



Impact Investment Assessment methodology for Early-stage Start-up Investment Screening

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ABSTRACT: Over the next five years, Indonesia is expected to absorb an estimated USD 23 billion in impact investments which could be materialized in the form of a Public-Private Partnership (PPP), and one of the beneficiaries of foreign investment is a start-up company. It is estimated that Indonesia will create thousands of potential start-ups that will disrupt the economy of Indonesia. As a developing country brimming with high potential growth, among its vast youth population, there are millions of entrepreneurs with brilliant ideas that may benefit not only themselves but also society.[13] One of the steps for investing in impact investment is screening and scoring the ESG and SDG Alignment using standardized and tested methods created by accredited international institutions. Start-ups that are still in the early-stage phase are rather very difficult to be assessed using the currently available global standard methodology, therefore making early-stage start-ups out of reach for Impact Investment and early-stage start-ups have a high potential in multiplying their valuation to drastically increase venture capital profits, creating an assessment tool that is necessary to eliminate the lost opportunity. Venture capital requires an assessment tool for their investment process, especially for early-stage start-ups. Currently, there are yet such scoring methodologies or standards that are suited for Indonesian early-stage start-ups. Many start-ups in their early don't have adequate resources to implement an ESG framework or commit to any SDG alignment by applying established international ESG frameworks and standards. But there are few start-ups that commit to ESG and SDG Value to their business model that create social and environmental impact while profiting as a business. The objective of this research is to create an Impact Investment assessment tool based on ISS ESG impact rating and MSCI ESG SDG alignment assessment methodology that will be adjusted for Indonesian early-stage screening purposes and to be implemented in Venture capital preliminary in the business process.

KEYWORDS: ESG impact scoring, Impact Investment, Investment process, Preliminary review, SDG alignment, Start-up screening, Venture Capital.

I. INTRODUCTION

Human impacts on an unimaginable level, as well as the advent of COVID-19 in this decade, have accelerated environmental issues, as well as the damage to people and the world is already far more severe. This incident should be recognized as a Code Red to Mankind and serve as a model for taking urgent action to prevent humanity from more significant negative consequences in the future. Furthermore, significant development obstacles persist in Indonesia, including the exploitation of natural resources and environmental destruction. The worldwide catastrophe created by the COVID-19 epidemic complicates Indonesia's efforts to attain its development goals in unprecedented ways. [1]

Even among such adversity, public- and private-sector leaders may prepare for the post-pandemic environment by identifying the adjustments required for the country to emerge stronger—to preserve both lives and livelihoods. When a startup creates a novel solution to an existing problem, it ends up having a big influence on society's environmental, social, and governance ("ESG") aspects have become increasingly crucial when choosing viable investment possibilities in recent years. As the demand for impact investing has grown by almost 4x since 2014, so has the number of firms claiming to include environmental, social, and governance (ESG) data in their investment process. [1]

Unfortunately, measuring how much a firm emphasizes environmental or social concerns in its goods, services, and solutions has been challenging until recently. Impact investing is a type of investment strategy that seeks to produce positive social or environmental outcomes in addition to financial advantages. Impact investments may take many different asset types and provide a wide range of effects. Many start-ups in their early or growth stage may not commit adequate resources to resolve ESG concerns or



commit any SDG value to their business but there are few startups that commit to ESG and SDG Value to their business model that create social and environmental impact and at the same time profiting as a business.[2]

Venture capital requires an ESG criterion for their investment due diligence, especially for early-stage startups. Currently, there are yet such scoring methodologies or standards that are developed by Indonesian venture capital and private equity firms to filter startups for their impact investment. Developing tools to screen early-stage startups for impact investment is a challenge because every impact investing and ESG screening tools developed by organization with industries standards such as GIIN (Global Impact Investing Network), UNPRI (United Nations Principles for Responsible Investment), and IFC (International Finance Corporation) are not suitable to be implemented to small companies or early-stage startups because of it will make every early-stage startups failed the Impact Investing (SDG and ESG) the screening.[3]

Venture capital requires an assessment tool for their investment process, especially for early-stage start-ups. Currently, there are yet such scoring methodologies or standards that are suited for Indonesian early-stage start-ups. Many start-ups in their early don't have adequate resources to implement an ESG framework or commit to any SDG alignment by applying established international ESG frameworks and standards. But there are few start-ups that commit to ESG and SDG Value to their business model that create social and environmental impact and at the same time profit as a business. The objective of this research is to create an Impact Investment assessment tool based on ISS ESG impact rating and MSCI ESG SDG alignment assessment methodology that will be adjusted for Indonesian early-stage screening purposes and be implemented in the Venture capital preliminary in the business process.

