

# EQUITY CROWDFUNDING AS AN ALTERNATIVE FUNDING FOR MARITIME INFRASTRUCTURE DEVELOPMENT

Ida Bagus Riscy A<sup>1</sup>, Fajar Yusuf Hikmawan<sup>2</sup>

Supply Chain Management, Institut Teknologi Sepuluh Nopember, Indonesia<sup>1</sup>

Business Analytics, Institut Teknologi Sepuluh Nopember, Indonesia<sup>2</sup>

[edoadhastyananda@gmail.com](mailto:edoadhastyananda@gmail.com)<sup>1</sup>

[fazeckfyh@gmail.com](mailto:fazeckfyh@gmail.com)<sup>2</sup>

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## ABSTRACT

The limited government funds necessitate the need for alternative financing for maritime infrastructure development. The purpose of this research is to explore the potential of equity crowdfunding as an alternative funding source for maritime infrastructure development. The results of this study conclude that equity crowdfunding has significant potential as an alternative financing method for maritime infrastructure. However, its current utilization is primarily for small-scale infrastructure construction or development. This is due to regulations limiting the maximum amount of funds that can be raised.


**Keywords:** Crowdfunding, Maritime Infrastructure, Swot

**JEL Classification:** A1, G2, H1

## INTRODUCTION

As the world's largest archipelagic country, Indonesia needs a great quantity of developed and efficiently managed ports. The competitiveness of producers in both national and international markets, efficiency of internal distribution, and generally, cohesion and integrity of the national economy are strongly influenced by the performance of the port sector (BPS, 2020).

**Table 1 Indonesia Global Competitiveness Index 4.0 2019 (FEW, 2019)**

Indonesia		50th /141		
Index Component	Value	Score *	Rank/141	Best Performer
 2nd pillar: Infrastructure 0-100	-	67.7 ↑	72	Singapore
Transport infrastructure 0-100	-	56.1 ↑	55	Singapore
2.01 Road connectivity 0-100 (best)	59.8	59.8 ↑	109	Multiple (3)
2.02 Quality of road infrastructure 1-7 (best)	4.2	52.6 ↑	60	Singapore
2.03 Railroad density km/1,000 km <sup>2</sup>	2.6	6.5 ↑	85	Multiple (24)
2.04 Efficiency of train services 1-7 (best)	4.7	61.1 ↓	19	Japan
2.05 Airport connectivity score	972,336.6	100.0 =	5	Multiple (8)
2.06 Efficiency of air transport services 1-7 (best)	4.9	65.2 ↓	56	Singapore
2.07 Liner shipping connectivity 0-100 (best)	47.8	47.8 ↑	36	Multiple (5)
2.08 Efficiency of seaport services 1-7 (best)	4.3	55.8 ↑	61	Singapore

Although the performance of the port sector is one of the important factors for improving economic competitiveness, Indonesia's ranking is still significantly lower than that of neighboring countries. According to The Global Competitiveness

Report in 2019, as shown in Table 1, The efficiency of port services in Indonesia is ranked 61 out of 141 countries. This ranking is notably distant from Singapore, which is ranked 1st, and Malaysia, which is ranked 19th.

Research conducted by Heru and Joewono (2012) demonstrates that the performance of Indonesia's national port services is closely linked to the availability of infrastructure and loading and unloading facilities. The current performance of Indonesian ports is assessed using port service and utility indicators. The efficiency of Indonesia's national ports is evaluated through three specific indicators, which are: (1) fleet services, (2) cargo services, and (3) port facility utilities. Based on this, ports that can demonstrate performance in these three aspects have significant potential to become hub ports in supporting foreign trade and the national logistics system.

Out of 578 fishery ports, 114 of them, or approximately 19.72%, are located in the province of Aceh. Meanwhile, Jambi, South Sumatra, and West Papua are the provinces with the fewest fishery ports, each having only 1 fishery port, accounting for approximately 0.17% each. Indonesia has 7 Type A fishery ports, 16 Type B ports, 45 Type C, and 510 Type D fishery ports. 88% of fishery ports in Indonesia fall under the category of Type D, and 69% of them have Fish Auction Venue (TPI) facilities. Motorboats with a gross tonnage of 5 GT are the most common vessels for landing fish at these ports (BPS, 2020). Therefore, based on this data, there is a need for further development of both port infrastructure and the fishing vessel.



