

## PUBLIC PERCEPTION OF THE POSITIVE AND NEGATIVE IMPACTS OF ONLINE LOANS IN THE DIGITAL ERA IN SERANG CITY

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### Abstract

The rapid expansion of digital technology in Indonesia has transformed financial services, notably through online lending (pinjaman online/pinjol) that provides fast and practical access to funds. This study investigates community perceptions of the positive and negative impacts of online loans in Serang City, a semi-urban area with increasing internet penetration but relatively low digital financial literacy. Using a mixed-methods design, the research combines quantitative surveys of 348 respondents with qualitative interviews of the Serang City Communication and Information Office (Diskominfo) and the Banten Regional Police. Descriptive analysis shows that residents recognise significant benefits of legal online loans, such as quick disbursement, flexible use, and support for micro-business capital (mean score 38.11 on a 1–5 Likert scale). However, perceptions of negative impacts are substantially higher (mean score 44.80), highlighting concerns over predatory interest rates, aggressive collection practices, lack of transparency, and misuse of personal data. Behavioural data (mean score 44.13) reveal generally cautious attitudes, with respondents checking platform legality and reading terms before borrowing. Qualitative findings confirm that low digital literacy and economic vulnerability heighten community risk, while illegal pinjol are viewed as cybercrime requiring cross-sector enforcement and stronger national regulation. The study recommends integrated digital literacy programs, stricter oversight of lending platforms, and enhanced cooperation between government agencies, law enforcement, and community institutions to protect consumers and promote responsible fintech use.

**Keywords:** *Loan; Online; Digital; Financial; Technology*

### INTRODUCTION

The development of digital technology has led to several innovations in the financial sector, including online lending services (pinjol), which enable the public to transfer money quickly without complicated banking procedures. This phenomenon is very prevalent in Indonesia, including in Serang City, and it is steadily increasing internet penetration and the public's need for more practical access to money (Huang et al., 2025). According to the law, online lending can provide a solution for financial emergencies, support microbusiness operations, and enhance financial literacy for groups reluctant to use traditional banks. However, this ease of use also presents new challenges that must be addressed (Wu & Pambudi, 2024). According to its intended use, online lending poses significant risks, such as unethical practices, high interest rates, and even the use of private data (Rohimah et al., 2023). As a semi-urban area, the rapid growth in the use of online lending (pinjol) in Serang City indicates a heightened awareness of the issues at hand, particularly among the population with lower levels of digital literacy and low-income groups. Illegal online lending worsens the situation, leading to social, economic, and psychological impacts, and necessitates the role of the government and relevant institutions in providing comprehensive electronic literacy education (Alshater et al., 2022). The goal of this study is to analyse the perceptions of the general public on the positive and negative aspects of online shopping in the digital age, as well as to identify the factors—demographic, social, and economic—that influence these trends (Donkor et al., 2025). The findings of this study are expected to serve as the foundation for more effective consumer protection, regulatory reform, and the development of a digital literacy program that can reduce the risk associated with using online banking services and guide the use of financial technology in a responsible and transparent manner (Khan et al., 2023).

## LITERATURE REVIEW

Information technology has led to the development of financial technology, or fintech, which has changed how the general public uses financial services (Tarihoran et al., 2023). According to Bank Indonesia (2023), fintech offers innovative services like online loans that enable transactions and payments to proceed smoothly through digital platforms. According to (Khan et al., 2023) accessibility, timeliness, and ease of use are factors that influence the public's perception of this service, particularly in countries with low financial literacy (Naim, Hadi, et al., 2024). Legal online banking can serve as a financial inclusion tool by providing access to financial information to the general public that is not yet familiar with formal banking institutions. According to the Otoritas Jasa Keuangan (OJK, 2024) report, registered and supervised official online lending can help MSMEs with business capital, assist the public in meeting their basic needs, and stimulate local economic growth. According to the study by (Azmeah, 2025) the main legal attraction is the speed and ease of the digital process offered.