II. LITERATURE REVIEW

The purpose of this chapter is to develop a comprehension of current research and analysis regarding a venture capital topic or its field of study and articulate the information and data through the format of this paper. The elaboration mostly dense and short.

A. Impact Investing

Impact investing is a form of investment strategy which seeks to produce positive social or environmental impacts in alongside financial profits. Impact investments might take many different asset types and provide a wide range of effects and the goal of impact investing is to utilize capital and assets for positive social outcomes. As more investors get engaged in impact investing, the risk of "impact laundering" (a fund or organization advertising itself as impact oriented but having little impact) increases significantly. This is primarily since there is currently limited agreement on what constitutes an "impact investment." This is the moment for new and established impact investors to think about and define what they mean by "impact". To define what is impact investing and its approach, The chart below explained the plots of different investment based on expected financial return and the approach to impact. The cause to find tools based on the ESG characteristic stated above is to identification start-ups eligible for of Impact Investing. In investment, there are several goals to be achieved by those who make the investment, ranging from capital gains, and synergy of cooperation, to philanthropy. As we know that not all capital gains-minded investments have a social responsibility value and not all philanthropic grant making investments create a capital gain, therefore the definition of Impact investing is an investment that are creating capital gain and on the other hand, also makes a social and environmental impact that can be determined or measured.

B. ESG (Environment, Social, Governance)

Environmental, social, and governance (ESG) aspects had also long been regarded by investors as key considerations for company valuation, risk assessment, and even compliance with regulations. More and more executives are integrating ESG into their investment strategy method, taking a more holistic approach, and much more contextual investment fund/vehicles are emerging to attracting investors with specific investment objectives. MSCI makes it simple to incorporate ESG factors into the equity valuation, portfolio analysis, screening, and statistical analysis. MSCI provide users with the option of combining and analyzing ESG data utilizing standardized tools for in-depth analysis by measuring a company's/start-up relative ESG output across ten themes (emissions, environmental innovative products, civil rights, stockholders, and so on).[4] for ESG evaluation system to work, there are criteria regarding the ESG value:

- Environmental

The issue discussed on this theme are involving climate policy, green energy, waste management, pollution mitigation, natural resource planning and conservation, and animal care are all examples of environmental challenges. these factors analyzing any



environmental hazards that a company may solve or face and how those issue is managed. Investment considerations for this criterion cover the issue mitigation and adaptation.

- Social

The issue discussed on this theme are revolve around social issue affecting human life, usually viewed from stakeholder point of view. Investors look for investee that promote ethical and socially aware topics focused to create solutions that solving issues of inequality, inclusiveness, labor relations, investment in human capital and communities, and human rights issues and any people referred it as Socially responsible investing (SRI).

- Governance

Governances in ESG principles focused on how investee tackling problem in management and governance also following transparent, integrity and accountability standards. Embracing diversity, creating innovation in governance transparency, or risk is a one of governance ESG value.

C. MSCI SDG Net Alignment

As the UN SDGs gain traction throughout all industries, some companies claim that they are adopting and supporting SDG goals and frameworks but are involved in a significant issue that may contradict the declared support or contributes to a specific SDG through philanthropy. yet, their product or service that has a negative impact on the goal in issue. The MSCI SDG Alignment Tool is based on a methodology that delivers qualitative SDG Net Alignment evaluations and scores for each of the 17 global objectives by analyzing the screened company's activities and operations. The SDG Alignment Tool is intended to offer a comprehensive overview of a company's net impact - both positive and negative - on achieving each one of the 17 UN Sustainable Development Goals (SDGs).[5] Assessments and ratings for SDG Alignment involve an examination of a company's operations, goods and services, policies, and practices, as well as their net contribution - positive and negative - to tackling critical global concerns in accordance with the SDG framework. The influence of a corporation on each of the seventeen SDGs is determined by three pillars:

- Product & Services – Identify to what extent products and services beneficially contribute to the SDGs or obstructing the cause.
- Operation & Management – Evaluate impact along with the entire value chain that affecting the SDGs.
- Involvement in social and environmental program that giving good or bad result.

