

SUCCESS FACTORS OF EQUITY CROWDFUNDING AND RURAL BANKS FAKTOR KEBERHASILAN URUN DANA EKUITAS DAN BANK-BANK PEDESAAN

Sumiyati*

Bangka Belitung University *Corresponding Author: sumiyati.lec2019@gmail.com

INFOARTIKEL	ABSTRACT	
Histori Artikel: Tanggal Masuk 26 Oktober 2023 Revisi Diterima 5 Desember 2024 Tanggal Diterima 22 Maret 2024 Tersedia Online 31 Maret 2025	The campaign success factors of Equity Crowdfunding (ECF), such as the size of the project to be financed, profitability, liquidity, the amount of funding successfully funded by investors, the age of the company, and the number of targets achieved, influence company owners to choose bank financing or ECF. This research aims to determine whether ECF can replace the role of banks or complement it. The population of this study is made up of banks and ECF fintech institutions in Indonesia. The sample banks have at least one branch	
Keywords: Equity	Conce in a region, while ECF institutions are ECFs that have an omcial	
Crowdrunding, Danking,	with logistic regression The research results indicate that ECE can	
profitability, liquidity	replace the role of banks, especially for start-up companies, but can also complement the role of banks, especially for MSMEs whose businesses have been running for a long time. This research is expected to provide a new perspective on the role of ECF and banks, especially for small and start-up companies, which are currently growing very rapidly and can support the national economy.	
Kata Kunci: Equity	ABSTRAK	
fintech start-up	Eaktor-faktor keberhasilan kampanye Equity Crowdfunding (ECF).	
profitabilitas. likuiditas	seperti besar kecilnya proyek yang akan dibiayai, profitabilitas,	
p	likuiditas, jumlah pendanaan yang berhasil didanai oleh investor, usia	
	perusahaan, dan jumlah target yang dicapai, mempengaruhi pemilik	
	perusahaan untuk memilih pendanaan dari bank atau ECF. Penelitian	
	ini bertujuan untuk mengetahui apakah ECF dapat menggantikan	
	peran bank atau melengkapinya. Populasi penelitian ini terdiri dari	
	sampel adalah hank yang memiliki setidaknya satu kantor cahang di	
	samper adalah bahk yang memiliki seluaknya salu kantor cabang di	

suatu wilayah, sedangkan lembaga ECF adalah ECF yang memiliki izin resmi dari Otoritas Jasa Keuangan (OJK). Hasil penelitian menunjukkan bahwa ECF dapat menggantikan peran bank, terutama untuk perusahaan start-up, tetapi juga dapat melengkapi peran bank, terutama untuk UMKM yang bisnisnya sudah berjalan lama. Penelitian ini diharapkan dapat memberikan perspektif baru mengenai peran ECF dan bank, khususnya bagi perusahaan kecil dan start-up yang saat ini berkembang sangat pesat dan dapat mendukung perekonomian nasional.

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1. Introduction

Equity Crowdfunding, in common parlance, is referred to as crowdfunding. The word "crowdfunding" refers to a type of fundraising that takes place online and involves a group of individuals raising money, usually in the form of (very) small individual contributions to support a specific cause. (Mollick, 2014)). In the past, crowdfunding was used to collect donations to develop non-profit, cultural and social projects through campaigns on social media. Recently, crowdfunding has become a popular method for funding new businesses. The reason that initiated this activity when in the past many of these innovative projects could not be funded because they were too risky for banks, had too low returns and expensive transaction costs for private equity and venture capital funds, and had too high capital requirements for family and friends. (Hornuf & Schwienbacher, 2017). With crowdfunding, small business owners are more likely to fund their projects by selling small equity or bond-like shares to the general public.

Equity crowdfunding (ECF) is a form of venture capital. (Ahlers et al., 2015). Suppose venture capital is a form of investment in the form of equity participation as a partner in a company. In that case, ECF is an "unsophisticated" form of venture capital where ECF is equity participation through a fintech company that brings together capital owners (investors) with share issuers (investees) where most capital owners are not investment experts. In short, ECF is the issuance and sale of equity in the form of shares, where the funds deposited become equity for the issuing company in exchange for dividends paid annually (Freedman & Nutting, 2015). Although similar to venture capital, there are major differences between the two. ECF is a form of crowdfunding from investors to finance a business or project, while venture capital is financing to a company for a business in the form of a loan. In terms of investors, ECF provides an opportunity for anyone to become an investor, while a venture capital company provides venture capital to a company, so not everyone can become an investor.

