanism also needs to be available effectively. Digitalization without accountability only moves manual bureaucratic problems to electronic mediums. Therefore, regulatory reform must include clear digital surveillance standards.<sup>7</sup>

The need for regulatory reform can be seen from technological changes that are much faster than the development of legal norms. Some of the provisions for fiduciary registration are still prepared in the old administrative framework that has not fully anticipated electronic signatures, biometric verification, *real-time monitoring*, and cross-database integration. Regulations that are partial have the potential to cause multiple interpretations at the executive level. Business actors need simple but firm norms regarding procedures, costs, authority, and legal consequences of system errors. The state needs to reorganize the regulatory hierarchy between laws, government regulations, and technical policies of ministries. The reform must be oriented towards ease of doing business without sacrificing the protection of people's rights. This research will provide an academic basis for regulatory updates that are adaptive to technology.<sup>8</sup>

An international comparative perspective shows that modern property security registration tends to lead to a centralized, notification-based, and easy-to-trace system. Many countries are developing electronic registries that allow for quick searches by creditors and potential third parties. The system lowers transaction costs and increases access to financing for small and medium-sized businesses. Indonesia can learn lessons while still adjusting the characteristics of the national legal system. The foreign model cannot be adopted raw because

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<sup>7</sup> Philipus M. Hadjon, *Legal Protection for the People in Indonesia* (Surabaya: Bina Ilmu, 1987), p. 46.

<sup>8</sup> Satjipto Rahardjo, *Progressive Law: A Synthesis of Indonesian Law* (Yogyakarta: Genta Publishing, 2009), p. 121.

the structure of property ownership, population administration, and bureaucratic culture is different. However, the principles of transparency, accessibility, and certainty of priorities should be used as a reference for reform. Comparative studies enrich the direction of national fiduciary law reform.<sup>9</sup>

Legal certainty in fiduciary registration is also closely related to the implementation of the execution of guarantees in the event of default. Fiduciary certificates have been understood to have executory power, but the practice of execution has experienced dynamics after the development of court decisions and the protection of debtors' rights. The validity of registration data is the main basis for assessing the legitimacy of execution actions. If the initial data is problematic, then the entire process of enforcing rights can be questioned. This condition emphasizes that the quality of registration is not just an administrative matter, but the foundation of guarantee law enforcement. The online system must be able to produce electronic evidence that is reliable and easily verifiable in court. This research is relevant to strengthen the relationship between digital registration and the effectiveness of enforcing creditors' rights.<sup>10</sup>

From a legal economy point of view, low transaction costs will increase the interest of financial institutions in distributing credit to the public. Slow and complicated registration increases operational costs as well as legal risks for creditors. These costs are ultimately passed back on to consumers through higher interest or financing costs. An efficient digital system has the potential to lower transaction costs and expand financial inclusion. However, efficiency will only be sustainable if it is accompanied by confidence in the accuracy of the system. The financing market is very sensitive to legal uncertainty. Therefore, the reconstruction of the online fiduciary registration system has a wide economic impact on national business growth.<sup>11</sup>

This research also has sociological urgency because the public often does not understand that the object of credit for vehicles or capital goods is burdened by fiduciary and is registered electronically. Lack of legal literacy can trigger disputes when debtors transfer

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<sup>9</sup> Louise Gullifer, *Goode and Gullifer on Legal Problems of Credit and Security* (London: Sweet & Maxwell, 2017), p. 233.

<sup>10</sup> J. Satrio, *Guarantee Law: Fiduciary Property Guarantee Rights* (Bandung: Citra Aditya Bakti, 2002), p. 166.

<sup>11</sup> Richard A. Posner, *Economic Analysis of Law* (New York: Aspen Publishers, 2014), p. 32.

objects to other parties without the creditor's consent. Buyers in good faith often have difficulty tracing the status of the item that has been collateralized. The state needs to present a proportionate public data search mechanism so that the public can check the status of certain objects. Limited transparency that protects personal data but remains informative is a balanced solution. Digital services must serve not only large business actors, but also the general public. This research is important in building a system that is inclusive and easy for the public to understand.<sup>12</sup>

The first problem formulation in this study focuses on the effectiveness of the current online fiduciary registration system in ensuring legal certainty for stakeholders. The analysis will assess the clarity of the procedure, speed of service, data accuracy, system security, and the evidentiary strength of the electronic certificate. The research will also test the extent to which the system provides balanced protection to creditors, debtors, notaries, and third parties. Effectiveness measures need to be based on objective indicators so that research results do not stop at normative impressions alone. This approach will show regulatory gaps and technical weaknesses in implementation. The results of the evaluation are expected to be the basis for improving national policies. Thus, research is not only theoretical but also applicative.<sup>13</sup>

The second issue formulation highlights the regulatory reforms needed to improve the efficiency and accountability of digital fiduciary registrations. Reforms could include updating norms regarding electronic identity verification, national database integration, cybersecurity standards, online objection mechanisms, and digital audit-based supervision. The formation of new regulations must pay attention to the principles of utility, legal certainty, and justice in a balanced manner. Countries need to ensure that technological innovations do not create access discrimination for remote areas or users with low digital literacy. Transition policies, operator training, and minimum service standards are also important to include. This research will formulate a realistic policy design according to Indonesia's needs. Digital legal reform must be oriented towards the sustainability of public services.<sup>14</sup>

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<sup>12</sup> Soerjono Soekanto, *Factors Affecting Law Enforcement* (Jakarta: RajaGrafindo Persada, 2014), p. 8.

