Research on the Impact of Green Finance Policies on Corporate Financing Efficiency

-- An Empirical Analysis based on Green Finance Reform and Innovation Pilot Zones

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Abstract

As the world moves deeper into green development, green finance isn't just a buzzword anymore-it's a powerful tool that steers social capital into environmentally friendly industries and pushes companies toward greener practices. In this study, I focus on China's Green Finance Reform and Innovation Pilot Zones, treating them as a kind of natural experiment. I use panel data from A-share listed companies between 2015 and 2023 and apply a multi-period difference-in-differences model to dig into how green finance policies affect corporate financing efficiency and how they work internally. The data tell a clear story: green finance policies make a real difference for companies inside the pilot zones, boosting their financing efficiency. This effect doesn't just burst onto the scene and disappear-it grows quickly at first, then settles into a steady state. When I dig into why this happens, I find that green finance policies help companies by easing their financing constraints and helping them strengthen their green governance. But not all companies benefit in the same way. The positive impact stands out especially among non-state-owned enterprises, high-tech firms, and companies in industries with heavy pollution. There's another twist: the effects don't stop at the targeted firms. Green finance policies send positive ripples down the supply chain, further boosting financing efficiency for downstream enterprises. Upstream firms, though, don't see much change. This research adds fresh evidence to the literature on the real-world, micro-level effects of green finance. It also offers practical insights for policymakers who want to refine the green financial system, help companies raise capital more efficiently, and drive high-quality economic growth.

Keywords

Green Finance Policies, Corporate Financing Efficiency, Difference-in-Differences (DID), Green Governance, Financing Constraints, Supply Chain Spillover, High-Quality Economic Development.

1. Introduction

In the era of global carbon peak and neutrality targets,green development is pivotal for high-quality economic growth.Enterprises,as economic entities,require financial backing for their green transition and sustainable growth.Yet,green projects demand substantial investment, have lengthy cycles,and yield broad benefits.This often leaves firms grappling with financing

hurdles,impeding financing efficiency and,consequently,the achievement of green development objectives.

China has started building a green financial system to close the funding gap for sustainable development. Back in 2017, the People's Bank of China teamed up with four ministries to release the Guiding Opinions on Building a Green Financial System. They didn't just stop at policy; they approved pilot zones for green finance reform in places like Zhejiang, Guangdong, and Xinjiang. This move launched a wave of new measures-credit, bonds, insurance, the works. The goal is simple: push financial institutions to back green industries, make it cheaper for green projects to get funding, and help companies secure financing faster.

Researchers have started to uncover the connections between green finance and corporate financing efficiency, but plenty of gaps remain[8]. Most studies zero in on one financial tool at a time-maybe green credit, maybe green bonds-and rarely tackle the bigger picture of how full policy systems shape company financing. Even where connections are made, the literature struggles to unpack exactly how these policies influence financing efficiency within firms. There's also a lack of in-depth work on how differences in policy affect various players, or on the way effects spread across supply chains. In short, the research is still catching up with the complexities of real-world green finance.

In this paper, I treat the green finance reform and innovation pilot zone policy as a quasi-natural experiment. Using a multi-period DID approach, I dig into how green finance policies shape corporate financing efficiency, and I break down the underlying mechanisms and differences across companies. The research expands the framework connecting green finance and corporate finance, and it gives real-world guidance for better green finance policies and corporate financing strategies. The core questions I tackle are clear: Do green finance policies boost corporate financing efficiency? How does this happen behind the scenes? Are the effects different for various enterprise types? And, does green finance spark spillover effects along the supply chain that change corporate financing efficiency?

2. Literature Review

2.1. Green Finance Policy and Corporate Behavior

Green finance policies push capital into sustainable industries and steer it away from heavily polluting, energy-hungry sectors[3]. You see the real impact on how companies operate. These policies don't just nudge-they motivate firms to invest in green innovation, modernize their operations, and move forward with the green transition. Take Liu Lanbiao and Liu Yong (2025), for example. They show that when policymakers introduce green finance tools, innovation catches on downstream in the supply chain. But it doesn't work the same everywhere. Ownership structures and each region's stage of green finance development shape the results. At the same time, these policies make it tougher for polluting firms to raise money. The pressure to improve environmental performance goes up, and so do efforts to cut emissions.

2.2. Corporate Financing Efficiency

Corporate financing efficiency reflects how well companies secure funds cheaply and put them to work for growth. Researchers usually look at two main things: how much it costs to finance, and the size or scale of that financing. Several factors shape this efficiency. Internally, you've got corporate governance, asset structure, and profitability. Externally, things like the strength of financial markets, the policy environment, and institutional quality step in. Out of these, the policy environment stands out-it plays a big role in setting the rules and guiding how companies manage their financing.

2.3. Green Finance Policy and Corporate Financing Efficiency

Researchers still haven't settled the debate over how green finance policies affect corporate financing efficiency[1]. Some claim these policies help-lowering financing costs and easing constraints-especially for companies with strong environmental records. Take green credit policies, for example. Banks often give lower interest rates to environmentally friendly firms. That drops their costs and opens up more funding. Others see it differently. They argue that green finance policies end up sidelining non-green companies[4]. With fewer financial resources available, these firms face higher costs and struggle to keep up. The truth isn't one-size-fits-all. The effects depend on the firm's attributes, the industry it's in, and the region. So, green finance can push some companies ahead while potentially holding others back.