**Figure 1 Percentage Estimate of Investment Value (KPPIP, 2022)**

To enhance global competitiveness, Indonesia needs to undertake maritime infrastructure development. Based on the National Strategic Projects (PSN) list in Permenko Number 21 of 2022, there are 61 PSN declared completed (12 PSN completed in 2020, 24 PSN completed in 2021, and 25 projects completed in 2022). Financing becomes one of the issues in providing PSN. The government's budget through the State Budget (APBN) and Regional Budget (APBD), which is limited, requires alternative financing to support the provision of PSN. The total investment required for the implementation of PSN, according to the latest list in Permenko No. 21 of 2022, amounts to IDR 5.746,4 trillion. The largest portion of the financing

is provided by the private sector with a project financing scheme, accounting for 68% or IDR 3.913,2 trillion. Meanwhile, the funding portion from State-Owned Enterprises (BUMN) or Regional-Owned Enterprises (BUMD) amounts to 19% or IDR 1.112,1 trillion, and the portion from the State Budget (APBN/D) is 13% or IDR 714,5 trillion.

Due to the limitations of the State Budget (APBN), the remaining funding comes from the private sector, sourced from banking, the stock market, bonds, and The Government and Business Entity Cooperation Scheme (KPBU) is used to finance the operation and development of ongoing infrastructure projects.

With the government's development of maritime infrastructure, it is advisable to also focus on the improvement of the quality of the fleet. This is expected to bring about a significant transformation within the maritime industry. However, when in need of funding to expand their business, companies often face difficulties in securing loans from banks. This is due to a lack of trust in the company's ability to repay the loan and the absence of collateral that can be used in case the borrowing company defaults (DJKN, 2022).

However, with the advancement of technology and the increasing trust of the public in products marketed on the Internet, alternative financing methods are emerging. The readiness of the public in the information technology era has also created opportunities for online fundraising, such as crowdfunding. One type of crowdfunding is equity crowdfunding. Essentially, equity crowdfunding is very similar to capital market investment and involves an Issuer, crowdfunding service provider, and Investors. The difference is that in equity crowdfunding, the issuance of shares is conducted by the Issuer to sell shares directly to Investors through an online electronic system. The offering of shares by each Issuer through this crowdfunding service is carried out through a Provider that has obtained permission from OJK. Share offerings are conducted within a maximum period of 12 months, with a total fund raised through share offerings not exceeding Rp 10 billion (DJKN, 2022).

One example of the results of equity crowdfunding funding is the "Kapal Alam Bahari 6." Kapal Alam Bahari 6 is the first ship in Indonesia that has come into existence thanks to funding from investors through equity crowdfunding. Based on the background mentioned above, this research aims to explore the opportunities of equity crowdfunding for financing other maritime infrastructure developments.

## **METHOD**

The research method in this study is literature from various sources such as scientific journals, books, and reliable media. And also an approach using SWOT analysis is conducted. The result of the analysis will be used as a reference for the next process. That is an analysis of the opportunities of equity crowdfunding to fund maritime infrastructure.

## **RESULTS AND DISCUSSION**

Sigar (2012) describes crowdfunding as an innovative method of raising funds for entrepreneurs that has become increasingly popular in the Internet age. It's a capital formation strategy that raises small amounts of funds from a large group of people through online means. Before analyzing the crowdfunding

opportunities for maritime infrastructure financing, a SWOT analysis of equity crowdfunding is first conducted.

### **Strengths and Weaknesses of Equity Crowdfunding**

Though the SWOT analysis of crowdfunding is still absent in the scientific literature, many authors identify various benefits of crowdfunding. Some of those benefits are of internal origin; they place crowdfunding at an advantage relative to others and therefore qualify for **strengths** (Loreta and Sima, 2013).

Sigar (2012) perceives crowdfunding as an opportunity to fill this capital gap by connecting small businesses, which are marginalized from the traditional sources of funding to the general public.

A similar opinion is also expressed by Marginingsih (2019) crowdfunding facilitates lenders with those who need funds (borrowers) through the digital market, which is essential for small business struggling to obtain banking funds to enhance financial inclusion.