<sup>13</sup> Peter Mahmud Marzuki, *Legal Research* (Jakarta: Kencana, 2019), p. 133.

<sup>14</sup> Jimly Asshiddiqie, *Indonesian Constitution and Constitutionalism* (Jakarta: Sinar Grafika, 2018), p. 289.

Based on this description, the research entitled *Reconstruction of Online Fiduciary Security Registration in Indonesia: Improving Legal Certainty and Digital Efficiency* has high strategic value for national law reform. Online fiduciary registration systems have become a real necessity in the modern financing ecosystem. The challenges of legal certainty, data integration, cybersecurity, and accountability show that existing systems still require normative and technical reconstruction. This research is directed to produce a fast, secure, transparent, and equitable digital registration model. The model is expected to strengthen the protection of the parties and increase public trust in electronic legal services. The academic contribution of the research lies in the development of the concept of technology-based material guarantee registration. Its practical contribution lies in policy recommendations that can be implemented by the Indonesian government.

## Research Question

1. How effective is the current online fiduciary registration system in ensuring legal certainty for stakeholders?
2. What regulatory reforms are needed to improve efficiency and accountability in digital fiduciary registration?

## THEORETICAL FRAMEWORK

### 1. Legal Certainty Theory

The theory of legal certainty places the law as a set of norms that must provide clarity, order, and predictability for each legal subject in carrying out legal actions. Everyone needs assurance that their rights and obligations can be known from the outset through written, consistent, and objectively enforceable rules. The state builds a legal system to prevent uncertainty that leads to disputes, high costs, and public distrust. In the context of online fiduciary registration, legal certainty is the main element because the registration determines the birth of material guarantee rights for creditors. The electronic system must show the exact time of registration, the identity of the parties, the object of the guarantee, and the value of the guarantee. Data errors or system disruptions can affect the creditor's legal position against debtors and third parties. The formulation of the first problem requires testing the effectiveness of the current online system in ensuring legal certainty for all stakeholders.<sup>15</sup>

Gustav Radbruch explained that legal certainty is one of the basic values of law besides justice and utility. The law must be present in the form of clear rules so that people are able to adjust their behavior to the provisions of the state. Legal certainty not only means the existence of written norms, but also demands consistent application by implementing agencies. The online fiduciary registration system should have the same standard procedures for each applicant without discrimination. The applicant is required to know the application requirements, service fees, completion time, and legal consequences of the issued electronic certificate. When the system changes without notice or the procedures are applied differently between regions, the

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<sup>15</sup> Hans Kelsen, *General Theory of Law and State* (Cambridge: Harvard University Press, 1945), p. 124.

value of legal certainty becomes weak. The formulation of the first relevant problem is analyzed through this theory because the effectiveness of the system depends on the state's ability to maintain the consistency of digital services.<sup>16</sup>

Legal certainty in fiduciary guarantees is closely related to the principle of publicity which requires registration so that third parties are aware of the burden of collateral on an object. Publicity provides legal information to the public that a certain object has been pledged to a certain creditor. The online registration system should reinforce these principles through a national database that is fast and easily verifiable. Creditors need accurate information so as not to receive objects that have been burdened with collateral beforehand. The debtor needs protection so that the recording is only carried out in accordance with a valid agreement. Third parties need limited access to information to avoid transactions on goods that are being burdened by the fiduciary. If the system data is incomplete or difficult to trace, then the publicity function becomes ineffective. The formulation of the first problem therefore assesses the extent to which the current system implements the principle of digital publicity.<sup>17</sup>

The effectiveness of legal certainty also depends on the validity of the data entered into the electronic system. The digital system only produces the correct output if the data input of identity, collateral object, debt value, and agreement date is accurately recorded. An error in the vehicle's frame number, debtor's name, or collateral value can cause serious disputes when execution is performed. The state is obliged to provide a rapid data verification and correction mechanism so that administrative errors do not turn into legal conflicts. Notaries, financing companies, and administrative officials hold important responsibilities in maintaining such accuracy. Legal certainty is not born from technology alone, but from disciplined and supervised data governance. The first problem formulation needs to test whether the online fiduciary registration system has an adequate data control mechanism.<sup>18</sup>

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<sup>16</sup> Gustav Radbruch, *Legal Philosophy* (New York: Baker, Voorhis & Co., 1950), p. 169.

<sup>17</sup> J. Satrio, *Law on the Guarantee of Fiduciary Property Guarantee Rights* (Bandung: Citra Aditya Bakti, 2002), p. 58.

<sup>18</sup> Roscoe Pound, *An Introduction to the Philosophy of Law* (New Haven: Yale University Press, 1954), p. 76.