The main reason for the development of ECF is the difficulties MSMEs face in directly accessing financing through banking services or the capital market. Therefore, ECF became an

initiating step in realizing the provision of capital for MSMEs and became a bridge between MSMEs and financiers directly. ECF is growing rapidly around the world, including Indonesia. In addition to the rapid advancement of information technology, Indonesian MSMEs face capital problems. MSMEs contribute 99% to economic growth because they can absorb nearly 97% of the labor force. (Shalihah et al., 2022).. Therefore, ECF is growing rapidly in several countries worldwide, such as Germany, the United Kingdom, the United States and others.

The first two ECF companies in Indonesia licensed by the Financial Services Authority (OJK) are Bizhare and Santara. These two ECF companies have been doing business since 2019 under PT Santara Daya Inspiratama and PT Investasi Digital Nusantara. The two companies have raised more than Rp 150 billion with more than 150 thousand investors by financing more than 100 business units, especially MSMEs in Indonesia. Until 2022, 10 ECFs/SCFs will have obtained OJK licenses, which is evidence that the ECF campaign to raise funds has been successful. Yasar (2021) mentioned that research on ECF in developing countries is still limited, so this is an opportunity for future research. Thus, it is important to study ECF, especially to determine the success or even failure of ECF in replacing or complementing the role of banks in Indonesia.

ECF is one form of digital innovation that contributes to the growth of MSMEs (Hervé & Schwienbacher, 2018). On the contrary, the study's results (Eldridge et al., 2021) (Eldridge et al., 2021) stated that ECF has no effect on innovation in small companies but has an effect on business growth in these small companies. With such contributions, the question is whether ECF can replace the role of banks and venture firms as institutions providing capital loans to small entrepreneurs. Several studies on ECF focus on the factors that influence ECF's success from the capital market's perspective. (Hornuf & Schwienbacher, 2017; Mokhtarrudin et al., 2017), The perspective of entrepreneurs (Miglo, 2022; Ralcheva & Roosenboom, 2020; Li et al., 2017; Vismara, 2016; Bapna & Ganco, 2021; Hornuf & Schmitt, 2016)institutional perspective (Cholakova & Clarysse, 2015; Moysidou & Hausberg, 2020; Bretschneider & Leimeister, 2017; Hornuf & Neuenkirch, 2017; Vismara et al., 2017; Abrams, 2017; Hervé et al., 2019), platform perspective (Hornuf & Schwienbacher, 2017; Itenberg & Smith, 2017).

Several other studies have also analyzed the role of ECF and traditional financing institutions such as banks and venture capital. Walthoff-Borm et al. (2018) stated that companies listed on ECF platforms are less profitable than other financing.) stated that companies listed on the ECF platform are less profitable. While Kukurba et al., 2021 concluded that ECF is not only an alternative financing innovation but also has economic added value. Meanwhile, another study states that the role of ECF in replacing the role of banks is very small. (Erel, 2020)Instead, the two complement each other (Cole et al., 2019; Mamonov & Malaga,

2019; Ellman & Hurkens, 2019). On the other hand, ECF is considered capable of replacing the role of banks, especially for small entrepreneurs who find it difficult to access bank financing (Balyuk et al., 2020). (Balyuk et al., 2020) and start-up companies (Kit, 2021; Cumming et al., 2021; Salim & Kassim, 2019; Mokhtarrudin et al., 2017; Boitan, 2016). A study (Blaseg et al., 2021) states that entrepreneurs choose to use ECF due to the pressure of large bank requirements.

Based on some previous studies, there is a gap in the research regarding the opinion on the complementary or substitutive role of banks and ECF, which has yet to be agreed upon. Miglo (2022) concluded that companies with good quality and large market potential choose to use bank financing, but companies tend to use ECF to finance projects. It indicates the campaign success factors of ECF, such as the size of the project to be financed, profitability, and liquidity. The amount of funding successfully funded by investors, the age of the company and the number of targets achieved influence the company owner to choose bank financing or ECF.

This research aims to see how likely ECF can replace the role of banks or even complement each other. This research is expected to provide a new perspective on the role of ECF and banks, especially for small and start-up companies, which are growing rapidly and can support the national economy. This paper has several sections consisting of an introduction, literature review, methodology used, results and discussion and conclusions.

2. Literature Review

2.1. trade-Off Theory

Modigliani and Miller (1963) initiated the trade-off theory, who argue that companies that use debt have higher firm value than companies that do not. Using debt, companies can balance tax, agency, and bankruptcy costs (Ghazouani, 2013). (Ghazouani, 2013). Trade-off theory, focusing on analyzing the costs and benefits of debt, predicts an optimal debt ratio that helps maximize a company's value. The optimal point is reached when the benefits of issuing debt securities are offset by an increase in the present value of the costs associated with issuing debt (Jahanzeb et al., 2013). (Jahanzeb et al., 2015).. This theory contradicts the theory of Fama & French, 2002 which states that companies with high profitability tend to reduce debt. The argument for the need for debt for companies is that when companies have debt, it is beneficial in reducing tax debt.

