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**THE ISLAMIC COMPOUNDING MECHANISMS FOR SUSTAINABLE  
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**Abstract**

This study examines the compatibility of compounding theory with Islamic investment principles in promoting business sustainability, green transition, and the achievement of the Sustainable Development Goals (SDGs). Using a qualitative-descriptive method and normative legal analysis, it finds that an Islamic Compounding Mechanism (ICM) based on the Base Profit Rate (BPR) can support exponential wealth accumulation without violating core shariah principles, provided it is structured through permissible contracts such as *murabaha*, *musharaka*, and *mudharaba*. The study further highlights that this mechanism can align profit growth with sustainable business practices and environmentally responsible investment. It thus proposes ICM as a practical framework for integrating shariah compliance, ethical wealth creation, and sustainability objectives in contemporary Islamic finance.

**Keywords:** Islamic Compounding Mechanism, Shariah Compliance, SDGs, Green Financial Innovations



## INTRODUCTION

Global sustainable development requires the transformation of the financial system so that it is capable of providing green financing on a large scale while maintaining fairness, stability, and long-term prosperity as emphasized in the SDGs agenda and Islamic green finance literature (Alam et al., 2023a; Gazali et al., 2018). The dominance of the conventional interest-based compounding model as the main engine of asset growth poses a fundamental problem for Islamic finance, as this exponential growth mechanism is often associated with usury, excessive leverage, and the potential for asset bubbles that are contrary to maqasid al-shariah (Gazali et al., 2018). On the other hand, studies on green sukuk and Islamic green financing show that sharia instruments have contributed significantly to the financing of green projects and the achievement of various SDG targets, but have not been accompanied by an explicit "mechanism of growth" framework that is commensurate with compounding in the sharia perspective (Alam et al., 2023a; Ayu Alifia & Fakhriah, 2024).

This gap is important because the asset growth model used in green finance will determine the distribution of risk-return, intergenerational equity, and the sustainability of funded projects (Alam et al., 2023a; Khanifa et al., 2024). The existing literature highlights the dichotomy of riba versus return and maqasid versus profit, and maps the role of green sukuk in supporting SDGs 7, 8, 9, 11, and 13, but has not yet elaborated on how exponential growth patterns can be engineered to be in line with profit-sharing principles, based on real assets, and free of usury (Inayati et al., 2025; Khanifa et al., 2024). In this context, efforts to formulate concepts such as Base Profit Rate (BPR), recurring musharaka growth cycles, and profit reinvestment mechanisms as halal analogues for compounding are crucial so that Islamic finance does not merely adopt interest structures in different terms (Gazali et al., 2018).

In the realm of conventional finance, research on exponential-growth bias and money illusion shows that many individuals systematically underestimate the magnitude of the compounding effect and are overly confident in their ability to calculate exponential growth (Caglayan et al., 2025; Levy & Tasoff, 2017). Laboratory experiments found that the majority of respondents failed to accurately perceive exponential growth and exhibited high levels of overconfidence, leading them to under-save for retirement and make suboptimal financial decisions, even when calculation tools were available (Levy & Tasoff, 2017). These findings explain why market solutions do not automatically correct biases against compounding and signal that the design of compounding



mechanisms—both conventional and sharia—must take into account the limitations of investor literacy and behavior (Caglayan et al., 2025).

In Islamic finance, there are efforts to develop alternative profit formulas that are more compliant with Sharia law while still utilizing the power of compounding, one of which is through the concept of Base Profit Rate (BPR) which links profit margins to real economic conditions and the size of financial bubbles (Gazali et al., 2018). The BPR model uses the theory of compounding in installment schemes and restructures profit rates so that they no longer depend on OPR-based base rates that contain elements of usury, while also attempting to reduce *ghabn fahish* in the determination of selling prices (Gazali et al., 2018). However, the existing formulation still focuses on sale-and-purchase-based financing and has not been explicitly integrated with the green finance framework, SDGs, or the use of fintech and artificial intelligence to support exponential halal growth.