Legal certainty in the digital era requires system security as a condition for protecting the rights of the parties. Fiduciary data contains high-value economic information such as the identity of the debtor, details of the debt, and the object of collateral. Data leaks or unauthorized changes can undermine the validity of the registration and cause significant losses. The state must ensure cybersecurity through multi-layered authentication, audit trail logging, and user access protection. Stakeholders will doubt the legitimacy of electronic certificates if the system is easily hacked or frequently disrupted. Legal certainty in a digital environment means certainty of data integrity and continuity of service. The formulation of the first problem becomes important because the effectiveness of the system cannot be measured only by the speed of the process, but also by the level of security of the platform used.<sup>19</sup>

Legal certainty also relates to the evidentiary power of electronic documents when disputes arise in court. A fiduciary certificate issued online must have the same or stronger legal legitimacy than a manual document. Judges, creditors, and debtors need clarity regarding the authenticity of documents, the time of issuance, and the authority of the notifying official. A system that is not able to show the publication history clearly will weaken the evidentiary position of the parties. The Electronic Information and Transactions Act provides a basis for the recognition of electronic documents, but its implementation requires consistent technical support. Online fiduciary registration must be connected to electronic signature standards and verifiable digital records. The formulation of the first problem therefore assesses whether the current system actually produces strong and reliable evidence.<sup>20</sup>

The theory of legal certainty ultimately requires an online fiduciary registration system that is simple, certain, secure, and accountable. The state needs to ensure that all stages of service are transparent from the submission to the issuance of the certificate. Stakeholders need assurance that creditors' preferential rights are born on time and are protected from administrative disputes. The debtor needs assurance that personal data and the value of the guarantee are recorded in accordance with the

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<sup>19</sup> Julie E. Cohen, *Configuring the Networked Self* (New Haven: Yale University Press, 2012), p. 213.

<sup>20</sup> Edmon Makarim, *Introduction to Telematics Law* (Jakarta: RajaGrafindo Persada, 2005), p. 141.

agreement. Third parties need sufficient information to avoid risky transactions. The formulation of the first problem can be answered by measuring the conformity between the normative objectives and the actual practice of the current system. If the gap is still large, then the reconstruction of the system becomes an urgent need for national law reform.<sup>21</sup>

## 2. Progressive Legal Theory

Progressive legal theory views law as a means to serve human beings and solve social problems in a real way. Satjipto Rahardjo rejects the view that places the law only as a collection of rigid written rules and closed to change. The law must move to follow the dynamics of society, economic developments, and technological advances to remain relevant. The state is obliged to place welfare, justice, and benefits as the main goals in the formation of legal policies. The formulation of the second problem regarding the reform of digital fiduciary registration regulations is very appropriate to be analyzed through this theory because the existing system was born from the context of conventional administration. Changes in modern financing transactions demand regulations that are faster, adaptive, and responsive to the needs of electronic services. Progressive legal theory provides the basis that legal reform is not an additional option, but an urgent need when old rules are no longer effective in responding to the times.<sup>22</sup>

Progressive legal theory places humans as the center of legal orientation so that rules must be judged by their benefits to society. The digital fiduciary registration system must provide convenience for creditors, debtors, notaries, business actors, and the public who use financing services. Regulations that are too bureaucratic, slow, or layered are contrary to the purpose of modern public services. Countries need to develop norms that facilitate access to registration, speed up verification, and reduce transaction costs without compromising legal protection. The second problem formulation asks for the regulatory reforms needed to improve efficiency and

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<sup>21</sup> Lon L. Fuller, *The Morality of Law* (New Haven: Yale University Press, 1969), p. 39.

<sup>22</sup> Satjipto Rahardjo, *Progressive Law: The Law of Liberation* (Jakarta: Kompas, 2009), p. 27.

accountability. Progressive legal theory answers that efficiency must be realized through legal design that favors the real needs of society, not just maintaining old procedures that are no longer relevant. Legal reforms must produce tangible benefits that can be directly felt by users of digital systems.<sup>23</sup>

The main character of progressive law lies in the courage to make a breakthrough when positive norms are not able to solve social problems. Online fiduciary registration systems face challenges in the form of data duplication, server disruptions, limitations in inter-agency integration, and often slow correction procedures. These problems are not enough to be overcome by simply adding administrative technical instructions. The state needs to redesign regulations to be able to connect population data, vehicle data, legal entity data, and the state's payment system in an integrated manner. Such reforms demonstrate institutional courage to break out of sectoral bureaucratic patterns. The second problem formulation can be answered through a progressive approach that encourages regulatory innovation across sectors. The law must be present as an operational solution, not just a normative document that is lagging behind the reality of technology.<sup>24</sup>

Progressive legal theory also rejects excessive formalism that makes procedure more important than the goal of justice. Digital fiduciary registration is often judged successful simply because the number of applications increases or the processing time is shorter. This measure is not enough if people still have difficulties in correcting data, do not understand procedures, or are harmed by system errors. The state must assess the success of regulations based on the quality of protecting the rights of the parties. Creditors need certainty of priority rights, debtors need personal data protection, and third parties need reliable information. The second problem formulation demands regulatory reform that is able to balance efficiency and accountability at the same

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<sup>23</sup> Satjipto Rahardjo, *Dissecting Progressive Law* (Jakarta: Kompas, 2008), p. 54.