D. ISS-MSCI ESG Impact Assessment

Impact assessment is an essential component of order to manage an impact investing portfolio, and many investors are developing approaches that add value beyond simply reporting results. ISS-ESG method offers a combination of quantitative and qualitative results and conducts a general mapping around measuring the impact of the company. The ISS-ESG provides extensive assessments of a company's either positive or negative influence on the SDGs through the SDG Impact Rating Tool. Precise scores can be used to create bespoke ratings that support specific impact investment goals. Another option for measuring the SDG effect is to engage two distinct suppliers (one quantitative, one qualitative/sector-specific) to do a thorough examination of how the firm contributes to the SDGs.[6] When possible, such an examination should look at the whole value chain of the company's activities. MSCI ESG ratings are designed assist institutional investors making an impact investment assessment from ESG point of view to enable them to make investment decision based on the profitability of certain company while making environmental and social impact. The assessment rating is based on their research the final Industry-Adjusted Company Score 7 point from AAA to CCC.[4]

E. Early-Stage Startup

Early-stage is the phase when a start-up is in the idea/seed validation stage, or it has produced a Minimum Viable Product (MVP) and during this phase start-up has not yet developed a business model or marketing strategy at this stage. However, numerous consumers have already begun to utilize the product. Start-ups begin to develop their business concepts and define the path of the firm during the early-stage phase. This is regarded as a tough stage for a start-up and its founders, and many economists called it Valley of Death. Start-ups require coaching and investors to expand their businesses due to limited cash and experience and it is provided by a Venture finance. Almost all venture capital firms make investments in businesses that are not yet well-known to the public. Only a few venture capitalists will invest in firms that have recently launched their goods.[7] But, of course, this only applies to businesses whose goods have gotten a strong market reaction. The investment value dispersed by venture capital may be little in

the early stages. However, venture capital has the contacts and knowledge that early-stage firms require. A venture capitalist's experience may provide start-up entrepreneurs with new insights and views as they expand their businesses.

III. ANALYSIS AND RESULT

Impact investments could be done for both developing and developed countries, with returns ranging from below average to market rate, based on the investor's strategic objectives. In this case, impact investment screening tools are needed which are adapted to be used to screen investments in developing countries (especially Indonesia) which will eventually be used in the investment process in the business process of venture capital. To do this, clear methods and definitions are needed regarding matters related to impact investment.[3] An entity's impact is characterized as a shift (good or negative) in social, environmental, or economic well-being. Nevertheless, when developing an investment scheme that aspires to positively contribute to the SDGs, while also follows the rules of the ESG framework to become a company that is sustainable, has impact, and is profitable for all parties involved is far from sufficient. Connecting areas of interest (for example, education services) to the supported SDGs (in this case, SDG 4, 8, and 16) aids in the establishment of concise, specific, and achievable objectives. Specific goals enhance transparency and measurability in investment and impact plans. Just as impact investors reconcile the twin goals of social or environmental change and financial return, it is vital to connect this balanced perspective with the investee's management. In this chapter, the author will explain how the assessment tools formulated and how to gather the necessary data to be used to analyze the early-stage start-up to be categorized as an impact investment.

A. MSCI SDG Alignment

The first step of analyzing impact investment is to use an SDG alignment tools to decide whether the startups products, services, and value are aligned with the 17 UN SDG. The SDG alignment framework used to measure the impact/contribution made by startups based on each SDG goals. Each contribution then scored per SDG using the MSCI scoring methodology based by impact created by startups. Then, the score is calculated, weighted, and rated using the adapted formulation based on MSCI scoring method. The following are the formulated methodology based on the MSC SDG net alignment assessment methodology:

Score	Strongly Misaligned	Misaligned	SDG Goals	Aligned	Strongly Aligned	[Startup] contribution per-point description
0,75			No Poverty			"Evidence,Fact, or Argument of alignment"
0,25			Zero Hunger			"Evidence,Fact, or Argument of Misalignment"
1			Health and Wellbeing			"Evidence,Fact, or Argument of Strong alignment"
0			Education			"Evidence,Fact, or Argument of Strong misalignment"
0,5			Equality for All			"skip the column If its Neutral"
0,5			Clean Water			
0,5			Clean Energy			
0,5			Economic Inclusion			
0,5			Sustainable Infrastructure			
0,5			Reduced Inequality			
0,5			Sustainable cities			
0,5			Responsible consumption			
0,5			Climate Solutions			
0,5			Life Underwater			
0,5			Life on Land			
0,5			Peace and Justice			
0,5			Partnership			
8,5	Total Score					