Islamic green finance literature and *maqasid al-shariah* emphasize that green sukuk and other sharia-compliant green instruments have become important instruments for supporting clean energy projects, sustainable infrastructure, and climate change adaptation, and are considered consistent with the goal of preserving the environment within the *maqasid* framework (Ayu Alifia & Fakhriah, 2024; Khanifa et al., 2024). A systematic and bibliometric study shows that the issuance of green sukuk contributes to various SDG targets and opens up opportunities to strengthen Islamic values in the environmental agenda, but the return growth mechanism used has not been formulated as an explicit sharia compounding model (Alam et al., 2023a; Prayogo et al., 2024). This opens up space for the development of an Islamic Compounding Mechanism (ICM) that combines a profit-sharing-based asset growth model, a reinvestment cycle, and asset-backed growth with SDG objectives and *maqasid al-shariah* principles.

The development of fintech, blockchain, and artificial intelligence expands opportunities for the transparent, efficient, and measurable implementation of sharia compounding mechanisms in the context of green finance. A literature review on Islamic fintech and blockchain shows that these technologies can increase financial inclusion, smart contract transparency, and tracking of sukuk and green waqf fund flows, while strengthening accountability for achieving SDG indicators (Alshater et al., 2022; Matondang et al., 2024). However, most of these studies are still limited to mapping trends and opportunities, without formulating how AI algorithms, smart contracts, and green asset tokenization can be designed to strengthen the profit reinvestment cycle, revolving *musharaka*, or



green profit-pooling as auditable halal compounding mechanisms that can be aligned with the maqasid framework (Surbakti & Nurzaman, 2025).

Based on these gaps, this study aims to: (1) analyze the compatibility of the compounding theory with the basic principles of Islamic finance, by distinguishing between the prohibited aspect of exponential interest and the aspect of exponential growth based on profit reinvestment and potential real assets that are permissible; (2) develop an Islamic Compounding Mechanism model that integrates the concepts of BPR, the musharaka/mudharaba growth cycle, and the mechanism of repeated reinvestment within a framework that is free of usury and in line with maqasid al-shariah; (3) evaluating how sharia green fintech innovations—including green sukuk, blockchain, asset tokenization, and AI-based portfolio optimization—can operationalize sharia compounding mechanisms; and (4) developing a theoretical framework for Islamic asset growth that links the design of growth mechanisms to their contribution to priority SDGs.

Theoretically, this study is expected to enrich the literature on Islamic finance and sustainable business by offering an operational model for sharia asset growth, while practically providing guidance for Islamic banks, regulators, and fintech players in designing green products that combine compounding leverage with sharia compliance and a commitment to sustainable development.

## LITERATURE REVIEW

The literature review in this study was compiled to systematically map the development of the concept of compounding in conventional finance, the core principles of Islamic finance, sharia investment growth models, and the latest literature on sustainable finance, green sukuk, and sharia-based green finance innovations. Through this mapping, the literature review section not only summarizes the main findings of previous studies but also identifies patterns, differences, and research gaps at the intersection of compounding, Islamic finance, fintech, and SDGs. Thus, the discussion in the existing subchapters is directed at building a theoretical basis for the development of an interest-free Islamic Compounding Mechanism, while also confirming the position of this study's contribution among previous studies.

### **Compounding in Conventional Finance**

In conventional finance, compounding is understood as the process of exponential asset value growth through the recapitalization of interest or returns in each period, so that small differences in interest rates and time horizons can result in large differences in wealth accumulation (Gazali et al., 2018; Levy & Tasoff, 2017). Compounding is the basis for various instruments such as interest-



bearing deposits, coupon bonds, pension products, and derivative instruments, making it the "engine of growth" in the modern financial system as well as a source of concern when linked to debt overhang, asset bubbles, and macro instability (Alam et al., 2023a; Levy & Tasoff, 2017).

### **Islamic Financial Principles Relevant to Compounding**

The basic principles of Islamic finance place the prohibition of *riba*, *gharar*, and *maysir* as the main pillars, which implies that every mechanism of value growth must be tied to real assets, productive activities, and fair profit-sharing schemes (Alam et al., 2023a; Khanifa et al., 2024). Usury—including additional charges on the principal debt due to time factors—is considered contrary to distributive justice and can encourage exploitation, so that exponential interest-based growth models in consumptive and speculative debt are not in line with *maqasid al-shariah* (Khanifa et al., 2024; Prayogo et al., 2024).