<sup>24</sup> Bernard L. Tanya, *Legal Theory: Strategies for Human Order Across Spaces and Generations* (Yogyakarta: Genta Publishing, 2013), p. 188.

time. Progressive law encourages policymakers to abandon mere administrative measures and turn to substantive measures of justice.<sup>25</sup>

The accountability aspect acquires an important place in progressive legal theory because administrative power must be directed to the benefit of the people. Unsupervised digital systems can give birth to new forms of abuse of authority, data manipulation, or automated decisions that are not transparent. The state needs to establish rules regarding electronic audit trails, minimum service standards, official responsibilities, and online objection mechanisms. Service users must be able to find out the reasons for the rejection of requests or changes to data in the system. The second formulation of the problem calls for regulatory reforms that improve the accountability of digital fiduciary registration. Progressive legal theory asserts that technology should not be a dark space that is difficult to supervise. The law must ensure that any use of digital systems remains subject to the principle of public accountability.<sup>26</sup>

Progressive legal theory pays great attention to groups that are potentially lagging behind in the process of modernizing the law. The digitization of fiduciary registration can create access gaps for remote areas, small business actors, or communities with low digital literacy. Countries are obliged to design regulations that provide assistance services, consultation centers, simple complaint channels, and inclusive access alternatives. Legal reform should not only benefit large corporations that have better technological resources. The formulation of the second problem needs to be answered with policies that ensure the equitable distribution of the benefits of digitalization throughout Indonesia. Progressive law assesses the success of reform by the extent to which the law provides convenience to the groups most in need of protection. Reform of the digital fiduciary system must bring access justice, not just symbolic modernization.<sup>27</sup>

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<sup>25</sup> Satjipto Rahardjo, "Progressive Law as the Basis for the Development of Indonesian Law," *Journal of Law Pro Justitia* 24, no. 1 (2006): 6.

<sup>26</sup> Philipus M. Hadjon, *Introduction to Indonesian Administrative Law* (Yogyakarta: Gadjah Mada University Press, 2011), p. 97.

<sup>27</sup> Roberto Mangabeira Unger, *What Should Legal Analysis Become?* (London: Verso, 1996), p. 121.

Progressive legal theory ultimately leads to the formation of an innovative, adaptive, and future-oriented digital fiduciary regulatory model. The state needs to update the rules regarding electronic signatures, identity authentication, national database integration, cybersecurity, and electronic dispute resolution. Lawmakers must open a space for periodic evaluation so that regulations are able to adapt to new technological developments. The formulation of the second problem regarding regulatory reform can be answered through a legal design that is not static and does not get stuck in the legacy of manual bureaucracy. The digital fiduciary registration system requires laws that move with societal changes. Progressive law provides the theoretical foundation that the success of regulation lies in its ability to provide real benefits, effective protection, and responsible governance. Regulatory reconstruction is therefore an important agenda in the development of national law.<sup>28</sup>

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<sup>28</sup> Nonet Philippe and Philip Selznick, *Law and Society in Transition: Toward Responsive Law* (New York: Harper & Row, 1978), p. 73.

## RESEARCH METHODOLOGY

This research uses the paradigm of legal constructivism which views law as the result of social, institutional, and state policy constructions that continue to develop following societal changes. The research places the online fiduciary registration system as an object that is not only understood from the text of the regulation, but also from administrative practices, power relations, economic needs, and the development of digital technology. This approach is relevant because the issues of legal certainty and efficiency cannot be explained only through a normative reading of Law Number 42 of 1999 concerning Fiduciary Guarantees. The research seeks to find a gap between *das sollen* and *das sein* in the implementation of electronic registration. The research also assesses how legal norms are applied by administrative officials, notaries, financing companies, and service users. This paradigm provides room for critical analysis of the weaknesses of the current system. The results of the research are expected to be able to compile a legal reconstruction that is adaptive to the needs of digitization of public services.<sup>29</sup>

This type of research is normative legal research enriched by empirical elements or often called a normative-empirical juridical approach. Normative research is carried out through the study of legal principles, synchronization of laws and regulations, legal theory, and the concept of digital fiduciary guarantees. Empirical elements are used to read the effectiveness of the implementation of the online fiduciary registration system through administrative facts, institutional practices, and technical obstacles that arise in the field. The research utilizes primary legal materials in the form of the Fiduciary Guarantee Law, the Electronic Information and Transaction Law, the Personal Data Protection Law, and technical regulations of the Ministry of Law and Human Rights. The research utilizes secondary legal materials in the form of books, journal articles, results of previous research, and expert opinions. The research utilizes tertiary legal materials in the form of legal dictionaries, encyclopedias, and regulatory indexes. This combination model allows for a complete analysis between norms and implementation.<sup>30</sup>

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<sup>29</sup> Johnny Ibrahim, *Theory and Methodology of Normative Legal Research* (Malang: Bayumedia Publishing, 2006), p. 57.

<sup>30</sup> Soerjono Soekanto and Sri Mamudji, *Normative Legal Research: A Brief Review* (Jakarta: RajaGrafindo Persada, 2015), p. 14.