Equity crowdfunding is one of the ways to raise funds that involves lower costs compared to an IPO. The mechanism of equity crowdfunding services shares many similarities with public offerings in the capital market, but it is simpler in its execution. The application process with the organizer is straightforward and fast. No specific collateral is required, making it suitable for start-ups and small enterprises that may not have significant assets—often relying on liquid assets such as cash, cash equivalents, and business equipment. Only the Issuer, Investors, and Organizer are involved, with the Financial Services Authority (OJK) overseeing, regulating, and nurturing the process (Cindy, 2019).

Some drawbacks of crowdfunding are of internal origin; they are the characteristics that place crowdfunding at a disadvantage relative to other means of financing and can be perceived as **weaknesses** (Loreta and Sima, 2013).

The risks of fraud occur when there is ill intent from organizers and/or initiators/investees to collect funds from the general public without clear accountability. Information asymmetry and data quality issues arise when organizers provide inaccurate or non-transparent data. The risk of default occurs when borrowers fail to meet their obligations. The risk of liquidity, particularly the absence of a secondary market for reselling equities purchased through crowdfunding platform websites. (Cindy, 2019).

Concerns about fraud are also discussed by Sullivan and Ma (2012), Galwin (2012) and Sigar (2012). The JOBS Act (2012) loosens regulatory requirements for small businesses in various ways and it can become a precondition for fraud via crowdfunding (Gobble, 2012). As a result of reduced requirements for public disclosures, some businesses can try to conceal their true financial status. Also, some businesses might even be created as fraud – companies can be started in order to take funding, pay it all as salary and then shut down.

Sullivan and Ma (2012), Bechter et al. (2011) and Galwin (2012) state that entrepreneurs seeking to crowdfund their businesses face the risk of their idea being stolen by better funded investors or large corporations. Entrepreneurs might lack knowledge to protect their ideas and business plans, and, moreover, in case an idea or business plan is stolen, most entrepreneurs would lack resources to fight for it in court. Such risk in this paper is considered a weakness, because it is a feature of the mechanism of crowdfunding – presenting ideas and business models in public is a must.

## Opportunities and Threats of Equity Crowdfunding

Some **opportunities** of crowdfunding can also be found amongst the advantages of crowdfunding. Despite that, an insight is needed here – as crowdfunding is a novelty and emerging very fast, exploring the elements it could exploit to its advantage could enhance the importance of crowdfunding and fasten its development (Loreta and Sima, 2013).

The most dominant challenge faced by small businesses in developing their ventures is capitalization (Indriana et al., 2022). According to Maulida (2018), only 17.5% of small businesses access capital from banks, while 82.5% do not rely on banks but turn to non-bank institutions. Equity crowdfunding can serve as an alternative solution to this capitalization issue. The application process with the organizers is straightforward and swift, without requiring specific collateral. As a result, it is particularly suitable for start-ups and small enterprises that have limited assets, which may primarily consist of liquid assets (such as cash, cash equivalents, and business equipment) (Cindy, 2019).

This trend is further supported by technological advancements. Marginingsih (2019) highlights that in 2018, Indonesia witnessed rapid growth in smartphone usage and internet adoption. According to the We Are Social: Indonesian Digital Report (2019), there are 150 million internet users in Indonesia, with 93% utilizing online platforms to search for products and services (Indriana et al., 2022).

Given Indonesia's large population and improved accessibility, equity crowdfunding has the potential to thrive due to its broad reach. Marginingsih (2019) asserts that crowdfunding can serve segments of society that remain underserved by traditional financial institutions due to stringent banking regulations and limitations in serving specific regions (Marginingsih, 2019). Consequently, it is hoped that economic development will be more evenly distributed rather than concentrated in specific areas.

Moreover, the close relationship between the digital world and millennials allows for greater opportunities for crowdfunding development. Easy investment platforms like crowdfunding will be increasingly needed. As investment needs grow, the chances of financing infrastructure through crowdfunding also increase (Arifin and Wisudanto, 2017).

According to Regulation of the Financial Services Authority No. 37/POJK.04/2018 on equity crowdfunding services through technology-based share offering, the maximum value of shares offered by each Issuer through an Equity Crowdfunding Platform may not exceed IDR 6,000,000,000 within a period of 12 (twelve) months. This figure is quite large for an internet-based alternative financing system.