As an alternative, Islamic finance emphasizes profit- and loss-sharing schemes through contracts such as *mudarabah* and *musharakah*, where the return on investment is determined by business performance rather than a fixed nominal interest rate. In addition, the principle of asset-backed growth requires that every financial claim has underlying assets or *halal* activities, which conceptually opens up room for exponential growth through profit reinvestment and business expansion, but at the same time limits purely money-based compounding practices (Alam et al., 2023a; Gazali et al., 2018).

### **Islamic Investment Growth Models**

The sharia investment growth model that has developed includes the *murabahah* scheme with a profit margin calculated at the outset, *musharakah* and *mudarabah* contracts with recurring profit-sharing cycles, and profit reinvestment mechanisms in *halal* asset portfolios (Gazali et al., 2018). In *murabahah*, the profit margin is usually fixed throughout the tenor, while in *musharakah* or *mudarabah*, the profit-sharing ratio allows for portfolio growth in line with improved performance and business scale, thereby creating a growth pattern that in practice can resemble compounding through repeated reinvestment (Alam et al., 2023a; Khanifa et al., 2024).

Gazali (2018) proposed the concept of Base Profit Rate (BPR) as an alternative to determining sharia profit rates that are more independent from conventional interest rates, by utilizing the theory of compounding in a controlled and transparent manner in installment contracts. This approach shows that, mathematically, the principle of compounding can be used to calculate payment



schedules and bank profits as long as they are based on valid sale and purchase or financing agreements and are not tied to interest references such as the OPR (Gazali et al., 2018; Levy & Tasoff, 2017). This opens up opportunities for the development of an Islamic Compounding Mechanism model that combines the musharakah growth cycle, profit reinvestment, and BPR as a halal analog for compounding.

## RESEARCH METHOD

This research method uses a qualitative-descriptive approach combined with normative legal analysis in the context of Islamic finance and sustainability. The qualitative approach is used to explore in depth the concepts, principles, and mechanisms of asset growth in conventional and Sharia finance literature related to the role of Islamic finance in achieving the SDGs (Herindar & Shikur, 2024). Normative legal analysis is used to assess the suitability of the Islamic Compounding Mechanism (ICM) design with sharia principles and SDG objectives through a review of regulations, sharia standards, and the maqasid al-shariah framework (Harun & Rahmat, 2025). This approach is in line with studies that position Islamic finance as a policy instrument for maqasid-based sustainable development (Ben Jedidia et al., 2025).

The types of data used are secondary data in the form of classical and contemporary fiqh literature, fatwas from authoritative institutions, international institutional standards, and Scopus-indexed journal articles related to Islamic finance, green finance, Islamic fintech, and SDGs. This secondary data includes reports on the development of the global Islamic finance industry that highlight asset dynamics, product innovation, and its relevance to sustainable finance and SDGs. Bibliometric articles on green sukuk and Islamic green finance were used to map the development of sharia-compliant green instruments, research themes, and geographical focuses relevant to the design of the ICM model. In addition, studies on Islamic social finance and environmental sustainability were used to emphasize the role of zakat, waqf, and other Islamic social instruments in supporting the environmental agenda and SDG targets.

Data collection was conducted through a systematic literature review of articles indexed in Scopus and other scientific databases using keywords such as "Islamic finance," "compound interest," "green sukuk," "Islamic social finance," and "SDGs." This process followed the general stages of a systematic literature review, which included identification, screening, quality assessment, and literature synthesis (Harun & Rahmat, 2025). The SLR and bibliometric approaches are widely used to map trends, theme clusters, and research gaps in



the fields of Islamic finance and green finance, including the role of sharia instruments in financing energy transition and green projects (Hermala et al., 2025). The same techniques were used in bibliometric analysis of the Islamic green economy and green sukuk to map dominant keywords and scientific collaboration networks in the field of Sharia-based green finance (Atiah et al., 2024; Prayogo et al., 2024).

