

## SPEED FACTORS OF CORPORATE LOAN FUNDING ON P2P LENDING LOAN IN INDONESIA

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### ABSTRACT

The financial technology business model has developed rapidly over the last few years. One of which is Peer to Peer Lending. This article aims to find out the factors that influence the speed of corporate loan funding in Peer to Peer Lending loans. The data are collected from Investree.com, one of the dominant Peer to Peer Lending service providers in Indonesia. The method used to analyze was regression analysis. There are five factors that influence the speed of corporate loan funding: interest rates, loan amount, loan duration, credit grade, and payor. The interest rate factor has a positive effect on the speed of loan funding. Loan amount, loan duration, and credit grade negatively affect the speed of funding. However, the payor does not affect the speed of funding.

### KEY WORDS

Peer to peer lending, speed of funding, companies.

The fourth industrial revolution, also referred to as Industry 4.0, had a huge impact on various sectors, such as social, economic, education, communication, and others. One of the salient impacts is the rapid development of the digital world, as seen from the growth in the use of the digital world as of January 2019, which is greater than the increase in population by 1.0% YoY. Indonesia itself has several unique mobile users reaching up to 133% of the total population. The internet users in Indonesia reaching up to 150 million with a growth of 13% yoy is a large market and has the potential for the development of financial technology or fintech (wearesocial.com, 2019). The development of the digital world is also increasing the development of the fintech. Fintech is an innovation from a company that combines digital technology and financial services.

Based on the results of the World Bank research, the development of the fintech in Indonesia has a major influence: an increase of 20% in financial inclusion through the adoption of digital financial services will provide an additional of 1.7 million jobs and an increase of 1% in financial inclusion will drive an increase in GDP growth per capita by 0.03% (deloitte.com, 2019). There are various forms of fintech businesses: cryptocurrency, payment systems (e-money and payment gateways), crowdfunding, peer to peer lending, market aggregators, and investment management. The spread of fintech companies in Indonesia is as follows: 49% (101 P2P lending companies), 33% (68 payment systems companies), 7% (14 aggregators companies), 2% (4 financial management companies), 2% (4 crowdfunding companies), 2% (4 Insurtech companies), 2% (4 KYC companies), 3% (8 other companies). Considering that distribution, the majority of Indonesia's fintech companies are dominated by Fintech P2P lending (Aftech, 2018).

Peer to peer lending financing began to emerge in Indonesia in 2015. As a regulator, Financial Services Authority or *Otoritas Jasa Keuangan* (OJK) has ratified the Financial Services Authority Regulation (POJK) Number 77/POJK.01/2016 concerning Information Technology-Based Lending Services or *Layanan Pinjam Meminjam Berbasis Teknologi Informasi* (LPMUBTI). This regulation aims to support the growth of the LPMUBTI or Fintech peer to peer lending industry as an alternative source of new financing for the public that has not been able to be served by conventional financings such as banking, capital markets, finance companies, and venture capital ([ojk.go.id](http://ojk.go.id)). According to data from the OJK per September 2019, the total P2P lending registered or licensed is 119 conventional and 8

sharia companies (OJK, 2019). In addition to legal P2P lending, the development of illegal P2P lending is increasing annually from 2017 to February 2019.

The growth of peer to peer lending is very rapid because its system provides greater access to credit compared to traditional banks and lenders who have tightened credit provision since the global financial crisis (Milne and Parboteeah, 2016). The alternative provided by the peer to peer lending companies to small entrepreneurs is a great potential to assist the development of Micro, Small, and Medium Enterprises (MSMEs) in Indonesia. The development MSMEs in Indonesia is inseparable from a variety of problems, one of which is limited capital and access from financial sources and institutions.

A study conducted by Cai et.al., (2016) showed some differences in strength between the intensity of the factors in first time lending, recurring lending without any dependent loans, and recurring borrowers who still have dependent loans. The first loan uses information on the interest rate, loan amount, loan duration, verification amount, and credit grade. For recurring loans without dependent loans, there are some additional factors, namely the history of loan transactions, both successful and failed loans. The most influencing factor loan dependencies is the ratio of loans from borrowers compared to successful loan requests in the past. Then, another study conducted by Zhang et.al. (2017) revealed that the annual interest rate, payment period, description, credit grade, number of successful loans, number of defaulted loans, gender, and credit grade are significant factors in the success of loans funded.