Every novelty is very vulnerable due to the lack of experience and existing negative forces in the environment. Finding out and monitoring **threats** - elements in the environment that could cause trouble for the business or project is especially important for innovative companies or in this case methods, that are expected to foster huge changes (Loreta and Sima, 2013).

Social stigma against small businesses affects investment decisions. Sigar (2012) states that startup companies are traditionally riskier and have a higher rate of failure in comparison with other businesses. Uncertainty about the development of unproven products and services arises. Sullivan and Ma (2012) also express the



fear that many crowdfunding investors will be sadly disappointed when business they invest in fails, since many do in the first 5 years.

According to Indriana et al. (2022), money laundering is also one of the challenges for the fintech system in Indonesia. Efforts to prevent money laundering crimes can be done by monitoring the authenticity of visible data and protecting transactions within the financial service provider's system (PJK).

### **The Potential of Equity Crowdfunding For Maritime Infrastructure Financing**

From the analysis of **Strengths, Weaknesses, Opportunities, and Threats** of equity crowdfunding, a summary of key points is derived. These points will serve as a reference for assessing the potential of equity crowdfunding as an alternative financing method for maritime infrastructure.

**Table 2 Strengths, Weaknesses, Opportunities, and Threats of Crowdfunding**

<b>STRENGTHS</b>	<b>WEAKNESSES</b>
facilitating access to financial resources, particularly in local regions	Risk of platform failure Risk of idea theft
<b>OPPORTUNITIES</b>	<b>THREATS</b>
The potential of internet user in Indonesia is quite significant	Social stigma towards small businesses

Every financing platform undoubtedly has strengths and weaknesses, as shown in Table 2 Strengths, Weaknesses, Opportunities, and Threats of Crowdfunding. While the government has already begun efforts to equalize infrastructure, it will still take time to reach all regions in Indonesia. With the ease of accessing equity crowdfunding via the internet, underdeveloped areas facing capital limitations now have an opportunity to progress. As long as the project campaigns on crowdfunding platforms are appealing and have growth potential, investors will be interested in investing in those projects.

According to a report by We Are Social, cited by Cindy (2013), the number of internet users in Indonesia reached 213 million people as of January 2023. This figure is equivalent to 77% of Indonesia's total population, which stands at 276.4 million at the beginning of this year. The report also found that on average, Indonesians spend 7 hours and 42 minutes online each day. On the other hand, the report notes that the majority, 98.3%, of Indonesian internet users access the internet via mobile phones. Based on this data, it's evident that there is significant potential for equity crowdfunding in the future. The key lies in developing platforms and regulations to facilitate this growth.

In addition to government regulations, equity crowdfunding platforms must effectively assess the suitability of projects proposed by issuers. By doing so, they can minimize the risk of failed projects once funds are raised from the public, thereby building trust among investors. The success of one platform can serve as a benchmark for others, creating a positive perception of equity crowdfunding among the public. According to Arifin and Wisudanto (2017), social capital formed through crowdfunding—both externally and internally—affects the success rate of fundraising for infrastructure development. The stronger the social capital possessed by those seeking infrastructure financing, the greater the likelihood of successful fundraising, and vice versa.

According to Regulation of the Financial Services Authority No. 37/POJK.04/2018 on equity crowdfunding services through technology-based share offering, the maximum value of shares offered by each Issuer through an Equity Crowdfunding Platform may not exceed IDR 6,000,000,000 (six billion rupiah) within a period of 12 (twelve) months.

The funding is indeed relatively small for large-scale port infrastructure renovations. However, this alternative financing can start from small steps. For instance, consider a region with abundant fisheries resources but lacking proper facilities on fishing boats. As a result, the existing potential cannot be maximized. According to data from BPPSDM KKP (2020), there is a price difference between fish caught by freezer boats and those caught by ice boats. Fish quality from freezer boats is considered superior to that from ice boats. This case can serve as a reference for fishermen or fishing vessel owners to develop their fleets. Equity crowdfunding can be an alternative for seeking capital to expand their businesses.

## CONCLUSION

The purpose of this research is to explore the potential of equity crowdfunding as an alternative funding source for maritime infrastructure in Indonesia. SWOT analysis based on various literature indicates that equity crowdfunding has significant potential in Indonesia. However, there is a need for further development in terms of crowdfunding platforms, regulations, and public awareness. Ensuring that there are no doubts among the public about investing in this segment is crucial for the future. A real-life example of equity crowdfunding in the maritime sector is the Kapal Alam Bahari 6 in 2022.