The analytical framework of this study is structured in several layers to capture the normative, financial, and sustainability dimensions. First, an analysis of maqasid al-shariah and Islamic financial principles is used to identify aspects of compounding theory that are not in line with shariah and aspects that can be adapted through profit-sharing and asset-backed financing schemes (Inayati et al., 2025). This approach follows the argument that Islamic green finance must be designed to maintain public interest and reduce negative environmental impacts. Second, a comparative analysis is conducted between the conventional compounding model and sharia asset growth models—such as murabahah, musharakah, mudarabah, zakat, and waqf—considering the risk-return structure and sustainability impact, as shown in a green financing study using Islamic financial instruments. Third, an integration matrix with SDGs and Islamic sustainable finance was developed to assess the potential contribution of ICM to goals such as clean energy, sustainable economic growth, reduction of inequality, and financial inclusion, following an analysis of SDGs in Islamic commercial and social finance.

This study then developed a conceptual model of the Islamic Compounding Mechanism (ICM) through conceptual synthesis of literature findings, rather than through quantitative empirical testing. The model was developed by mapping key findings from studies on Islamic green finance, green sukuk, and Islamic social finance into a single framework of riba-free and sustainability-oriented asset growth (Alam et al., 2023a). The literature on integrated models of Islamic social finance and trends in Islamic social finance research was used to structure the integration of sharia social and commercial instruments within the ICM framework. Thus, the validity of the model is conceptual-normative and relies on logical consistency, compliance with sharia principles, and alignment with SLR findings and qualitative studies on the role of Islamic finance and Islamic social finance in sustainable development.



## RESULTS AND DISCUSSION

The theory of compounding can be adopted in Islamic finance as long as it is separated from interest-bearing lending practices and linked to real activities and profit-sharing mechanisms. In this framework, value multiplication is understood as a mathematical process to model profit reinvestment and asset growth, not as a price for the use of money, so it does not automatically conflict with the prohibition of ribā. (Azad et al., 2018; Widarjono & Rafik, 2023).

### **Compatibility of Compounding Theory with Islamic Principles**

The latest study on the prohibition of ribā confirms that the complexity of interest rates—including the differences between nominal rates, internal rates of return, and annual percentage rates—makes interest difficult to function as a single and transparent balancing variable, unlike commodity prices, which tend to converge toward a single market price (Iqbal & Shah, 2024). This is in line with the criticism that the use of interest as the "price of capital" opens up room for unfair distribution of risk and returns, so that it cannot be equated with prices in the goods market, whose role is recognized by sharia (Azad et al., 2018).

In the context of banking practices, studies of the dual banking system in Indonesia and Malaysia show that Islamic bank financing rates are still heavily influenced by conventional lending rates, so that Islamic products tend to replicate existing interest structures (Widarjono & Rafik, 2023). This finding reinforces the urgency of developing a return growth model that does not depend on interest-based benchmarks, but rather on the performance and risk of real projects that are in accordance with sharia, so that the theory of compounding can be directed to model profit sharing and reinvestment, rather than loan interest.

From a technical perspective, exploration of continuous compounding in complex numbers shows that the multiplication function is capable of representing the dynamics of profit, loss, and volatility, including negative asset conditions, without assuming that the additional value is interest on borrowed money. By integrating this understanding into an asset-based and risk-sharing contract framework, compounding can be used to regulate cash flow patterns, profit distribution schedules, and reinvestment scenarios that are consistent with maqāṣid al-sharī'ah and free of usury.

### **Islamic Compounding Mechanism (ICM) Model**

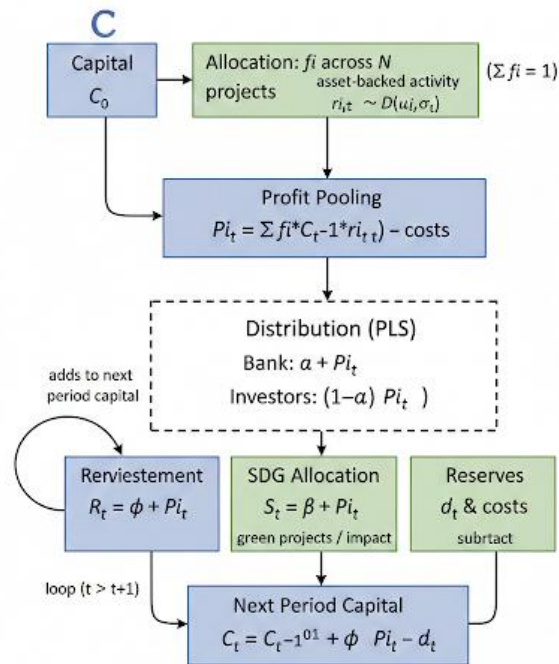
The Islamic Compounding Mechanism (ICM) model departs from the Base Profit Rate (BPR) as a sharia alternative to the interest-based base rate, where the profit rate is determined by the agreed margin and economic condition indicators such as bubble size estimated through the GJLS model, then applied with a compounding scheme to installment contracts (Gazali et al., 2018). Thus, the