This study aims to analyze the factors of the speed of peer to peer lending loan funding in Indonesia, especially those offered on the investree.com website.

The problem in this study is the absence of (from the researchers' observations) research on the factors that influence the speed of funding in peer to peer lending. This article aims to analyze the factors that influence the speed of funding. It is also expected to be useful in terms of theoretical as well as practitioners. Theoretically, it is used as an alternative to adding insight and reference sources for further research relating to the theory of signaling and funding in P2P lending. Whereas, the benefits for practitioners are providing information to parties involved in P2P lending activities, especially those carrying out lending activities, both applying for loans and gaining benefits on both sides and giving an idea to the world community about the factors that influence the speed of funding in P2P lending.

## **LITERATURE REVIEW**

The theory used in this article was the signaling theory. Signaling theory explains that a signal will be given by the sender (the borrower) in the form of relevant information utilized by the recipient (lender). The recipient will make his decision according to the signal that is captured and interpreted. Since the signal giver and receiver often have a partial competitive interest, the lower signal giver can "cheat" intentionally to produce a false signal so that the signal receiver will receive it (Johstone and Grafen, 1993).

The framework of signaling theory is divided into three main focuses: signal giver, signal, and signal receiver. The signal giver in P2P loans is in the form of borrowers, P2P websites, or other potential lenders, and the signals in the form of information about loans and recipients potential lenders (Connely et al, 2011)

Signaling theory has a framework of how a company/borrower (sender) gives signals in the form of information about loans. The information is very important to influence the lender to provide funds and the speed at which the loan is fulfilled. This information includes the interest rate, loan duration, loan amount, credit grade, and payor. The information provided is expected to be interpreted positively for the signal receiver (the lender) so that it will accelerate the loan funding.

Peer to peer lending is an illustration of an online market where Peer to peer lender is a form of cooperation scheme between one party and another. Peer to peer lending is an interaction between lenders/investors who provide funds to borrowers without traditional institutional processes and structures.

Technological developments encourage profit lending activities carried out online through a place or marketplace, can lend to individuals or businesses/companies (borrowers). In this case, the funding can be obtained from several individuals.



Figure 1 – P2P Lending Scheme

### The Speed of Funding

The company needs funds to finance its operations and development. Funds can be obtained from debt financing or the sale of shares for companies that go public. Debt funding is expected to increase the value of the company but also has a risk for the company when dealing with difficulties and the inability to pay the loan installments so the company will go bankrupt. Funding is proposed by considering the time, both the time needed to reach the needed funds and the loan duration. The faster the funds are disbursed, the faster the company's problems are resolved.

### Development of Hypothesis

#### *The Effect of Loan Amount on the Funding Speed*

Feng et al (2015) and Pope & Sydnor (2008) revealed that the greater the possibility of the loan amount, the smaller the success rate of funding. According to Puro et al. (2010), a smaller number of loans increase the probability of loan success. While according to Shun Cai et al. (2016), there is no evidence that a larger loan amount will reduce the probability of funding demand. The results of his study indicate that the loan amount is positively related to funding successful.

#### *Hypothesis 1: The loan amount influences the speed of funding*

#### *The Effect of Loan Duration on the Funding Speed*

Galak et al. (2011) proposed that the duration of the loan is related to the return on investment and the remaining loan. Based on Lee and Lee (2012), loan requests with short payback periods will be more attractive for funding.

#### *Hypothesis 2: Loan duration has a negative effect on the speed of funding*

#### *The Effect of Interest Rates on the Funding Speed*

The higher the interest rates, the bigger the possibility to be successful in the first time loans (Cai et al, 2016). Interest rates are an effective signal for loan requests because they reflect the level of willingness to be paid by the borrower. High-interest rates reflect the financial benefits to be obtained by the lender and the level of the borrower's confidence in economic status so that it will increase the lender's confidence in funding

#### *Hypothesis 3: The interest rates have a positive effect on the speed of funding*

#### *The Effect of Credit Grade on the Speed of Funding*

Fredman and Jin (2014) showed that the borrower's credit grade is positively related to the loan success rates. According to Cai et al. (2016), a higher credit grade will increase the likelihood of successful funding for first-time loans.