## REFERENCES

- Annur, Cindy Mutia. (2023). Pengguna Internet Di Indonesia Tembus 213 Juta Orang Hingga Awal 2023. *Katadata Media Network*.  
<https://databoks.katadata.co.id/datapublish/2023/09/20/pengguna-internet-di-indonesia-tembus-213-juta-orang-hingga-awal-2023>
- Arifin, S.R., & Wisudanto. (2017). Crowdfunding Sebagai Alternatif Pembiayaan Infrastruktur. *University Network For Indonesia Infrastructure Development*, September, 1-7.
- Bechter, C., Jentzsch, S., Frey, M. (2011). From Wisdom Of The Crowd To Crowdfunding. *Journal Of Communication And Computer*, 8, P. 951-957.
- Direktorat Statistik Peternakan, Perikanan, dan Kehutanan, BPS. (2020). Statistik Pelabuhan Perikanan Tahun 2020. *Badan Pusat Statistik*, Jakarta. 80 Hal.
- Fauzi, Ahmat. (2020, October 28). Kualitas Ikan Pada Kapal Berpendingin Freezer Di PPN Pekalongan. *BPPSDM KKP*.

<http://www.mekanisasikp.web.id/2020/10/kualitas-ikan-pada-kapalberpendingin.html>

- Galwin, W.F. (2012). Comment On SEC Regulatory Initiatives Under The JOBS Act: Title III – Crowdfunding. <https://www.sec.gov/comments/jobs-titleiii/jobs-title-iii.shtml>
- Gobble, M.A.M. (2012). Everyone Is A Venture Capitalist: The New Age Of Crowdfunding. *Research Technology Management*, 4 (55).
- Hutomo, Cindy Indudewi. (2019). Layanan Urun Dana Melalui Penawaran Saham Berbasis Teknologi Informasi (Equity Crowdfunding). *LPPM*, Surabaya.
- Indriana, I., Satila, H.T., Alwi, B.D., & Fikri, M. (2022). Fintech Equity Crowdfunding Syariah Sebagai Solusi Akses Permodalan UMKM. *BISNIS: Jurnal Bisnis dan Manajemen Islam*, 10(1). <https://doi.org/10.21043/bisnis.v10i1.13142>
- Kamsidah & Febriana PU, Della. (2022, November 24). Crowdfunding Sebagai Instrument Alternatif Pendorong Pertumbuhan Ekonomi Di Indonesia. *DJKN Kemenkeu*. <https://www.djkn.kemenkeu.go.id/kpknl-semarang/baca-artikel/15643/Crowdfunding-sebagai-Instrumen-Alternatif-Pendorong-Pertumbuhan-Ekonomi-di-Indonesia.html>
- Komite Percepatan Penyediaan Infrastruktur Prioritas (KPPIP). (2022). Laporan KPPIP Semester II Tahun 2022. *KPPIP*, Jakarta. 94 hal.
- Marginingsih, R. (2019). Analisis SWOT Technology Financial (Fintech) Terhadap Industri Perbankan. *Cakrawala-Jurnal Humaniora*, 19(1).
- Riyandi, Vlora. (2022, June 21). Kapal Alam Bahari Hasil Pendanaan Crowdfunding Resmi Berlayar. *PT ICX Bangun Indonesia*. <https://landx.id/blog/kapal-alam-bahari-hasil-pendanaan-crowdfunding-resmi-berlayar-landx/>
- Sigar, Karina. (2012). Fret No More : Inapplicability Of Crowdfunding Concern In The Internet Age And The Jobs Act’s Safeguards. *Administrative Law Review*: 473-506.
- Sullivan, B., Ma, S. (2012). Crowdfunding: Potential Legal Disaster Waiting To Happen. <https://www.forbes.com/sites/ericsavitz/2012/10/22/crowdfunding-potential-legal-disaster-waiting-to-happen/?sh=55ff029f576c>





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Valanciene, Loreta & Jegeleviciute, Sima. (2013). Valuation Of Crowdfunding:  
Benefits And Drawbacks. *Economics And Management: Volume 18*.