compounding formula is used to calculate the payment pattern and principal-profit separation in real asset transactions, without referring to the OPR or conventional money market rate, thereby reducing dependence on interest-linked benchmarks that have been criticized in the literature. (Azad et al., 2018; Widarjono & Rafik, 2023).

At the system level, research on financing benchmarks finds that Islamic bank financing rates tend to follow conventional lending rates in the long term, indicating the absence of a fully independent internal benchmark. ICM offers a correction by linking BPR to the profitability and risk of the project being financed, and using a multiplication structure to regulate the reinvestment cycle in *mudhārabah* and *musyārahah* contracts, so that the exponential growth that occurs is real asset growth and not the accumulation of interest-bearing debt (Gazali et al., 2018).

Furthermore, ICM can be integrated with green instruments such as green sukuk through a green profit-pooling mechanism, whereby a portion of the compounding profits is channeled to environmentally friendly projects that support the SDGs. Recent studies show that green sukuk plays a significant role in financing climate change mitigation and sustainable infrastructure projects, as well as being an important channel for investors who prioritize ESG and sharia principles (Khanifa et al., 2024). By positioning BPR and ICM as halal growth engines connected to green sukuk, Islamic finance is able to combine the mathematical advantages of compounding with a commitment to sustainability and intergenerational justice (Prayogo et al., 2024).



**Figure 1.**  
**Diagram and Mathematical Model of ICM**

The Profit-Loss Sharing (PLS) diagram with SDG allocation illustrates the ICM flow as a capital growth cycle that starts with initial capital  $C_0$ , is allocated to asset-based projects, and circulates back through reinvestment and green impact allocation. In the first stage, capital is distributed to various real activities with allocation weights  $f_i$ , where each project generates a random return  $r_{i,t}$  representing business risks and opportunities; this pattern is consistent with findings that PLS financing such as *mudhārabah–musyārahah* contributes positively to the profitability of Islamic banks and the real sector (Gazali et al., 2018).

**Table 1.**  
**Notation and Main Variables**

Code	Definition
$C_0$	Initial Capital
$C_t$	Total Capital at the time $t$
$f_i$	The proportion of capital allocated to $i$ at the time $t$ , which is stochastic (involves uncertainty)
$\Pi_t$	Total profit earned during the period $t$
$\alpha$	The bank's or manager's share of the profit $\Pi_t$



$\phi$	Fraction of the profit $\Pi_t$ that is reinvested into the project (reinvestment)
$\beta$	Fraction of profit allocated specifically to SDGs/Green Economy projects
$\delta_t$	Reserves or expenses incurred during the period $t$
$costs_t$	Operational costs or costs required for project implementation during the period $t$

The next stage is profit pooling, where in Figure 2 all project profits  $\Pi_t$  are collected, minus costs, and then distributed using the PLS scheme between the bank and investors according to the agreed ratio, rather than through fixed interest payments (Widarjono & Rafik, 2023). This scheme implements BPR as an internalized profit level in the profit-sharing structure: the profits received by the bank ( $\alpha + \Pi_t$ ) and investors  $(1 - \alpha)\Pi_t$  reflect the actual performance of the portfolio, in line with the recommendation that Islamic financing benchmarks be linked to business returns, rather than external interest rates (Azad et al., 2018).

$$\Pi_t = \sum_{i=1}^N f_i C_t - 1 r_{i,t} - costs_t$$

**Figure 2**  
**Profit Pooling Dynamics (per Period)**

ICM then strengthens the sustainability dimension through three main channels: reinvestment, SDG allocation, and reserves. The portion of profits that is not distributed is added to the next period's capital "Reinvestment" ( $1 + \phi \sum_i f_i \mu_i$ ) as a halal compounding mechanism, while a certain portion is allocated to green projects and SDG initiatives ( $S_t$ ) — for example, through green sukuk or energy transition financing — and another portion is set aside as reserves for risks and operational costs  $\delta_t$  (Alam et al., 2023b; Khanifa et al., 2024). The next period's capital formula in Figure 3 illustrates how BPR and compounding are used to grow capital exponentially through real assets, while still channeling part of the proceeds to sustainable projects and risk buffers, thus aligning with the ICM concept that combines halal growth, risk-sharing, and support for SDGs.