In addition, online loans also pose a number of serious risks. (Osei-Assibey Bonsu et al., 2025) emphasises high interest rates, aggressive behaviour, and a lack of information transfer as the main concerns for users. The use of private information, intimidation, and even verbal abuse by illegal pinjol providers is frequently reported and results in psychological and social harm. This aligns with the findings of (Appiah & Agblewornu, 2025) who classify illegal pinjol as a type of cybercrime because it compromises user privacy and has the potential for malware development. Digital literacy is a crucial factor in determining how the general public feels about online fraud. According to (Azmeah, 2025) understanding utang management, data security, and legality platform renders individuals in illegal pinjol. Digital literacy education that is well-integrated can increase the ability of the general public to assess risk, distinguish between legal and illegal services, and handle pinjaman in a responsible manner. This relates to the digital literacy concept that encourages critical thinking when utilising technology.

The public's perception of online shopping is influenced by a variety of demographic factors, including user demographics, educational attainment, income, and user experience. Researchers (Makmur, 2024) found that while people are more comfortable using the internet, they are less comfortable using illegal pinjol. On the other hand, the public is more critical of education in assessing legality and risk. It is important to analyse the interaction between economic and cultural factors so that strategies for development can be tailored to the characteristics of the local population (Naim & Valentin, 2024), such as the semi-perkotaan population in Kota Serang. The public's perception of online shopping is influenced by a variety of demographic factors, including user demographics, educational attainment, income, and user experience (Naim, Supriatman, et al., 2024). Researchers (Liang et al., 2025) found that while people are more comfortable using the internet, they are less comfortable using illegal pinjol. On the other hand, the public is more critical of education in assessing legality and risk (Hadi et al., 2024). It is important to analyse the interaction between economic and cultural factors so that strategies for development can be tailored to the characteristics of the local population (Lu et al., 2025), such as the population in Serang.

## METHOD

### Research Methods

1. **Mixed Methods Approach** Descriptive quantitative and qualitative approaches were used in this study to objectively describe how society views the positive and negative impacts of online lending in the digital age. The quantitative approach was chosen because it can provide a systematic, measurable, and statistically processable overview, allowing researchers to reach scientifically accountable conclusions (Zaiceanu et al., 2015).
2. The qualitative approach was also selected for this study for the following reasons: a. Understanding Subjective Perceptions and Experiences ; b. Uncovering Social Realities in the Field ; c. Exploring Conceptual and Local Cultural Information ; d. Flexibility in the Research Process; e. Capturing New and Complex Phenomena (Edhie Rachmad et al., 2024).
3. **Research Location and Time** The research was conducted in Serang City, Banten Province, which represents a semi-urban area with significant growth in online loan users in recent years. The research will be conducted over a period of 12 months, from May 2025 to Sept 2025.
4. **Research Population and Sample** The population in this study is the residents of Serang City who have ever used or are currently using online loan services, whether from legal or illegal platforms (11). The population of Serang City in the productive age group is 417,913 thousand people (12). a. **Sample Determination Technique** The technique used is the Isaac & Michael theory, based on the following criteria: o Be at least 20 - 59 years old (productive age) o Male and female gender o Education level o

Income level o Reside in Serang City. o Have used online loan services at least once. b. Sample Size This study uses the Isaac & Michael table theory approach to determine the sample size. The target research involved 348 respondents with a tolerance limit of 5%, in order to obtain representative results that could be analysed statistically (Adznan & Nelson, 2014).

5. Types and Sources of Data This research uses primary data obtained directly from respondents through the distribution of questionnaires. Additionally, secondary data is also used to support the analysis, sourced from literature, OJK reports, academic articles, and data from other financial institutions related to online lending (Zhang et al., 2025).

6. Data Collection Techniques Data collection techniques were carried out in the following ways: Questionnaire Distribution: The questionnaire was designed in a 1–5 Likert scale format to assess respondents' perceptions of various aspects of online loans.

Limited Open Interviews (Optional): For some selected respondents, brief interviews were conducted to explore perceptions qualitatively (Sun, 2023).

Research Instruments The instrument used is a questionnaire, which consists of 3 parts: Part A: Demographic data (age, gender, education, occupation, income, and experience using online loans).; Part B: Perceptions of the positive impacts of online loans (ease of access, speed of process, financial inclusion, etc.); Part C: Perceptions of the negative impacts of online loans (high interest rates, aggressive collection, misuse of personal data, etc.).