#### *Hypothesis 4: Credit grade has a positive effect on the speed of funding*

#### *The Effect of Payor on the Speed of Funding*

Payor is a company that has a business to business cooperation relationship with the borrower. This payor will pay the bill. Payor can be likened to collateral. Previous research on

guarantees is due to the absence of research on payor, so it is likened there is a significant relationship between risk and the availability of collateral (Argentiero, 2016). This situation shows that collateral is used as a mitigation of credit risk that will arise. Wesaratchakit et al.(2010) investigated that established companies with good financial statements, low leverage ratios, and sufficient credit guarantees can increase the number of loans they propose. However, there are differences in the results of research from Nuryartono et al., (2005); Bebczuk, (2004); Wanja et al., (2014); Le, (2012) in several developing sectors, that the characteristics of MSMEs, the characteristics of the owners, and the characteristics of loans play a role in accessing credit approval to banks. The characteristics of MSMEs include: age of the company, ecto, company experience, type of business, risk profile, flow of funds, target market, and information on availability of the inputs. The characteristics of the owner include: age of entrepreneur/owner, gender, experience, and household expenses. The characteristics of loans include the amount of credit, the term, the purpose of the use of funds, collateral, interest rates, and administrative obstacles.

Hypothesis 5: Payor has a positive effect on the speed of funding

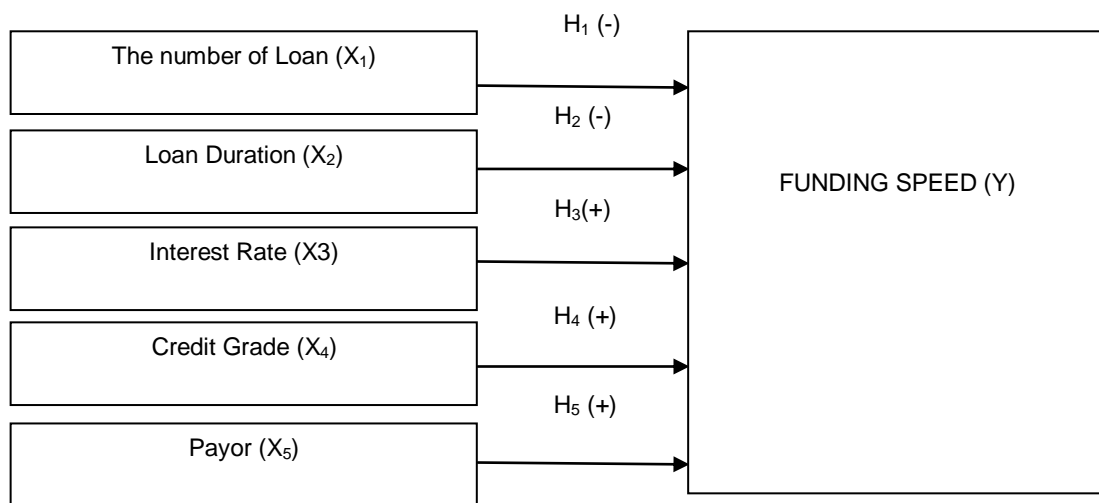


Figure 2 – Conceptual schema

## METHODS OF RESEARCH

### Data and Sample

This study used a quantitative approach. This research was conducted using secondary data from the Investree.com website during July-August 2019. The population in this research is companies that apply for loans through the Peer to Peer Lending platform. The sampling technique used was a purposive sampling. The sample is selected based on certain considerations. The criteria used to determine the sample in this study are as follows:(1) Companies applying for loans at Investree and offered during July-September 2019, (2) Corporate loans that have reached the completed funding listed on the website (funded 100%). The population of this study was 160 loans, but those fulfilling the criteria as a sample are 149 loans.

### Operational Definition and Variable Measurement

Explaining how the researchers measured the variables. The following is the definition of variables used in the research (Brigham and Houston, 2012). The dependent variable in this study is the speed of funding. The speed of funding is measured from the loan being offered until the loan reaches 100%/funding. The speed of funding is the time required until the funding is completed (days). The time span used in this research is six hours. Therefore, the observations are made for four times a day.