According to the trade-off theory, managers should choose a debt ratio that maximizes firm value (Brealey et al., 2008). So according to the trade-off theory, a firm's capital structure decision leads to a target debt ratio, where the tax shelter of debt is maximized, and the bankruptcy costs associated with debt are minimized. According to (Myers, 2001), debt offers

tax protection for the firm. Based on the theory of Modigliani and Miller (1963), the advantage is that debt interest can be deducted before paying taxes. (Titman, 2013). So companies increase the level of debt to get maximum tax benefits but, on the other hand, increase the risk of possible bankruptcy. The theory predicts that highly profitable firms will have higher debt levels to maximize tax benefits and increase capital availability. The static trade-off theory is stated by (Bradley & Taylor, 2002). They made the following conclusions based on their static trade-off model:

An increase in the cost of financial distress reduces the optimal level of debt.

An increase in the non-debt tax shield reduces the optimal level of debt.

An increase in the personal tax rate on equity increases the optimal level of debt.

In the optimal capital structure, an increase in the marginal bondholder tax rate reduces the optimal level of debt.

The effect of risk is ambiguous, even if uncertainty is assumed to be normally distributed.

2.2. Crowdfunding

According to the European Commission's Guide on Crowdfunding (2020), Crowdfunding is an alternative business model that aims to raise money rather than traditional banking. Demand for money and supply intersect on an online platform (website); the goal is to channel financing for startups, small businesses and new projects. The European Parliament and the Council (2020) define crowdfunding as a financing alternative to mainstream banking that contributes to developing a pluralistic and resilient social market economy. The European Central Bank (2015) includes crowdlending among the promising pool of alternative financing sources due to its potential to provide tailor-made financing to the specific needs of small entrepreneurs. Crowdfunding aims to raise small amounts of funding with easy and secure money from individuals or groups. Crowdfunding platforms advertise in advance the project to be financed; if the fundraising campaign is successful, those who have applied for financing will be charged by the platform.

In principle, most platforms operate with little or no funding, meaning that if the crowd gives money in a total amount that exceeds a pre-determined target, the "borrower" will receive the money; otherwise, each individual will get their money back, and the business or project will not be financed. Crowdfunding platforms screen businesses for fundraising, based on some creditworthiness criteria, before promoting their business or project idea on the online platform. (Wenzlaff et al., 2020)

The European Commission's Guide on Crowdfunding (2020) identifies seven types of Crowdfunding, including (1) Peer-to-peer lending. This form of crowdfunding lends money to small businesses or individuals and expects the money to be repaid with interest. It is very similar to a traditional loan from a bank, except the amount is borrowed from many investors; (2) Equity crowdfunding. A form of crowdfunding with the sale of shares in a small or medium size business, holders expect a return for their investment; (3) Reward-based crowdfunding. A form of crowdfunding for project or business ideas, by obtaining in exchange some non-financial reward; (4) Donation-based Crowdfunding. A form of Crowdfunding that relies on voluntary donations made by individuals to a specific project, without expecting any reward or return, neither financial nor tangible; (5) Profit-sharing crowdfunding. A form of crowdfunding with an agreement that small businesses make to share future profits with individuals who provide them with current funds; (6) Debt securities crowdfunding. A form of crowdfunding where people invest money in debt securities, usually bonds issued by small businesses; (7) Hybrid models. A form of crowdfunding that combines features of several crowdfunding typologies.

2.3. Equity Crowdfunding

ECF allows individuals and institutional investors to invest in entities not listed on the capital market (issuers) in exchange for shares in the entity. By definition, equity crowdfunding caters to funding legal entities that can raise funds by selling them equity. ECF is particularly suitable for startups and especially MSMEs. If the investment target is reached and the investor, issuer and platform agree, then the offering is closed. The platform charges a commission based on the amount raised or future profits.

ECF comes with risks and benefits. The main benefit lies in the efficient and effective intermediation of funds that allows lenders to invest in new assets for higher returns and makes it easier for entrepreneurs to access funding (Kirby & Worner, 2014). Specifically, ECF has several benefits, including (1) Benefits for funders' access to startup and SME-related investment opportunities are typically limited to traditional financial intermediaries and venture capitalists. Equity fundraising opens up these opportunities to a much broader group of funders (Gubler, 2014)(2) Unlimited potential to gain access to finance because, in contrast to Peer to peer (P2P) lending, funders have (at least theoretically) the possibility to multiply their investment indefinitely if they place their funds in new startups that are likely to become the next market leaders; (3) Aligned incentives between funders and fundraisers which is what distinguishes ECF from other Crowdfunding. ECF emphasizes that the interests of funders and fundraisers are aligned because they share the same risks (including the risk of dilution and financial loss) and have similar options to conduct other activities such as a sale, merger, or initial public offering (IPO). It will reduce conflicts of interest between the two parties; (4) Advantages for fundraisers Limited liability where in some cases, these ECF fundraisers are not burdened with unlimited liability for unpaid debts and instead, funders accept liability in proportion to the amount of fundraising provided.