7. The instrument was first tested for validity and reliability through a trial run with 30 initial respondents (instrument trial) before being used on a large scale .

8. Data Analysis Techniques Data analysis is carried out through several stages as follows:

a. Validity and Reliability Test The validity test was conducted using Pearson Product Moment correlation to determine whether each question item was suitable for use. Reliability testing was conducted using Cronbach's Alpha, with a value of  $\alpha > 0.7$  indicating that the instrument is reliable (15).

b. Descriptive Statistical Analysis The data were analysed descriptively to determine: The frequency and percentage of public perceptions. The average score (mean) of perceptions for each positive and negative indicator. The distribution of perceptions based on demographics.

c. Inferential Statistical Analysis If needed, further analysis will be conducted using: Correlation Test: To determine the relationship between demographic variables and perception.

Multiple Linear Regression: To examine the influence of several independent variables (age, education, usage experience) on public perception. All analyses were performed with the aid of statistical software such as SPSS or Excel, to ensure accuracy and efficiency (Brás et al., 2024). However, the results of this study still provide an important initial contribution to understanding the dynamics of online loan usage and public perception in semi-urban areas (Dafri & Al-Qaruty, 2023).

## RESULTS AND DISCUSSION

### RESULT

#### 1. Perception of the Positive Impact of Online Loans (Y1)

**Table 1. Perception of the Positive Impact of Online Loans (Y1)**

	Descriptive Statistics								
	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance	Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
Q1	348	3.00	2.00	5.00	3.7902	0.72757	0.529	-0.983	0.261
Q2	348	2.00	3.00	5.00	3.9368	0.49959	0.250	0.952	0.261
Q3	348	3.00	2.00	5.00	3.3391	0.86891	0.755	-0.660	0.261
Q4	348	3.00	2.00	5.00	3.7960	0.48169	0.232	0.573	0.261
Q5	348	3.00	2.00	5.00	3.8075	0.66207	0.438	-0.307	0.261
Q6	348	3.00	2.00	5.00	4.0029	0.52323	0.274	1.635	0.261
Q7	348	2.00	3.00	5.00	3.7098	0.78474	0.616	-1.162	0.261
Q8	348	3.00	2.00	5.00	3.8851	0.55634	0.310	0.671	0.261
Q9	348	2.00	3.00	5.00	3.9828	0.65725	0.432	-0.671	0.261
Q10	348	3.00	2.00	5.00	3.8592	0.64888	0.421	0.768	0.261
TOTAL	348	16.00	30.00	46.00	38.1092	3.24941	10.559	0.424	0.261
Valid N (listwise)	348								

The results of the descriptive analysis of the Perception of the Positive Impact of Online Loans (Y1) from 348 respondents indicate that the assessment of the people of Serang City regarding the positive impact of online loans tends to be high and consistent. The average total score reached 38.11 out of a range of 30–46, with a standard deviation of 3.25, indicating a relatively even positive perception. Each question (Q1–Q10) had an average score ranging from 3.34 to 4.00 on a 1–5 Likert scale, confirming that respondents generally recognised the benefits of online loans, such as ease of access, speed of processing, and flexibility in using the funds. The kurtosis values, which are mostly close to zero, indicate a normal data distribution, while the low variation (variance 0.23–0.76) shows stable perceptions among respondents. This finding indicates that despite the risks, the public still views legal online lending services as a beneficial financial tool, especially for meeting emergency funding needs and supporting small economic activities.