The independent variable consisted of 5 variables. (1) The number of loan is the amount of money submitted by the borrower. The range of loans that can be submitted is up to Rp.2,000,000,000. (2) The credit grade is determined by the investree team when prospective borrowers apply for loans. The investree team analyzes, selects, and approves loan applications by using billing documents with a credit-scoring system. Credit scoring is used to determine the business-grade and its risk level. The results of this analysis are called loan grade. Loan grade ease the lenders to choose funded loans. (3) The interest rate refers to the level of risk produced by credit-scoring. Interest rates are based on the loan grade results. The higher the level of risk, the higher the interest rate that will be obtained by the lender. (4) The duration of the loan is determined by the borrower when applying for the loan (days). The duration of the loan is proposed within a year. (5) The payor is the third party who guarantees the invoice and pays the loan bill. The payor has a partnership with a company that offers loans to fund. The payor is in the form of public companies, multinational companies, Stated-Owned Enterprise, and sharia government institutions. The dummy variable is used in payor, 1 for loans with payor, and 0 for loans without payor.

Descriptive statistics describe data seen from the mean, standard deviation, variance, maximum, minimum, sum, range, kurtosis, and skewness (distribution inclination) (Ghozali, 2005). The classical assumption test is a test to determine the feasibility of the regressed model, whether it meets the classical assumptions which include multicollinearity, autocorrelation, heteroscedasticity, and normality (Gujarati, 2004: 93). However, this study did not perform the autocorrelation test because this research was not a time-series study. The linearity test was also not conducted for the same reason.

Hypothesis testing measures the strength of the relationship between two or more variables, but it also shows the direction of the relationship between the dependent variable and the independent variable. After the regression model meets the classical assumption test requirements, the next step is to analyze the regression results:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e$$

Where: Y = Speed Funding; X1 = Loan Amount; X2 = Loan Duration; X3 = Interest Rate; X4 = Credit grade; X5 = Payor.

## RESULTS AND DISCUSSION

The independent variables used are the number of loans, the duration of the loan, the interest rate, credit and payor's level, while the dependent variable is the speed of funding. The score of the Kolmogorov-Smirnov test is 0.20, which means greater than 0.1 or 10%. This means that the data is normally distributed. Data is normally distributed if the Asymp.Sig (2-Tailed) coefficient is greater than  $\alpha = 0.10$ . Multicollinearity test is done by looking at the tolerance value and Variance Inflation Factor (VIF). Tolerance measures the variability of selected independent variables that are not explained by other independent variables. Therefore, a low tolerance value is the same as a high VIF value (because of  $VIF = 1/Tolerance$ ). The value commonly used to indicate the presence of multicollinearity is a tolerance value  $<0.10$  or equal to a VIF value  $> 10$  (Ghozali, 2005). The test results showed that the tolerance value of the variables in this study ranged from 0.432 to 0.861 while for VIF ranging from 1,147 to 2,313, so it can be concluded that there was no multicollinearity. The autocorrelation test is performed using the Durbin Watson (DW) test with the following conditions: (1) positive autocorrelation occurs if the DW value is below -2 (DW  $<-2$ ); (2) autocorrelation does not occur if the DW value is between -2 and +2 ( $-2 < DW < +2$ ); (3) auto negative correlation occurs if DW is above +2 (DW  $> +2$ ) (Sunyoto, 2009). The test results show that the DW value is 1.343, meaning that there is no autocorrelation because the DW value is between -2 and +2 ( $-2 < DW < +2$ ). The heteroscedasticity test is a test regarding the variance that is similar or not from one observation to another. If the variance from one observation residual to another observation is fixed, it is called homoscedasticity and if the

variance is different, it is called heteroscedasticity. This study used scatterplot diagrams to test heteroscedasticity.