Another benefit of the ECF is that it can also increase investment attractiveness. Indicators of campaign success signal to established investors (including venture capitalists) that they can attract additional funding sources. Moreover, the global reach allows equity fundraising access by funders or investors worldwide. It is particularly relevant for countries where capital markets still need to be robust. In addition to the benefits, some risks are associated with using an ECF platform regarding liquidity. A recent study showed that of the 367 businesses that used five UK ECF platforms between 2011 and 2013, only 22 percent could raise higher-value funds and realize returns to their investors. (Signori & Vismara, 2016). It is most likely because early-stage ventures and MSMEs are inherently risky, and risk is further compounded by the lack of incentive for individual investors to investigate in depth given their small share capital.

According to Jenik et al. (2017), Another liquidity risk of investments made through Crowdfunding is the possibility of dilution when the business needs additional capital later and issues new shares to new investors. Liquidity poses a big risk to Crowdfunding because the options available for exit are very limited. Without a secondary market, investors can make offers to interested parties, wait until a strategic investor merges to acquire the company, or issues an IPO. However, there needs to be more evidence on how likely these scenarios are.

Another issue around the fundraising protection gap in ECF occurs when compared to P2P. ECF is marketed to fundraising as a simpler, easier and cheaper way to fund business development (compared to traditional sources of capital). Fundraising can be through campaigns that incur compliance costs related to reporting, management fees and other costs related to risk assessment, Etc. ECF also requires a higher level of disclosure (Johan & Zhang, 2020; Ibrahim, 2015). However, ECF only requires more disclosure, revealing too much information to competitors, which may harm intellectual property (patent) protection.

Start-up companies that successfully obtain external capital from various types of investors can convey their financial quality and strength. Such companies will increase their chances of success with ECF. Companies with good financial capabilities will show good leverage signals in the future (Yasar, 2021). (Yasar, 2021). Market participants and regulators will determine the future orientation of capital markets. Investors will only use alternative financing if they depend on it if their expectations are met. However, if people use ECF as a new idea that can increase profitability, then ECF can work well. (Cohen, 2017). Walthoff-Borm et al. (2018) argued that there is a positive relationship between ECF and the financial performance of MSMEs, which means that the success of the ECF campaign is highly dependent on the financial performance of the MSMEs themselves. Based on the above arguments, the hypothesis can be stated as follows:

Ha1: Project size has a positive effect on ECF success

Ha2: the amount of investor funding has a positive effect on ECF success Ha3: Company age has a positive effect on ECF success

In theory, bank financing and ECF complement or substitute each other. There are several reasons why ECF and bank financing may substitute each other (Cole et al., 2019). The first reason is that banks and ECF have similar capabilities in offering to the market to raise funding. Second, ECFs offer a more variable cost deal alternative to banks (D. Cumming et al., 2019). (D. Cumming et al., 2021).

Ha4: nonperforming loans has a negative effect on Bank success

Ha5: liquidity has a positive effect on Bank success

Ha6: profitability has a positive effect on Bank success

While some other studies mention that banking and ECF can complement each other for reasons such as entrepreneurs, especially new entrepreneurs, need bank debt to start a project, especially for costs not directly related to the project such as salary costs, office rental costs and others. (Gartner et al., 2012; Robb & Robinson, 2014; Larsson & Truong, 2022). The next reason is that banks usually have data that can support information about companies related to their credit reputation. Cole & White (2017) found evidence that start-up companies obtaining bank financing can grow faster. Financing provided by the government to MSME entrepreneurs is usually deposited with government-owned commercial banks. It can also be accessed, while the ECF can serve as a facility for IPOs for these MSMEs. (Jeppsson, 2018; Nahata et al., 2014). Thirdly, entrepreneurs tend to access financing from multiple sources so that both ECFs and banks can be the choice of entrepreneurs (Cumming & Johan, 2014). (Cumming & Johan, 2014). Some companies choose ECF because of uncertain market conditions and rely heavily on how the company communicates to investors. Meanwhile, using banks, companies must be charged a fixed price based on rules (Xu et al., 2020).