The research approach uses several integrated methods, namely the legislative approach, the conceptual approach, the case approach, and the comparative approach. The legislative approach is used to examine the consistency of electronic fiduciary arrangements in the hierarchy of national norms. A conceptual approach is used to describe the meaning of legal certainty, digital efficiency, administrative accountability, and data security in electronic public services. The case approach is used to analyze court decisions, fiduciary execution disputes, or administrative issues related to the validity of registrations. A comparative approach was used to compare the electronic guarantee registration model in several more developed countries. The comparison is useful for finding best practices that can be adapted to the Indonesian legal system. The use of this multi-approach provides depth of analysis and strengthens regulatory reform recommendations.<sup>31</sup>

Data collection techniques were carried out through literature studies, tracing of official documents, observation of electronic systems, and limited interviews with relevant informants. Literature studies were conducted on books, scientific journals, and policy reports on fiduciary guarantees and digital transformation of legal administration. Searches of official documents are carried out against regulations, technical guidelines, annual reports, and publications of agencies that manage online fiduciary services. System observation is carried out by examining the service flow, registration features, payment mechanisms, and data correction procedures on available electronic platforms. Limited interviews can be conducted with notaries, academics, financing practitioners, and relevant officials to obtain information on implementation barriers. The collected data is then verified through source triangulation techniques to maintain reliability. This technique is important to avoid conclusions that rely on only one type of data.<sup>32</sup> Lexy J. Moleong, *Qualitative Research Methodology* (Bandung: Remaja Rosdakarya, 2018), p. 330.

Data analysis was carried out qualitatively using descriptive-analytical and prescriptive methods. The descriptive stage is used to map the regulatory conditions and actual practices of online fiduciary registration in Indonesia. The analytical stage is used to test the effectiveness of the system in ensuring legal certainty based on the theory of legal certainty and the theory of the legal system. The prescriptive stage is used to formulate a regulatory

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<sup>31</sup> Peter Mahmud Marzuki, *Legal Research: Revised Edition* (Jakarta: Kencana, 2021), p. 133.

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reform model that improves efficiency and accountability based on progressive legal theory and the principles *of good governance*. Conclusions are drawn through deductive logic from general norms to specific solutions to research problems. The validity of the argument is maintained through consistency between the theory, data, and policy recommendations produced. This method allows research to produce academic contributions as well as practical recommendations for the renewal of the national digital fiduciary system.<sup>33</sup>

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<sup>33</sup> Sugiyono, *Qualitative Research Methods for Exploratory, Interpretive, Interactive, and Constructive Research* (Bandung: Alfabeta, 2020), p. 184.

## RESEARCH RESULTS

### **The effectiveness of the current online fiduciary registration system in ensuring legal certainty for stakeholders**

The online fiduciary registration system in Indonesia basically shows administrative progress because the registration process that was previously carried out manually can now be carried out through the electronic service of the Directorate General of General Legal Administration of the Ministry of Law and Human Rights. The transformation accelerates the issuance of certificates, shortens physical queues, and lowers administrative transaction costs for notaries and financing institutions. The effectiveness of the system cannot be measured only by the acceleration of the procedure because the formulation of the first problem focuses on the system's ability to ensure legal certainty for stakeholders. The theory of legal certainty requires clear rules, fixed procedures, and predictable outcomes for all users. Creditors need certainty of the birth of preferential rights since registration is made. The debtor needs assurance that the data and collateral objects are recorded in accordance with the agreement. The state needs to ensure that digitalization does not stop at technical efficiency, but also results in real legal protection for all parties. This situation shows that the assessment of effectiveness must combine administrative aspects and normative aspects in a balanced manner.<sup>34</sup>

Legal certainty in fiduciary guarantees is closely related to the birth of the right of guarantee and publicity to third parties. The online system becomes effective if the registration time is recorded as accurate, not easily manipulated, and directly causes legal consequences in accordance with Law Number 42 of 1999 concerning Fiduciary Guarantees. Many financing institutions rely on the certainty of registration time to determine priorities in the event that the collateral object is disputed or re-encumbered. Gustav Radbruch explained that legal certainty requires predictability so that legal subjects can estimate the consequences of their actions. If the server experiences an outage, a delay in syncing, or the status of the request is unclear, then the predictability is compromised. This condition shows that the effectiveness of the system still depends on the reliability of digital infrastructure. A

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<sup>34</sup> Munir Fuady, *Debt Guarantee Law* (Bandung: Citra Aditya Bakti, 2013), p. 214.

fast but inconsistent system does not meet the full standard of legal certainty.<sup>35</sup> Gustav Radbruch, *Legal Philosophy* (New York: Baker, Voorhis & Co., 1950), p. 169.