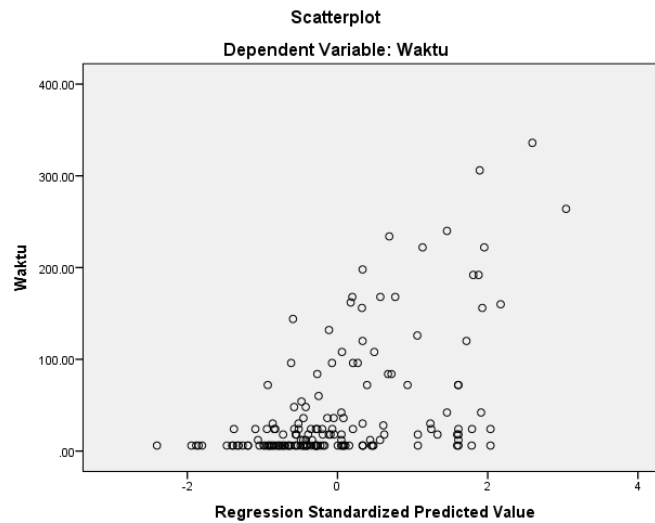


Figure 3 - Scatterplot Heteroscedasticity

Table 1 – The Results of the Regression Test

Model	Unstandardized Coefficients		Sig.	Adjusted R Square
	B	Std.Error		
1				
(Constant)	134,054	42,443	0.002	0.263
The Number of Loan	2.972E-08	0	0.000	
Loan Duration	0.240	0.065	0.000	
Interest Rate	-978,261	276.77	0.001	
Credit grade	9.701	3.332	0.004	
Payor	-21.00	16.182	0.196	

*Dependent Variable: Time.*

The adjusted R2 value is 0.263 or 26.3%. This means that 26.3% of the speed of funding can be explained by five independent variables (loan amount, loan duration, interest rates, loan rates, and payor), while the rest are caused by external factors. Based on the statistical tests, we draw the following conclusions. Statistical t-test results will be significant if the variable has a score below 10%. The result of the loan amount is 0%, meaning that the number of the loan has a positive effect on the timing of funding. In other words, the smaller the number of loans, the higher the speed of funding. These results support the study conducted by Wiranata and Nugrahanti Puro et al. (2010). The smaller the number of loans, the bigger the probability of loan success.

The result of the loan duration variable is 0.00%, meaning that the longer the loan duration, the longer the time needed for funding. This means that the loans offered with a shorter duration will be quickly funded. This supports the study conducted by Galak et al. (2011), showing that loan duration is negatively related to investment returns and loan balance. Based on Lee and Lee (2012), loan requests with short payback periods will be more attractive for funding.

The result of regression test for interest rate by 0.1% with a negative coefficient indicates that the smaller the interest rate offered to be funded, the longer funding time will be required. It means that the smaller the interest rate offered in the loan, the slower the speed of funding. This means that the higher the interest rates, the bigger the possibility of successful funding for first-time loans (Cai et al, 2016). The interest rates are an effective signal for loan requests because they reflect the level of willingness to be paid by the borrower. High-interest rates reflect the financial benefits to be obtained by the lender and

the level of the borrower's confidence in economic status so that it will increase the lender's confidence in funding.

The result of regression test for the credit grade by 0.4% indicates that the higher the level of loan credit offered, the lesser the time needed. It means that the higher the level of credit, the faster it will be funded. This is in line with the research done by Fredman and Jin (2014), showing that the borrower's credit grade is positively related to the success rate of loans. According to Cai et al. (2016), a higher credit grade will increase the likelihood of successful funding for first-time loans.

The results of the payor test by 19.6% indicate that the payor does not have a positive effect on the speed of funding. This is not in accordance with the hypothesis that the payor has a positive effect on the speed of funding because the payor is likened to collateral. It is because the lenders of online lending focus on the characteristics of the borrowing company such as company age, assets, company experience, type/business sector, risk profile, fund flow, target market, and information on the availability of inputs as well as loan characteristics including the amount of credit, the loan duration, the intended use of the fund, the interest rate, and the borrower's record.

## CONCLUSION

Based on the analysis and discussion of research hypotheses, it can be concluded that the number of loans negatively affects the speed of funding in P2P Lending in Indonesia. The duration of the loan also has a negative effect on the speed of funding on P2P Lending in Indonesia. Interest rates have a positive effect on the speed of funding on P2P Lending in Indonesia. Credit grade also have a positive effect on the speed of funding in P2P Lending in Indonesia. While the payor does not affect the speed of funding in P2P Lending in Indonesia. Company size does not have a positive effect on the financial performance of airlines. Limitations of this study are: the sample of this study is only big companies.