Ha7: ECF can replace the role of banks in meeting the needs of small and medium enterprises

3. Research Methodology

3.1. Samples And Data

The population of this study is banks and ECF fintech institutions in Indonesia. The sample banks with at least one branch office in a region, while ECF institutions are ECFs that have an official license from the Financial Services Authority (OJK). Data from OJK is used from 2020 to 2022 to identify these banks and ECF institutions. The banks referred to in this study provide financing to MSMEs, namely conventional People's Bank Pembiayan Rakyat (BPR) with the search key 'Indonesian Banking Statistics' where the data is obtained per region of 34 provinces.

For ECF data, we used the search keyword 'securities crowdfunding' on the OJK page, then searched the website of each ECF institution to obtain information related to research variables such as project size, funding amount, transaction costs, profitability and liquidity. Some ECFs that have been licensed by OJK until 2022 include PT Santara Daya Inspiratama, PT Investasi Digital Nusantara, PT Crowddana Teknologi Indonusa, PT Numex Teknologi Indonesia, PT Dana Saham Bersama, PT Shafiq Digital Indonesia, PT Dana Investasi Bersama, PT Likuid Jaya Pratama, PT LBS Urun Dana and PT Dana Rintis Indonesia. This ECF institution has succeeded in gathering more than 100 investors spread throughout Indonesia.

3.2. Variable Measurement

The independent variables in this study consist of (1) project size (PROJECT) as measured by the total number of projects using the ECF and BPR platforms. (Cole et al., 2019)(2) the amount of funding (INVEST) measured by the total number of projects successfully funded. (Carlini et al., 2022; Ralcheva & Roosenboom, 2020)(3) company age (AGE) is measured by the year the company was established. (Carlini et al., 2022; Carlini et al., 2021).

The dependent variable (ECFSuc) is ECF success, measured by 1 for ECFs that meet funding targets and 0 for others (Ralcheva & Roosenboom, 2019; Vismara, 2016). For banks as measured by the failure of the Minimum Capital Adequacy Ratio (CAR) or also called Capital Adequacy Ratio (CAR) or NACF, which is divided into 2 (two) categories of NACF where one of the BPR that has at least one branch that reports the amount of equity plus allowance for losses on receivables is less than half the value of assets and 0 for others. Category 2 is NACF1, where the BPR that has at least one branch that reports the provisioning ratio for nonperforming assets is below 2%, 0 for others (Cole et al., 2019).

3.3. Hypothesis Testing

Hypothesis testing in this study uses Binary Logistic Regression, a form of multiple regression variation where the dependent variable consists of two categories (binary). In contrast, the independent variable consists of a ratio or ordinal scale (Hair et al., 2010). (Hair et al., 2010). The mathematical equation of binary logistic regression is as follows:

$$Logit_{1} = ln\left(\frac{Prob_{event}}{1 - Prob_{event}}\right) = b_{0} + b_{1}X_{1} + \dots + b_{n}X_{n}$$

The logistic equation in this study is written as follows:

$$ln\left(\frac{ECFSuc}{1-ECFSuc}\right) = b_0 + b_1 PROJECT_1 + b_2 INVEST_2 + b_3 AGE_3 + e_i (1)$$

 $ln\left(\frac{NACF}{1-NACF}\right) = b_0 + b_1 PROJECT_1 + b_2 INVEST_2 + b_3 AGE_3 + e_1(2)$ $ln\left(\frac{NACF1}{1-NACF1}\right) = b_0 + b_1 PROJECT_1 + b_2 INVEST_2 + b_3 AGE_3 + e_i (3)$

To analyze using logistic regression, there are several conditions that must be met including:

- Model Estimation. The basic measure of model estimation in logistic regression is called the likelihood value which is symbolized by -2 log kelihood or -2LL. The minimum value -2LL is 0. The lower the value -2LL the better the model or with a significant value of less than 0.05.
- 2. Model Fit (model suitability) is measured using the Chi-Square test of -2LL or called Hosmer and Lemeshow. χ^2 . The smaller the value of Hosmer and Lemeshow χ^2 the better or with a significance of more than 0.05.
- Coefficient of determination (R^2). In logistic regression, R^2 using Pseudo R^2, the Cox and Snell R^2 and the Nagelkerke R^2. If the value of the coefficient of determination is more than or equal to 0.5, it can be concluded that the model is suitable.
- 4. The significance coefficient or t test in multiple regression is assessed using the Wald test, where the coefficient value is large with a significant value of less than 0.05 or 0.01.

4. Results and Discussion

4.1. Descriptive Statistics

Tables 1 and 2 present the descriptive statistics of the whole sample, ECF and BPR separately for the successful and unsuccessful ones and the different periods. Table 1 shows the number of investments and projects offered to the public. There are characteristics considered to explain the success of ECF, two characteristics are considered: the target size of the projects offered and the amount of funds raised. The target project size reached IDR 82 billion on average, while the maximum project offered was IDR 212 billion. Meanwhile, the investment funds that were successfully raised exceeded the target projects raised on average by about 5% of the project funds offered.