The latest legal issues show that there is still debate about the validity of electronically issued fiduciary certificates and the legitimacy of some technical procedures outside the norms of the law. A number of academic studies assess that the harmonization between the Fiduciary Guarantee Law and electronic implementing regulations still needs to be strengthened so as not to cause multiple interpretations. This situation is relevant to the formulation of the first problem because legal certainty demands vertical and horizontal conformity between norms. Stakeholders need assurance that digital certificates have full legal force, not just administrative documents. When the legal basis is considered to be out of sync, the potential for disputes increases at the stage of proof and execution. The online system is therefore not fully effective if its normative legitimacy is still in question. Regulatory reform is an important requirement to strengthen the legal certainty of fiduciary electronic services.<sup>36</sup>

The role of notaries in the online fiduciary registration system is an important element that determines the effectiveness of legal certainty. Notaries act as public officials who check the identity of the parties, the suitability of the deed, and the correctness of the data to be entered into the system. Errors at the input stage can cause a difference between a fiduciary deed and an issued electronic certificate. The theory of legal certainty requires consistency between the basic document and the registration results so as not to create legal doubts. The latest study shows that notaries still hold a strategic function as guardians of the validity of digital fiduciary transactions. The system will be effective if it is supported by operator competence and strict verification standards. Technology without professional controls only transfers the risk of manual errors to digital forms.<sup>37</sup>

Accessibility and transparency aspects also determine the effectiveness of the system in ensuring legal certainty for the wider community. A third party who wants to purchase a vehicle or movable object needs a clear way to know if the object is being burdened by fiduciary. The function of publicity is the spirit of the registration of material guarantees

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<sup>35</sup> I Gusti Ayu Ketut Rachmi Handayani et al., "Strengthening Legal Certainty on the Electronic Registration System of Fiduciary Deed in Indonesia," *International Journal of Criminology and Sociology* 10 (2021): 1128.

<sup>36</sup> Habib Adjie, *Indonesian Notary Law: Thematic Interpretation of the Notary Law* (Bandung: Refika Aditama, 2022), p. 301.

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because the rights of other parties must be respected since they are announced. If access to data search is too closed or difficult to do, then the public risks transacting on goods that are being pledged. The theory of legal certainty requires that legal information be available proportionately so that people can adjust their actions. The current online system has made it easier to register, but the function of data disclosure still needs to be balanced with the protection of personal data. The effectiveness of the system is not optimal if third parties still have difficulty obtaining certainty of the status of the collateral object.<sup>38</sup>

Another latest legal issue is related to the protection of personal data after the enactment of Law Number 27 of 2022 concerning Personal Data Protection. The fiduciary registration system contains the debtor's identity, financing details, and data on objects of high economic value. Data leaks or misuse can harm debtors and lower public trust in state services. The theory of legal certainty in the digital era is not only concerned with the certainty of the status of rights, but also the certainty of the security of information handed over to the state. Stakeholders have the right to know who is accessing the data, for what purpose, and what the security mechanisms are. Online systems become effective when data protection is integrated with registration procedures. Without data security, legal certainty turns into digital risk uncertainty.<sup>39</sup>

The effectiveness of the system is also tested through the ability to quickly and accurately complete data corrections, cancellations, cancellations, and changes in collateral status. Many disputes do not arise at the initial registration stage, but at the time of debt repayment or transfer of rights when old data has not been updated. The debtor can be harmed if the fiduciary record has not been deleted even though the obligation has been completed. Creditors can also be harmed if data changes are not recorded immediately, causing priority conflicts. The theory of legal certainty demands orderly administration throughout the life cycle of the guarantee, not just the issuance of certificates. Online systems that focus on early registration but are weak on data updates cannot be judged to be fully effective. Post-registration governance is an important measure of the quality of legal certainty.<sup>40</sup>

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<sup>38</sup> Tan Kamello, *Fiduciary Guarantee Law: A Coveted Need* (Bandung: Alumni, 2006), p. 145.

<sup>39</sup> Edmon Makarim, *Legal Responsibility of Electronic System Operators* (Jakarta: RajaGrafindo Persada, 2010), p. 188.

<sup>40</sup> Lawrence M. Friedman, *The Legal System: A Social Science Perspective* (New York: Russell Sage Foundation, 1975), p. 17.

The dynamics after the Constitutional Court Decision Number 18/PUU-XVII/2019 also affect the assessment of the effectiveness of the online fiduciary registration system. The decision reinterprets the execution of fiduciary certificates to respect the default agreement and the debtor's protection. Accurate electronic registration is becoming increasingly important because registration data will be tested when an execution dispute occurs. If the identity of the object, the value of the debt, or the registration date is not precise, then the process of enforcing creditors' rights can be hampered. The theory of legal certainty demands a link between the registration stage and the law enforcement stage. The online system becomes effective if the registration results are reliable in the litigation and non-litigation process. The low quality of registration will weaken the executorial power of the fiduciary certificate.<sup>41</sup>

From a legal economy perspective, the online fiduciary registration system is quite effective because it reduces transaction costs and accelerates the distribution of financing to the public. Finance companies find it easier to secure their receivables through fast and documented registration. People also get faster access to credit because the administrative process is shortened. The theory of legal certainty explains that the credit market will grow if the rights and risks of the parties can be rationally predicted. This economic efficiency still requires legal reliability so that it does not turn into a source of mass disputes. If a lot of data is problematic or the certificate is in question, then the dispute fee will erase the benefits of initial efficiency. The current system is quite economically effective, but it still requires strengthening substantive legal certainty.<sup>42</sup>

Based on all these descriptions, the online fiduciary registration system in Indonesia can be considered quite effective administratively, but it is not yet fully effective in ensuring legal certainty for all stakeholders. The system has succeeded in speeding up services, reducing costs, and expanding access to national registration. Challenges still arise in regulatory harmonization, data validity, cybersecurity, information disclosure, updating of collateral status, and evidentiary strength in disputes. The theory of legal certainty demands clear rules, consistent procedures, predictable outcomes, and equal protection for creditors, debtors, notaries, and third parties. The standard shows that the effectiveness of the current

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<sup>41</sup> Jimly Asshiddiqie, *Constitutional Court and the State of Law* (Jakarta: Sinar Grafika, 2020), p. 244.