## REFERENCES

1. Brigham, E. F., & Houston, J. F. (2012). *Dasar-Dasar Manajemen Keuangan*. Jakarta: Salemba Empat.
2. Cai, S., Lin, X., Xu, D., & Fu, X. (2016). Judging Online Peer-to-Peer Lending Behavior: A Comparison of First-Time and Repeated Borrowing Request. *Journal of Information and Management*, 53(7), 857-867.
3. Connely, B. L., Certo, S., Ireland, D., & Ruetzel, C. R. (2011). Signalling Theory. *Journal of Management*, 37(1), 39-67.
4. DeAngelo, H., & Masulis, R. W. (1980). Optimal Capital Structure Under Corporate and Personal Taxation. *The Journal of Finance Economics*, 8, 3-29.
5. Efferin, S., Darmadji, S. H., & Tan, Y. (2008). *Metode Penelitian Akutansi; Mengungkap Fenomena dengan Pendekatan Kuantitatif dan Kualitatif*. Yogyakarta: Graha Ilmu.
6. Feng, Y., Fan, X., & Yoon, Y. (2011). Lenders and Borrowers "Strategies in Online Peer-to-Peer Lending Market: An Empirical Analysis of PPDAl.com. *J Electron Comm Res*, 16(3), 242-260.
7. Galak, J., Small, D., & Stephen, A. T. (2011). Microfinance Decision Making: A Field Study of Prosocial Lending. *J Mark Res*, 48, 21-29.
8. Ghozali, I. (2005). *Aplikasi Analisis Multivariate dengan SPSS*. Semarang: Badan Penerbit UNDIP.
9. Johstone, R. A., & Grafen, A. Dishonesty and The Handicap Principle. *Anim, Behav*, 46(4), 759-764
10. Lee, E., & Lee, B. (2012). Herding Behavior in Online P2P Lending: An Empirical Investigation. *Electron Comm Res Apl*, 11(5), 496-503.
11. Leland, H., & Pyle, D. (1977). Information Asymmetries, Financial Structure, and Financial Intermediation. *Journal of Finance*, 32, 371-837.

12. Milne, A., & Parboteeah, P. (2006). The Business Models and Economics of Peer-to-Peer Lending. ECRI Research Report, 17, 27-36.
13. Mitic, M., & Alexandros, K. (2012). Understanding The Role of Social Media in Bank Marketing. *Marketing Intelligence and Planning*, 30(07), 67-76.
14. Modigliani, F., & Miller, M. (1963). Corporate Income Taxes and The Cost of Capital :A Correction. *The American Economic Review*, 53(3), 433-443.
15. Pope, D. G., & Sydnor, J. R. (2008). What's in Picture? Evidence of Discrimination from Prosper.com. *J Hum Resour*, 46(1), 53-92.
16. Puro, L., Teich, J. C., Wallenius, H., & Wallenius, J. (2010). Borrower Decision Aid for People-to-People Lending. *Decision Support System*, 49(1), 52-60.
17. Sekaran, U., & Bougie, R. (2010). *Research Method for Business: A Skill Building Approach*. New York: John Wiley @ Sons.
18. Spence, M. (1973). Job Market Signaling. *The Quarterly Journal of Economics*, 87(3), 353-274.
19. Sunyoto, D. (2009). *Analisis Regresi dan Uji Hipotesis*. Yogyakarta: Media Pressindo.
20. Zhang, Y., Li, H., Hai, M., Li, J., & Li, A. (2017). Determinants of Loan Funded Successful in Online P2P Lending. *Procedia Computer Science*, 122 (2017), 896-901.
21. Wearesocial.Com. (2019). Special Reports: Digital 2019: Global Internet Use Accelerates. Retrieved from <https://wearesocial.accelerates.com/>
22. OJK. (2019). Perusahaan Fintech Lending Berizin dan Terdaftar di OJK per 30 September 2019. Retrieved from <https://www.ojk.go.id/id/berita-dan-kegiatan/publikasi/Pages/-Penyelenggara-Fintech-Terdaftar-dan-Berizin-di-OJK-per-30-September-2019.aspx> pada 05 Oktober 2019 16:00
23. Peraturan OJK Nomor 77/POJK.01/2016 Tentang Layanan Pinjam Meminjam Uang Berbasis Teknologi Informasi.