		Ν	Minimum	Maximum	Mean	Std. Deviation
ECFSuc		10	0	1	,60	,516
project (PROJECT)	size	10	0	212.566.010.000	82.478.856.215,00	88.706.184.402,316
total funding (INVE	ST)	10	8.100.000	235.900.000.000	85.972.578.380,00	93.563.850.408,194
company age (AGI	Ξ)	10	1	5	3,10	1,197

Valid N (listwise) 10

Table 1 also shows the company's age; the average ECF company is three years old. ECF in Indonesia is still very young, and the longest has only been running for five years because ECF or SCF in Indonesia ECF is based on POJK Number 37 / POJK.04 / 2018 concerning Crowdfunding Services through Information Technology-Based Share Offerings (Equity Crowdfunding), the Financial Services Authority has only legalized two ECFs which took effect in November 2019. Table 2 below presents the results of descriptive statistics for BPRs. Two characteristics are used to determine the success of BPRs: a BPR is successful if it has more than two branches that report equity and non-performing loans (NPLs).

	Table 2.BPR Descriptive Statistics				
	Ν	Minimum	Maximum	Mean	Std. Deviation
NPL (NETO)	38	,05	24,14	6,7045	6,07646
ROA	38	-5,90	43,30	3,8937	7,31584
BOPO	38	0,00	155,40	82,5318	22,26451
LDR	38	22,58	98,54	76,4176	15,88554
CASH RATIO	38	3,79	150,51	21,7432	25,24384
Number of Offices	38	1	65	7,00	11,531
Assets	38	12.047.708	3.088.833.152	343.714.865,39	635.133.064,900
Equity	38	3.648.303	512.116.259	53.964.366,63	100.439.343,087
Valid N (listwise)	38				

Several different characteristics see the performance of BPRs, such as the value of NPL, ROA, BOPO, LDR, Cash Ratio, Number of Offices, Total Assets and Total Equity. The average number of NPLs in the sample is 6.70, and the number of offices in more than five branches. In contrast, the average amount of equity reached IDR 5.3 trillion. If we refer to these values, it is very clear that the equity of BPRs is greater than ECF, but the NPL value shows 6.70% or higher than the NPL limit set by Bank Indonesia of 5%. The higher NPL indicates that the number of bad debts is also high.

Financial performance proxied by ROA shows an average value of 3.89%. It indicates that the overall financial performance of BPRs does not provide encouraging results because a good ROA value should reach more than 5%. In terms of efficiency, Table 4 presents the BOPO value of the BPR of 82.53% or less than the threshold set by Bank Indonesia by Bank Indonesia Circular Letter No. 6/23/DPNP of 2004, which sets the maximum limit of the BOPO ratio as a measure of healthy banks at a maximum of 94 - 96%. Although the value of BOPO is good, ROA and NPL do not show positive results. The possibility of BPRs doing efficiency, but the

business cycle is starting to stagnate, where BPRs tend to be more careful in providing financing to customers due to bad credit.

ECF provides a new alternative for financing small and medium enterprises compared to BPR. It can be seen from the success of the projects campaigned by ECF through the company's website, almost 80% of which were fulfilled. Meanwhile, the financial performance of BPRs, as shown by ROA, indicates that the company's ability to earn profit from its total assets has decreased. It means that most BPR customers may have used ECF to finance every project they are carrying out. By using instruments of several types of securities, such as stocks and bonds, investors tend to have more confidence in ECF due to information disclosure. In contrast to BPRs, most of which have yet to go public, so there is much misleading between investors and agencies.

4.2. Empirical Results Crossection Sample Ecf Performance

A cross-section analysis of all firms in the latest period is conducted To identify whether ECF and BPR are successful. Table 3 presents the logistic regression analysis results with ECF cross-section data. In the logistic analysis, there are several conditions to see whether ECF success is influenced by project size, funding amount and firm age, including Pseudo R^2 , Chi-Square test of -2LL, $-2\log likelihood$ and the Wald test. Pseudo R^2 is used to determine the coefficient of determination where the value of Pseudo R^2 shown in the Cox & Snell R column2 of 0.740 or more than 0.5 indicates that the model is suitable. In determining model fit, you can also use the Chi-Square test value of -2LL in the Hosmer and Lemeshow column χ^2 column, where the smaller the value the more suitable the model. In table 3 the value of the Chi-Square test of -2LL the test results are worth 0.000 or less than 0.05 so it can be said that the model is fit.