**2. Perception of the Negative Impact of Online Loans (Y2)**

**Table 2. Perception of the Negative Impact of Online Loans (Y2)**

**Descriptive Statistics**

	N	Range	Minimum	Maximum	Mean		Std. Deviation	Variance	Kurtosis	
					Statistic	Std. Error			Statistic	Std. Error
Q11	348	3.00	2.00	5.00	4.4511	0.03128	0.58356	0.341	0.486	0.261
Q12	348	4.00	1.00	5.00	4.5029	0.02977	0.55529	0.308	2.906	0.261
Q13	348	3.00	2.00	5.00	4.4339	0.03198	0.59653	0.356	-0.112	0.261
Q14	348	2.00	3.00	5.00	4.3908	0.02947	0.54969	0.302	-0.912	0.261
Q15	348	2.00	3.00	5.00	4.5546	0.02729	0.50917	0.259	-1.559	0.261
Q16	348	3.00	2.00	5.00	4.4368	0.02843	0.53037	0.281	-0.408	0.261
Q17	348	3.00	2.00	5.00	4.4425	0.03228	0.60223	0.363	0.419	0.261
Q18	348	3.00	2.00	5.00	4.5057	0.03139	0.58558	0.343	0.141	0.261
Q19	348	3.00	2.00	5.00	4.5402	0.03132	0.58422	0.341	0.372	0.261
Q20	348	2.00	3.00	5.00	4.5431	0.03104	0.57906	0.335	-0.284	0.261
TOTAL	348	20.00	30.00	50.00	44.8017	0.17422	3.25006	10.563	0.974	0.261
Valid N (listwise)	348									

The results of the descriptive analysis of the Perception of the Negative Impact of Online Loans (Y2) on 348 respondents indicate that the perception of the people of Serang City regarding the negative impact of online loans is in the very high and uniform category. The average total score reached 44.80 out of a range of 30–50, with a standard deviation of 3.25, indicating consistent views. Each question (Q11–Q20) received an average score between 4.39 and 4.55 on a 1–5 Likert scale, reflecting strong concerns about risks such as predatory interest rates, aggressive debt collection, lack of information transparency, and misuse of personal data. Low variance (around 0.50–0.60) indicates uniformity in responses, while a kurtosis value close to zero confirms a normal data distribution. This finding confirms that the majority of respondents hold a consistent and strong negative perception, viewing the threat of online loans—especially illegal ones—as far greater than their potential benefits.

**3. Behaviour and Attitudes towards Online Loans (X)**

**Table 3. Behaviour and Attitudes towards Online Loans (X)**

**Descriptive Statistics**

	N	Range	Minimum	Maximum	Mean		Std. Deviation	Variance	Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic	Statistic	Std. Error
Y1	348	3.00	2.00	5.00	4.3908	0.03267	0.60937	0.371	0.716	0.261
Y2	348	3.00	2.00	5.00	4.4741	0.03240	0.60442	0.365	0.546	0.261
Y3	348	2.00	3.00	5.00	4.4109	0.03049	0.56873	0.323	-0.800	0.261
Y4	348	2.00	3.00	5.00	4.4569	0.03131	0.58402	0.341	-0.653	0.261
Y5	348	3.00	2.00	5.00	4.3851	0.03158	0.58905	0.347	0.339	0.261
Y6	348	3.00	2.00	5.00	4.4483	0.03332	0.62158	0.386	0.831	0.261
Y7	348	2.00	3.00	5.00	4.3879	0.03134	0.58470	0.342	-0.711	0.261
Y8	348	3.00	2.00	5.00	4.3649	0.03413	0.63666	0.405	1.191	0.261
Y9	348	3.00	2.00	5.00	4.3822	0.03333	0.62182	0.387	0.603	0.261
Y10	348	3.00	2.00	5.00	4.4253	0.03344	0.62387	0.389	0.291	0.261
TOTAL	348	22.00	28.00	50.00	44.1264	0.22498	4.19703	17.615	2.466	0.261
Valid N (listwise)	348									

Descriptive analysis of Behaviour and Attitudes towards Online Loans (X) from 348 respondents shows that the behaviour and attitudes of the people of Serang City towards online loans are in the very positive and consistent category. The average total score was 44.13 (range 28–50) with a standard deviation of 4.20, indicating relatively uniform scores. Each question item (Y1–Y10) has a high average score, ranging from 4.36 to 4.47 on a 1–5 Likert scale, indicating that respondents are generally cautious, critical, and selective when interacting with online lending services. The low variance values (around 0.57–0.64) and kurtosis close to zero indicate a normal data distribution and stable perception. This finding illustrates that society tends to prioritise caution, read terms and conditions, and check the legality of applications, thus demonstrating wise behaviour and a rational attitude towards online lending services.