Final Alignment					
0%	Misaligned		Neutral		Aligned 100%

Figure 1. SDG Alignment Assessment tools



From the data published by MSCI stated that most respondent companies with populations more than 50% had neutral or better alignment across the goals because most of their products or operations are relevant to the advancement of specific designated goals from the 17 SDG. MSCI found that nearly more than 37 of the 8 thousand companies that has been assessed had a greater number of alignments than its misalignments. However, a larger share of developed-market companies (60.9%) was aligned with more SDGs. The finding is suggesting many companies from developed nation face greater pressure to mitigate their negative effect on based on the SDG alignment goals on the environment and society, compared to their counterparts in developing economies. (MSCI AWCI Index,2022). From this information we can conclude that for start-up to pass the SDG Alignment assessment, their SDG alignment score must have a positive alignment to the right or more than 60%. The following table is an explanation how to make verdict score of SDG based on the evidence findings:

Table 2. SDG Alignment verdict and scoring

Verdict	Description	Score
Strongly Aligned	operations, goods and services, policies, and practices of the company brings 1 direct contribute to the sustainable development goals	
Aligned	operations, goods and services, policies, and practices of the company brings 0,75 indirect contribute to the sustainable development goals, or weak evidence	
Misaligned	operations, goods and services, policies, and practices of the company indirectly 0,25 restrain sustainable development goals or week evidence	
Strongly missaligned	operations, goods and services, policies, and practices of the company directly 0 restrain sustainable development goals	

If the assessors didn't find any prove or fact backed with evidence about the startup involvement/effect on SDG then, the score will be neutral (0.5 or 50%) the following are the formula to weight and calculated using MSCI method based on total score accumulated in the assessment.

B. ISS Impact Analysis

ISS-ESG method offers a combination of quantitative and qualitative results and conducts a general mapping around measuring the impact of the company. The ISS-ESG provides extensive assessments of a company's either positive or negative influence on the SDGs through the SDG Impact Rating Tool. Precise scores can be used to create bespoke ratings that support specific impact investment goals. Another option for measuring the SDG effect is to engage two distinct suppliers (one quantitative, one qualitative/sector-specific) to do a thorough examination of how the firm contributes to the SDGs. The following are formulated assessment tools based on ESG dimension issue that the startup making impact in and its score based from adjusted methodology of ISS using a Likert scale:

Table 2. SDG Alignment verdict and scoring

Dimension	General Issue	Description Positive/negative impact of general issue	Startup Impact	Likert score
E	Environment	GHG Emission	effect on carbon emission	
		Air Quality	emissions of various gases, disease, or heavy metal in air	
		Energy Management	management in energy efficiency or renewable	
		Water & Waste Management	Water and waste treatment	
		Ecological Impact	Biodiversity or deforestation	
		Product Design & Life cycle management	Life cycle of products and services in circular economy	
		Physical Impacts of climate change	Environmental engineering	
S	Social Capital	Material Sourcing & Efficiency	Innovation / destruction in material sourcing	
		Human Rights	Socioeconomic Impact	
		Customer Privacy	Use of personal Identity	
		Data and Cyber security	Collection, retention, use of confidential data	
		Digital Rights and Truth	Freedom of speech	
		Access & Affordability	Inclusive/exclusive access for certain products/services	
		Digital Inclusion	Digital education or access	
	Human Capital	Product quality & safety	Health and safety risk	
		Customer Welfare	improving access to products/services	
		Selling Practices & Product	Transparency, accuracy, and marketing	
		Labour Practices	Improvement of labour standards	
G	Business Management & Governance	Employee Health & Safety	Safety and health risk at workplace	
		Employee engagement, Diversity & Inclusion	Diverse and Inclusive workforce	
		Ethical and safe research/innovation practice	ethical and safety in technology	
		Business model resilience	Reducing/Increasing business risk from fraud, crime, nature, etc	
		Supply Chain Management	Supply chain innovation	
		Business Ethics	Improvement of business ethic	
		Technology/Digital/Innovation ethics	Improvement in ethical products /services	
		Governance processes & Practices	Innovation in Governance process	
		Management of the Legal & regulatory	Innovation in Legal & Regulatory process	
		Critical incident risk management	Reducing incident	
		Payment structure	Innovation in payment structure	
		Technological geopolitics	Geopolitical solutions	