Table 3. ECF Logistic Regression		
	ECFSuc	
project size (PROJECT)	0,000** (5,305)	
total funding (INVEST)	0,000** (35,832)	
company age (AGE)	0,000** (72,542)	
Observation	50	
-2 Log likelihood	0,000 ^a	
Cox & Snell R^2	0,740	
	0,000	

a. Estimation was terminated at iteration number 5 because parameter estimates changed by less than .001.

b. **significant at 0.05 level

Values $-2 \log likelihood$ to determine whether the model is good or not. Based on the table above, it is known that the value $-2 \log likelihood$ value of 0.000 where the model is getting better if the value is less than 0.05. The Wald Test is a significance coefficient or t test where in table 3 it is known that the significance of PROJECT is 0.000 or less than 0.05, which means that PROJECT affects on ECF success. INVEST and AGE show a significance value of less than 0.05 or it can be concluded that INVEST and AGE affect on ECF success.

4.3. Empirical Results Of Crossection Sample Bpr Performance

In the performance of BPRs using logistic regression test tools where the dependent variable is divided into two, namely NAFC is a measure stating that the bank has more than two branch offices that report the amount of equity with a value of 1, while others are 0. For NAFC1 is a measure stating that the branch office that reports the ratio of nonperforming loans (NPL) with 1 and others 0.

First, determining the model is appropriate using the coefficient of determination where the Pseudo value R^2 in logistic regression used Cox & Snell R test2 of 0.732 for NAFC (model 1) and 0.723 for NAFC1 (model 2) which indicates the model is appropriate. While the value of Chi-Square test of -2LL in the Hosmer and Lemeshow column χ^2 column is 0.000 or less than 0.05, which means the model is fit.

Table 4. Logistic Regression of BPR			
	Model 1		
	(NAFC)	Model 2 (NAFC1)	
NPL (NETO)	0,000**	0,010**	
	(-0,910)	(5,577)	
ROA	0,000**	0,005**	
	(11,887)	(-15,161)	
BOPO	0,000**	0,009**	
	(2,378)	(-4,428)	
LDR	0,000**	0,017**	
	(3,945)	(2,105)	
CASH RATIO	0,000**	0,013**	
	(0,155)	(-5,523)	
Number of Offices	0,000**	0,024**	
	(41,714)	(600,753)	
Assets (In Thousand Rupiah)	0,000**	0,001**	
	(0,000)	(0,000)	
Equity (In Thousand Rupiah)	0,000**	0,022**	
	(0,000)	(0,000)	
Observation	190		
-2 Log likelihood	0,000ª	0,001ª	
Cox & Snell R ²	0,732	0.723	
Chi-Square (χ^2)	0,000	0,000	

a. Estimation was terminated at iteration number 5 because parameter estimates changed by less than .001.

**significant at 0.05 level b.

Table 4 presents the results of hypothesis testing where financial performance affects the success of BPRs. The results show that the constant value of NPL is -0.910 with a significance of 0, indicating a significant negative effect on NAFC, while the constant value of NPL on NAFC1 is 5.577 with a significance of 0.000 or it can be stated that NPL has a significant positive effect on NAFC1. It indicates that BPRs that have more than two branch offices reporting equity and NPLs indicate that the company is in good financial condition, or it can be said that BPRs have sufficient financial strength. The availability of branch offices indicates the extent of the BPR's financial services in the region. The more branch offices, the larger the BPR's service network. ROA, BOPO, LDR and Cash Ratio variables are also known to show significant results, although the constant ROA, BOPO, and Cash Ratio on NAFC1 are negative. Meanwhile, the number of offices, total assets and total equity significantly positively affect NAFC and NAFC1. The greater the number of branch offices, total assets and total equity, the more likely the BPR will be successful.

4.4. Robustness Testing Results

In this section, we evaluate the real effects of ECF versus banks with a focus on employment by small businesses. The objective is to see whether ECF can replace or complement banks. A data set between the equity of ECFs and banks is tested where debt is one of the elements of increasing and decreasing equity. The basic divisor is the community's total population, with the assumption that the success of ECF and banks should impact the community (Balyut et al., 2022). The regression equation used in this test is as follows:

 $Office/Pop_{it} = b_0 + ECF/Pop_{it} + Bank/Pop_{it}$

Based on the regression equation formula, the test results can be presented in table 5 below.