<sup>42</sup> Richard A. Posner, *Economic Analysis of Law* (New York: Aspen Publishers, 2014), p. 32.

system is partial, not yet comprehensive. The state needs to make normative and technical improvements so that digital fiduciary services truly meet the ideals of national law.<sup>43</sup>

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<sup>43</sup> Lon L. Fuller, *The Morality of Law* (New Haven: Yale University Press, 1969), p. 39.

## **Regulatory reforms needed to improve efficiency and accountability in digital fiduciary registration**

Reform of digital fiduciary registration regulations must start from updating the legal paradigm that still relies on manual procedures towards responsive electronic governance. Existing systems have indeed moved services to online platforms, but most of the basic norms are still built in the context of physical document-based administration. This creates a gap between digital practices and the available legal frameworks. Satjipto Rahardjo through progressive legal theory emphasized that the law must serve humans and move according to the needs of society. The state is therefore not enough to just digitize old forms, but must reconstruct norms to suit the electronic transaction ecosystem. The second formulation of the problem demands reforms that are oriented towards efficiency and accountability at the same time. Regulatory reforms must dare to leave the old patterns of sluggishness and layering.<sup>44</sup>

The latest legal issues show that fiduciary digitalization still faces obstacles in the form of inconsistency in notary rules, the validity of electronic documents, and limited infrastructure in some regions. The 2025 study confirms that the success of digital transformation is highly dependent on regulatory harmonization and equitable distribution of technology support. Progressive law sees the obstacle as a signal that the state should act innovatively, not wait for problems to escalate. Regulatory reforms need to include norms on risk-based services, technical assistance for disadvantaged areas, and uniform national operational standards. The state must ensure that digital services are not only effective in large cities, but also accessible to the periphery of the region. National efficiency will not be achieved if access inequality is left unchecked. Legal reform must touch on the substance and implementation aspects at the same time.<sup>45</sup>

The next reform needs to be directed at strengthening the legal basis of electronic documents and electronic signatures in every stage of fiduciary registration. Many modern financing transactions use digital consent, but fiduciary guarantee regimes are still often perceived to be close to conventional documents. This situation raises doubts about the probative strength if a dispute arises in court. Progressive legal theory rejects formal rigidity

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<sup>44</sup> Satjipto Rahardjo, *Progressive Law: Liberating Law* (Jakarta: Kompas, 2009), p. 41.

<sup>45</sup> "Digitization of Fiduciary and Notary: Modern Legal Solutions in the Cyber Era," *Journal of Media Law Justitia Nusantara* 15, no. 1 (2025): 129–131.

that hinders the social benefits of technology. The State needs to align the Fiduciary Guarantee Law with the Electronic Information and Transactions Act and its derivative rules explicitly. The new regulations should affirm that electronic deeds, statements, and certificates that meet security standards have full legal force. This certainty will increase transaction efficiency and reduce administrative disputes.<sup>46</sup>

Digital fiduciary registration accountability requires an electronic audit trace-based supervision system that is strictly regulated in regulations. Any data changes, identity corrections, errors, cancellations, and reissues of certificates must be automatically logged and traceable. A trail audit system opens up room for abuse of authority and administrative manipulation. Progressive law requires the state to be present through a control mechanism that protects society from hidden bureaucratic power. Regulations need to require the recording of access times, operator identities, reasons for changes, and verification logs permanently. An online objection mechanism should also be available to applicants who are aggrieved by the system's decision. Digital accountability will only be born if supervision is embedded in the legal and technological architecture at the same time.<sup>47</sup>

Regulatory reform must also build cross-agency data integration so that fiduciary registration no longer relies on repetitive manual input. Population data, motor vehicle data, legal entity data, and tax data are currently often in separate systems. The applicant must then upload repeated documents and face the risk of data differences between agencies. Progressive legal theory encourages simplification of procedures that free society from unnecessary bureaucratic burdens. The state needs to establish a legal basis for the exchange of data that is legal, secure, and limited to the purpose of the service. The integration will cut verification time and improve information accuracy. Digital efficiency will not be achieved as long as regulations still maintain the old administrative barriers.<sup>48</sup>

Personal data protection must be a core part of digital fiduciary regulation reform after the enactment of Law Number 27 of 2022 concerning Personal Data Protection. The fiduciary system stores the identity of the debtor, financing details, and data on assets that have high

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<sup>46</sup> "The Validity of Electronic Signatures in Guarantee Agreements," *JIIIC: Journal of Intellectual Insan Cendikia* 2, no. 12 (2025): 19732–19734.