The primary data collected from the start-ups will analyzed from ESG and SDG KPI perspectives using an impact assessment bar that collected by Likert scale. A Likert scale is a rating scale used to measure opinions, attitudes, output or behaviors. Likert scales generally feature either five or seven answers. Response anchors are the possibilities on each end. The middle is frequently a neutral item, with positive and negative possibilities on either side. Each component is assigned a score ranging from 1 to 5. When responding to a Likert Scale item, the respondent specifies their level of preference. These scales allow you to determine the respondents' respondents' level of agreement. The Likert scale presupposes that the experience's strength and intensity are linear. Assuming that attitudes can be assessed, it there, therefore, progresses from full agreement to complete disagreement. The following are ISS-ESG impact assessment with Likert scoring as follows:

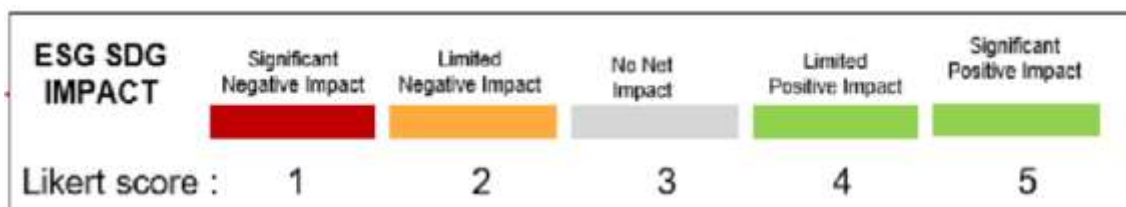


Figure 2. Likert Scoring for ESG SDG Impact

The following is an explanation and procedure for using the ESG SDG Impact assessment bar for start-ups to be assessed:

Table 3. ESD SDG Impact score description

ESG SDG Impact	Description	Score
Significant Negative Impact	The startup products, services, management, or other involvement directly brings a negative impact to the ESG Dimension for each Issue category	1
Limited Negative Impact	The startup products, services, management, or other involvement Indirectly brings a negative impact to the ESG Dimension for each Issue category	2
Net Neutral Impact	The startup products, services, management, or other involvement brings no Impact whatsoever	3
Limited Positive Impact	The startup products, services, management, or other involvement Indirectly brings a positive impact to the ESG Dimension for each Issue category	4
Significant Positive Impact	The startup products, services, management, or other involvement directly brings a Positive impact to the ESG Dimension for each Issue category	5

Based on the result of scoring impact investment assessment using a Likert scale, the assessors can use the following rating method to decide whether their startup investee is an impact investment or not. From the analysis that has been done to create an impact analysis scoring tool based on the issue impacted in the ESG theme, the next step is to enter the values that have been made from the ESG impact scoring into the Final Industry-Adjusted company score obtained from the MSCI ESG scoring methodology. The following is a detail of the rating for each ESG score that has been obtained:



Figure 3. ESG-SDG Impact Investment Final Scoring and verdict assessment tools



IV. CONCLUSION

Based on the results and analysis of the making of impact investment assessment tools, it is concluded that by using these assessment tools investment company or enterprise can assess, differentiate, and determine whether the potential startup investees to be invested are included in the form of impact investment or not. These assessment tools are specified to be used to screen an impact investment for an early-stage startup. The formulation of the screening tools that have been created can be expected to assist investors in their endeavor to invest in the right company by implementing it into their business process. Investing in impact investment is a form of investor commitment to carrying out the ESG framework by implementing SRI (Socially Responsible Investment). It is hoped that with the creation of this tool, many early-stage startups will receive investment funds from impact investment as a form of inclusive access to investment. Investing in a start-up early-stage will also increase the growth of technological innovation in disruptive products and services that may bring environmental and social benefits. By adopting the existing ESG assessment methodology, it is hoped that the creation of these screening tools will still follow international standards on the established SDG and ESG principles, so that the impact investment screening tools that have been created will still have the quality of the existing accreditation. This impact investment screening tool is suitable to be used in the venture capital business process, and implementation in other types of investment entity such as investment bank, government, hedge fund, private equity, etc. require additional research.

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