$$\mathbb{E}[C_t] \approx C_{t-1} \left( 1 + \phi \sum_i f_i \mu_i \right) - \mathbb{E}[\phi \text{costs}_t + \delta_t]$$

**Figure 3**  
**Exponential Growth Conditions (Expectations)**

### **Shariah Constraints, Optimization and Final Contribution**

This model is designed to fully comply with sharia principles in its operations. There is no guaranteed fixed return in this model, as all profits or losses must be shared between the manager and investors in accordance with the agreed contract, such as in a mudharabah contract. This principle ensures that this model does not involve riba, which is fixed interest and is considered contrary to Islamic teachings. In this case, the investor bears the loss unless there is negligence on the part of the manager (Iqbal & Shah, 2024). In addition, every investment made must be asset-backed, which means that the capital allocated is only for investments related to real assets, not speculation or derivative instruments. This indicates that the profits obtained must come from real economic activities, such as investments in green projects or social infrastructure whose success can be measured.

Furthermore, the principle of risk-sharing is prioritized in this model, where profits or losses will be shared between managers and investors in accordance with the agreement. When profits are earned, a portion of the profits will be allocated to SDG (Sustainable Development Goals) or green projects, ensuring that the profits are not only financial, but also provide benefits to society and the environment. Clear supervision and transparency in all stages of operations are part of sharia governance, which involves the Sharia Supervisory Board to ensure that all fund allocations and profit sharing are in accordance with established sharia principles.

To optimize capital allocation, this model proposes the use of AI to determine the appropriate capital allocation across various projects, ensuring maximum capital growth without violating sharia principles or SDGs. AI and optimization algorithms can be used to select the optimal proportion of capital among various projects, taking into account project return estimates and the volatility of each project. In this case, AI technology can help identify risks and estimate the expected returns from each project, enabling the investment portfolio to grow optimally and sustainably (Iqbal & Shah, 2024; Mustafa et al., 2020). By



using AI, portfolio optimization can be carried out with a more measurable approach, including using robust optimization or models that reduce CVaR (Conditional Value-at-Risk), to ensure that the risks of market uncertainty can be minimized.

Finally, the contribution of the results that we can present is the structured integration of Shariah-compliant growth mechanisms with sustainable development objectives. The Islamic Compounding Mechanism (ICM) demonstrates a viable pathway for value growth by aligning Shariah principles with practical investment flows. Through the integration of murabaha, musharaka, and mudharaba contracts, ICM facilitates sustainable reinvestment cycles via compliant instruments, supporting real-asset-backed growth without prohibited elements. This approach complements green finance instruments like sukuk in the context of SDG targets, bridging theoretical finance models with practical, ethics-driven investment flows. The findings offer a practical and theoretically sound approach for both academic and industry applications.

Methodologically, the study provides a transparent framework for assessing Shariah compliance and sustainability alignment, which can be replicated in future research. The evaluation protocol includes decision rules, governance checks, and sensitivity considerations such as variable Base Profit Rate and asset quality. This framework not only clarifies the theoretical contribution but also enhances the practical utility of the research by providing a replicable protocol for researchers and practitioners. The results underscore the potential for ICM to be adopted in product design, ensuring that growth mechanisms remain robust under diverse market and regulatory environments.

From a policy and industry perspective, the findings offer actionable insights for Islamic financial institutions aiming to embed SDG-oriented growth into their product architectures. The discussion emphasizes the importance of governance and risk management in maintaining the integrity of growth mechanisms across varying regulatory and market landscapes. By focusing on practical implementation, this study provides valuable guidance for practitioners and policymakers seeking to strengthen the integration of Islamic finance and sustainable development goals.