<sup>47</sup> Philipus M. Hadjon, *Legal Protection for the People in Indonesia* (Surabaya: Bina Ilmu, 1987), p. 72.

<sup>48</sup> Richardus Eko Indrajit, *Electronic Government: Development and Development Strategy of Public Service Systems* (Yogyakarta: Andi, 2016), p. 88.

economic value. Data leaks can cause financial losses and lower public trust in the country. Progressive law views the protection of human dignity as a legal goal that should not be sacrificed for efficiency. Digital fiduciary regulations need to regulate access restrictions, encryption obligations, leak incident notifications, and data controller responsibilities. Service users must also be given the right to correction and the right to know the use of their data. Digital accountability will increase when data protection becomes a real legal obligation.<sup>49</sup>

Another important reform is the establishment of an online administrative dispute resolution mechanism for digital fiduciary services. Applicants often face problems with system rejections, data errors, or service delays without a fast objection channel. The manual completion process actually eliminates the efficiency benefits promised by digitalization. Progressive legal theory emphasizes the quick and fair resolution of society's real problems. The state needs to set up electronic objection forums, official response deadlines, online mediation, and escalation to state administrative courts if necessary. The mechanism will increase accountability as every administrative decision can be tested. The certainty of the objection procedure also strengthens the legitimacy of the digital system in the eyes of the public.<sup>50</sup>

The latest legal issues also show the existence of contractual fairness issues in the digital fiduciary ecosystem, especially the debtor's weak bargaining position against the financing standard clause. Digitization of registration often speeds up registration, but does not automatically improve the balance of rights of the parties. Progressive law rejects laws that only benefit economically powerful. Regulatory reforms need to require digital clause readability, conscious consent, cost notification, and transparency of default consequences before registration is made. The system must ensure that the debtor understands the object of the fiduciary burden and its legal consequences. Business efficiency should not erase the principle of substantive justice. Balanced regulations will increase confidence in the national financing market.<sup>51</sup>

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<sup>49</sup> Daniel J. Solove, *Understanding Privacy* (Cambridge: Harvard University Press, 2008), p. 101.

<sup>50</sup> Indroharto, *Efforts to Understand the Law on State Administrative Justice* (Jakarta: Pustaka Sinar Harapan, 2004), p. 213.

<sup>51</sup> "Contractual Justice in Digital Fiduciary," *Journal of Innovative and Creativity* (2026).

Regulatory reform needs to open up space for the use of new technologies such as *blockchain*, biometric verification, and artificial intelligence in a measurable manner. The technology can strengthen data integrity, prevent duplication of collateral objects, and accelerate the detection of transaction anomalies. Progressive law encourages law to be a facilitator of innovation that benefits society. The state must develop principles-based regulations so that new technologies can be adopted without having to wait for changes in the law every time. Security standards, algorithm audits, and organizer responsibilities need to be set up from the start. The adaptive approach will keep the digital fiduciary system relevant to future technological developments. Stagnant legal reforms will be lagged behind by market innovation.<sup>52</sup>

Based on all these discussions, the necessary regulatory reforms include the harmonization of electronic norms, strengthening digital signatures, mandatory trail audits, cross-agency data integration, personal data protection, online dispute mechanisms, contractual justice, and new technology innovation spaces. Progressive legal theory answers the formulation of the second problem by placing law as an active and solution-oriented tool of social change. The state must dare to abandon a static regulatory model that simply copies manual procedures to digital screens. Efficiency demands simple, fast, and inexpensive processes. Accountability demands transparency, oversight, and measurable accountability. The digital fiduciary registration system will be effective if legal updates are carried out comprehensively and oriented to the interests of the community.<sup>53</sup>

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<sup>52</sup> Lawrence M. Friedman, *The Legal System: A Social Science Perspective* (New York: Russell Sage Foundation, 1975), p. 29.

<sup>53</sup> Satjipto Rahardjo, *Dissecting Progressive Law* (Jakarta: Kompas, 2008), p. 117.

## CONCLUSION

The results of the study show that:

1. The online fiduciary registration system in Indonesia has currently shown a fairly good level of effectiveness from an administrative point of view because it is able to speed up the registration process, facilitate access to national services, reduce transaction costs, and support the acceleration of financing for the community and the business world. Assessments based on the theory of legal certainty show that the effectiveness is not completely perfect because there are still issues of regulatory harmonization, data validity, cybersecurity, disclosure of information on the status of the object of guarantee, data correction mechanism, and the power of proof of electronic certificates in disputes. The current system can be considered procedurally effective, but it is not optimally substantively in ensuring equal legal certainty for creditors, debtors, notaries, and third parties. Therefore, the state still needs to improve fiduciary digital governance so that the speed of service is in line with comprehensive legal protection.
2. Reform of digital fiduciary registration regulations must be carried out comprehensively in terms of legal substance, structure, and culture. The state needs to form new regulations that are adaptive to technological innovation, ensure transparency, strengthen accountability, and facilitate public access. Progressive legal theory provides the basis that law must move according to the needs of the times and side with human interests. The ideal digital fiduciary registration system is not just an all-electronic system, but a system that is fair, fast, secure, and accountable. Thus, regulatory reconstruction is an urgent need in the development of national law in the digital economy era.

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