**DISCUSSION**

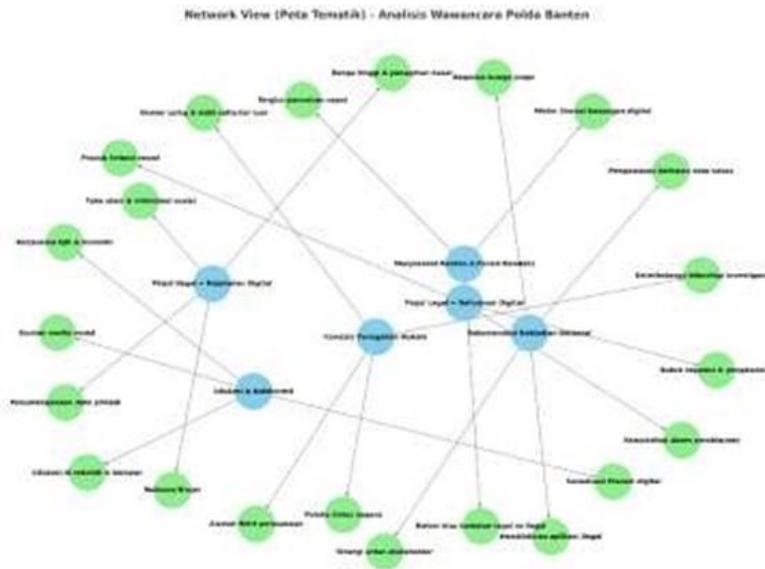
**1. Qualitative Analysis:**

Based on in-depth interviews with the Serang City Diskominfo using ATLAS.ti analysis, it was revealed that legal online loans are seen as an opportunity to expand financial inclusion. This service can help MSMEs obtain business capital and provide quick funding access for people who are not yet reached by conventional banks. However, these benefits are only optimal if supported by strict regulations and good digital financial literacy, so that people can use them wisely.

On the other hand, illegal online loans pose a major threat with the risks of exorbitant interest rates, aggressive debt collection, misuse of personal data, and social and psychological impacts such as mental stress and family conflict. The low digital literacy of the community and limited legal protection make Serang City vulnerable to illegal online lending practices. The Ministry of Communication and Information (Diskominfo) emphasises that the threat of illegal online loans is far greater than the benefits of legal online loans, so the main focus is on prevention and public education.

Blue node = Main theme (result of selective coding)





**Figure.2 Thematic Map of Banten Regional Police Interview Analysis**

The integration of questionnaire data from 348 respondents showed consistent findings: residents of Serang City acknowledged the benefits of legal online lending (average score 3.81) but perceived the risks of illegal online lending to be significantly higher (average score 4.48). Both approaches—quantitative and qualitative—highlight low digital literacy as the root of vulnerability, while also emphasising the need for a multidimensional strategy that includes improving public literacy, strict national regulation, and cross-sector collaboration as a comprehensive effort to address illegal online lending.

**CONCLUSION**

Based on the results of a questionnaire survey of 348 respondents in Serang City and in-depth interviews with the Serang City Diskominfo and the Banten Regional Police, several conclusions were drawn as follows:

1. Perception of the Positive Impact of Online Loans The people of Serang City acknowledge the practical benefits of legal online loans, especially regarding quick access to emergency funds, platform flexibility, and a simple application process. This aligns with the Diskominfo's view that legal online lending can serve as an instrument for financial inclusion and help MSMEs obtain business capital. Meanwhile, the Banten Police emphasise that legal online lending is part of digital reform and fintech innovation, which can expand public access to finance. However, both from the questionnaire and interview results, it was identified that the benefits of legal online lending are limited and conditional, namely highly dependent on strict regulations and the digital literacy of the public.
2. Perception of the Negative Impact of Online Loans Public perception of the negative impact of online loans is far higher than the positive impact, with an average score of 4.48. The most prominent risks are high interest rates, lack of information transparency, aggressive debt collection, and misuse of personal data. This view is reinforced by interviews: Diskominfo highlights socio-economic impacts such as psychological stress, domestic conflict, and economic burden; while the Banten Police view illegal online lending as a form of digital crime (cybercrime) with multiple modes, such as intimidation, malware, and data theft. This indicates that the threats of illegal online lending are more dominant than the benefits of legal online lending.
3. Public Behaviour and Attitudes The majority of respondents showed a cautious, rational, and more critical attitude towards online lending services. They tend to avoid illegal online lending, read the terms and conditions, and are aware of the importance of digital literacy. This view aligns with the Diskominfo's strategy of emphasising digital literacy education through socialisation to schools, campuses, and communities, as well as the Polda's strategy of emphasising prevention through social media-based education. Thus, both quantitative data and interviews confirm that education is the main bulwark for reducing community vulnerability.
4. Community Vulnerability and Demographic Characteristics The majority of respondents are of productive age (31–50 years old), have secondary education (junior high school – high school), and earn less than Rp

3 million per month, with 68.9% having used online loans more than three times. This data indicates potential financial dependence. The Department of Communication and Information (Diskominfo) believes the public's vulnerability is triggered by low digital literacy, while the Regional Police (Polda) emphasise that people often prioritise speed of disbursement over checking the legality of applications. This indicates that economic factors (low income) and cultural factors (low literacy) interact in creating vulnerability to illegal online lending.

5. Challenges in Handling Illegal Online Loans This aspect was not strongly explored in the questionnaire, but was clearly revealed in the interviews. The Department of Communication and Information (Diskominfo) faces constraints due to limited authority, as application blocking can only be done by the central Ministry of Communication and Information, in addition to low public participation in reporting. On the other hand, the Banten Regional Police face technical obstacles in law enforcement, such as fictitious company addresses, foreign numbers, overseas debt collectors, and limitations in digital forensic technology. This confirms that addressing illegal online lending requires cross-agency support, strong national regulations, and more advanced investigative technology capabilities.

### **Recommendations**

1. Based on the research findings and integrative analysis, the following recommendations can be made: 1. For the Government and Regulators (OJK, Kemenkominfo, and Local Governments): a) Strengthen the regulation of online loan providers, with a focus on combating illegal online loans, protecting personal data, and overseeing collection practices. b) Enhance digital financial literacy programs, particularly for vulnerable groups such as housewives, students, and MSMEs. These programs need to be conducted sustainably, community-based, and utilise social media. c) Establish cross-sectoral collaboration mechanisms (Diskominfo, OJK, Polda, educational institutions, and community groups) to ensure comprehensive prevention and handling efforts.
2. For the Public: a) The public should be more selective in choosing loan applications, ensuring they are registered with the OJK, and avoiding suspicious quick loan offers. b) It is important to read the terms and conditions in detail before using the service, and also to calculate your financial capacity to avoid falling into a debt cycle. c) Prioritise using loans for productive needs such as business capital, not solely for consumption.
3. For Law Enforcement Agencies (Regional Police and Related Institutions): a) It is necessary to increase the capacity of digital forensic technology to address cross-border illegal loan sharks. b) Strengthen international cooperation in handling illegal loan sharks based abroad, considering their transnational crime characteristics. c) Develop a faster enforcement mechanism against illegal loan sharks with coordination between the central and regional levels.
4. For Future Researchers: a) Expanding the research to other regions to compare patterns of public perception in urban and rural areas. b) Using advanced quantitative methods such as regression or Structural Equation Modelling (SEM) to identify the determinants of public behaviour and perceptions towards online lending. c) Conducting advanced qualitative research that explores the direct experiences of online lending victims, thereby enriching policy recommendations for consumer protection.
5. This research confirms that the online lending phenomenon in Serang City is a multidimensional issue involving economic, social, psychological, legal, and technological aspects. The integration of questionnaire and interview results shows that the benefits of legal online lending are still limited, while the risks of illegal online lending are very dominant. Therefore, a multidimensional and collaborative handling strategy is needed, prioritising public digital literacy, firm national regulations, and strengthening the role of law enforcement officials.

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