Future research should prioritize two important avenues to strengthen the theoretical and practical relevance of the integrated compounding model (ICM) within Islamic sustainable finance. First, empirical validation of ICM across different market settings is needed, including simulation-based assessments using maqāṣid al-sharī‘ah-aligned project portfolios and diverse regulatory



regimes. Such investigations would be valuable for assessing the model's operational feasibility, scalability, and adaptability under varying institutional and market conditions. Second, comparative analyses between ICM-based instruments and conventional green sukuk should be undertaken, with particular emphasis on financial performance, risk-adjusted returns, and SDG-related impact metrics. These lines of inquiry are expected to generate deeper insight into the comparative advantages and potential scalability of ICM, while also offering more robust and actionable evidence for practitioners and policymakers seeking to strengthen the nexus between Islamic finance and sustainable development.

From a policy perspective, the findings also suggest the need for regulators and policymakers to foster an enabling ecosystem for the implementation of an integrated ICM framework aligned with sustainability objectives. This may be pursued through regulatory incentives aimed at increasing the share of profit-and-loss sharing (PLS) financing, support for the development of data-driven Islamic benchmarks, and the strengthening of the green sukuk framework as a primary channel for SDG-oriented capital allocation within the PLS-ICM model. This recommendation is consistent with growing evidence that green sukuk can serve as an effective financing instrument for clean energy, sustainable transportation, and climate adaptation projects that are closely aligned with *maqāsid al-sharī'ah*. Looking ahead, stronger collaboration among financial regulators, international institutions grounded in the most recent research, and industry stakeholders will be essential to accelerate ICM standardization, stimulate innovation in green *Sharī'ah*-compliant financial products, and position halal compounding as a driver of inclusive growth that supports the achievement of the SDGs at both national and global levels.

## CONCLUSION

This study concludes that the theory of compounding can be adapted to Sharia through the establishment of an Islamic Compounding Mechanism (ICM) based on the Base Profit Rate (BPR), profit-loss sharing, and real asset-based investment. By separating the mathematical function of compounding from the practice of interest-bearing loans, the ICM enables exponential capital growth as reflected in the cycle of capital allocation, profit pooling, PLS distribution, reinvestment, and SDG allocation as described in the SDG-based PLS model. Empirical findings on PLS financing in Indonesian and global Islamic banking show that a higher portion of profit-sharing financing is positively correlated with profitability and proximity to the real sector, thus supporting the argument that



BPR-based compounding and PLS are more sustainable than non-PLS mechanisms based on fixed margins that resemble interest.

From a theoretical and benchmark policy perspective, the results of the study show that reliance on conventional interest rates as a pricing benchmark hinders substantive differentiation of Islamic finance and has the potential to reopen the risk of injustice criticized by the concept of usury prohibition. ICM offers a theoretical contribution by formulating BPR linked to the performance and risk of real projects, while in terms of policy, it provides a basis for the development of a more equitable and transparent Islamic benchmark, in line with the initiative to develop an Islamic benchmark rate and MyOR-i based on real transactions (Azad et al., 2018)., this study reinforces the position that the future of Islamic financial benchmarks should shift towards asset-linked and data-driven return measures, rather than simply modified interest-based benchmark replicas.

In practical terms, Islamic banks are advised to increase the portion of PLS financing and integrate BPR into product design, so that the financing price structure reflects the real capacity of the project to generate income and bear risks. The implementation of the PLS-ICM model requires strengthening risk management capacity, project monitoring systems, and sharia governance so that profit pooling mechanisms, profit sharing, and risk reserve formation are carried out in a disciplined and transparent manner as reflected in the capital-profit-reinvestment loop in the PLS diagram with SDG allocations. Empirical findings that PLS significantly increases profitability when it reaches a certain portion of total financing also provide a basis for banks to target a higher portfolio composition in *musyārahah* and *mudhārahah* contracts, while still controlling the risk of non-performing financing and liquidity.

Another point that is equally important for us to note here is that the integration of empirical findings on PLS financing further strengthens the argument for the sustainability and policy relevance of the ICM framework. This study formalizes the Islamic Compounding Mechanism as a coherent growth pathway that adheres to Shariah principles and advances sustainable development outcomes. Growth through ICM can be designed to support real-asset investment and profit-sharing arrangements, providing an ethical and economically meaningful alternative to conventional compounding in the context of green finance.

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