Table 5	Table 5.Logistic Regression of BPR		
	Model 1	Model 2	
Hire: Office/Pop _{it}	(ECF/Pop _{it})	(Bank/Pop _{it})	
RSquared (R) ²	0,358	0,054	
Constanta	0,000	0,000	
T-Value	5,062	1,621	
Sig.	0,000	0,112	

a. **significant at 0.05 level

The table above presents the R value2 of 0.358 for Model 1 (ECF/Pop) and 0.054 for Model 2 (Bank/Pop), where the constant shows a value of 0.000. It indicates the influence of the HIRE variable, which is the number of branch offices divided by the population. The more branch offices indicate that the number of employees of the entity is also increasing. Based on the data above, it is also known that the t-value of model 1 is 5.062 with a significance of 0.000,

while the t-value of model 2 is 1.621 at a significance level of 0.112. These results indicate that ECF is a smaller entity compared to BPR. In addition, managing start-up businesses by utilizing technology makes it easier for people to access them both as financiers and entrepreneurs.

4.5. Analysis

Several indicators, including financial capability, can indicate the ECF's or the Bank's success. The success of ECF is largely determined by the number of projects that are successfully funded and achieve the set targets. Hornuf & Schwienbacher (2018) stated that ECF is a form of digital innovation that contributes to the growth of MSMEs. The existence of ECF makes it easier for MSMEs to obtain funds without bank intermediaries (unbankable). In addition, the ECF platform is fully supported by technology to facilitate the transparency process which can convince investors.

This study's findings indicate that two things are involved in determining ECF's success: the platform and investors. Ralcheva and Roosenboom (2019) stated that the platform model organized by ECF can increase success. Vismara (2016) also concluded that the ECF website as a platform increased ECF's ability to raise investors' funds, indicating its success. The success of the campaign provided a positive signal for sophisticated investors. In addition, easy access can also increase the amount of equity that can be raised because fundraising can be accessed by the whole world, especially for countries with less robust capital markets. (Signori & Vismara, 2016).

Based on the results of data description, the maximum value of the project size is Rp 212,566,010,000 with the amount of investment collected amounting to Rp 235,900,000,000 or exceeding the target by 110%. These results support the hypothesis that project size and amount determine the success of ECF. Despite the average age of 3 years, the ability of ECF to raise funds is quite good. This result contradicts the research conducted by Carlini et al., (2022), Miglo (2022), and Carlini et al., (2021) which state that company age has negatively affected market response.

BPR differs from ECF in that the success of BPR is not dependent on the entity's success in meeting project targets. BPR success can be measured by its financial performance. NPL is an indicator of the health of BPR where the smaller the NPL value, the lower the bad credit. A good NPL indicator is a maximum of 5%, while the descriptive statistical analysis results show an NPL value of more than 5%. It indicates that bad debts in BPRs are quite high. Financial performance, as measured by ROA, BOPO, LDR, Cash Ratio, significantly influences the success of BPRs. It is supported by the results of descriptive tests that show the value of the four variables on average is positive. In determining whether ECF can replace the role of BPR, the answer can be seen from regression testing results between ECF and BPR. If we evaluate, then the coefficient of determination of ECF is greater than BPR so that ECF can replace the role of BPR. It is corroborated by the significant value where ECF is 0.00 and BPR is 0.112. Thus, ECF has the potential to replace the role of BPR, especially for small and medium entrepreneurs who are constrained in accessing banking. Likewise, start-up companies usually still need stronger capitalization capabilities. In the future, MSME owners will likely switch to using funding from ECF mainly because of the heavy bank requirements. This study aligns with several previous studies that mention that entrepreneurs will choose to use ECF because they fail to meet bank criteria. ((Blaseg et al., 2021; Balyuk et al., 2020; Kit, 2021; Cumming et al., 2021; Salim & Kassim, 2019; Mokhtarrudin et al., 2017; Boitan, 2016).

5. Conclusion

The results show that ECF and BPR performance indicators are quite different. However, each shows that success is influenced by the ability to increase the amount of equity and assets. In ECF, the success criteria are how the company can raise funds from investors or the community to fund small and medium enterprises jointly. This ability makes it easier for MSMEs to obtain capital, and the platform that is available in real-time with an easy-to-use display is also a consideration for investors. Meanwhile, BPRs show indicators of successful performance based on the ability to meet financial performance. Thus, for BPRs, financial performance is highly dependent on how many debtors use their services. ECF can play a role in replacing BPRs with the various conveniences they offer. Although it takes time, slowly but surely, ECF can replace BPRs but only sometimes replace the role of banking in general.

Therefore, the government needs to allow ECFs to flourish through regulations that are friendly to them. With its technological approach, ECF can be a platform that can bring more transparency and accountability. Nonetheless, the success of ECF is also highly dependent on the companies themselves. With the ability of ECF to potentially replace BPRs, BPRs must innovate, especially how to get the government to make concessions on the issue of access to financing through banks. This study still has many limitations due to incomplete access to ECF data, especially since the ECF performance report is not published to the general public. Adding sample criteria and conducting cross-country studies would also be better to do in the future in order to produce conclusions with high validity.

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