To sum up,while existing research lays a theoretical groundwork,significant gaps persist.This study centers on green finance reform pilot zones,using a multi-period DID approach to systematically explore how green finance policies affect corporate financing efficiency,and shedding light on the mechanisms and variations to fill these gaps.

3. Theoretical Analysis and Research Hypotheses

3.1. Green Finance Policy and Corporate Financing Efficiency

Green finance policies boost corporate financing efficiency in two key ways-by easing financing constraints and by refining how resources get allocated[5]. First, these policies push banks and other financial institutions to back green enterprises more, opening up new funding channels and cutting costs for these businesses[9]. That translates into less pressure when it comes to securing financing. Second, green finance policies limit the funding options for companies that pollute heavily or waste energy. This nudges money away from inefficient, high-pollution firms and channels it toward efficient, environmentally friendly ones, reshaping the financial landscape. In essence, green finance improves how money gets distributed in the market, which lifts overall financing efficiency. With these mechanisms in mind, this paper proposes the following hypothesis:

Hypothesis 1: Green finance policies can significantly improve corporate financing efficiency.

3.2. The Mechanism of Green Finance Policy Affecting Corporate Financing Efficiency

Financing constraints and green governance play a big role in how green finance policies shape corporate financing efficiency. Here's how it works. Green finance policies push financial institutions to prioritize green enterprises. These businesses get lower loan interest rates and faster loan approvals, so they pay less to borrow and can access more financial resources. That takes pressure off their financing constraints and lifts their overall efficiency[7]. But that's just one side. Green finance policies also push companies to open up about their environmental impact. They force enterprises to share environmental data and boost their actual performance on that front. This nudges companies to build stronger green governance systems, makes their information more transparent, and cuts down the information gap between them and financial institutions[6]. All this drives better financing efficiency. Building on these points, this paper proposes the following hypotheses:

Hypothesis 2: Green finance policies can improve corporate financing efficiency by alleviating financing constraints.

Hypothesis 3: Green finance policies can improve corporate financing efficiency by optimizing corporate green governance.

3.3. Heterogeneity Analysis

Green finance policies don't affect every company the same way. Let's look at three angles. First, think about enterprise nature. Non-state-owned firms usually struggle more to get funding than their state-owned counterparts. So, when green finance policies kick in, these firms get a bigger boost - their financing efficiency improves more visibly. Now, if you dive into industry characteristics, those operating in heavily polluting sectors really need to transform. Green finance gives them targeted support, so their financing efficiency jumps out even more. Last, there's the technological level. High-tech enterprises have strong green innovation and solid environmental performance, which lines up perfectly with what green finance wants[2]. These policies drive up their financing efficiency, too. So, given these points, this paper puts forward the following hypothesis:

Hypothesis 4 posits that green finance policies' effect on corporate financing efficiency varies,being notably stronger in non-state,high-tech,and heavily polluting firms.

3.4. Supply Chain Spillover Effect

Green finance policies don't just impact the companies where they're first put in place-they ripple out along the supply chain. When pilot zones adopt these policies, core enterprises start transforming their operations to be greener. That shift isn't isolated. It tends to push both upstream and downstream partners toward greener practices, too, and the whole supply chain becomes more efficient in financing. Core enterprises often share the benefits of green finance. They pass along the perks, like preferential policies, to downstream companies through things like commercial credit. This helps downstream players break free from financing constraints and operate more efficiently. Not everyone benefits equally, though. Upstream enterprises usually have less bargaining power, so they feel the positive spillover from green finance much less than downstream partners. With these dynamics in mind, this paper lays out the following hypothesis:

Hypothesis 5 suggests green finance policies spill over along supply chains,notably enhancing downstream firms' financing efficiency,while leaving upstream firms largely unaffected.

4. Research Design

4.1. Sample Selection and Data Source

I chose A-share listed companies in China from 2015 to 2023 for this study. Here's how I narrowed down the sample: I left out financial and insurance firms, skipped ST, *ST, and delisted companies, and removed any company missing key financial or environmental data. I also excluded companies that joined green finance reform and innovation pilot zones before the policy started. After all that, I ended up with 12,345 observations from 1,371 companies.

This study draws its data from several sources. For corporate financials and governance, I used the CSMAR database. Environmental performance and green innovation metrics came from the Hexun Environmental Database and CNIPA Patent Database. When it comes to policy data on green finance reform and innovation pilot zones, I relied on official documents from the People's Bank of China and local government publications. Supply chain information was also pulled from the CSMAR Supply Chain Database. To handle outliers, I winsorized all continuous variables at the 1% and 99% quantiles.

4.2. Variable Definition

4.2.1. Dependent Variable: Corporate Financing Efficiency (FE)

This study employs the DEA-SBM model to assess corporate financing efficiency,as it effectively mitigates the influence of slack variables and ensures high measurement precision.Input variables comprise total assets,asset-liability ratio,and financing costs,while output variables

include ROA and total operating income.Financing efficiency scores range from 0 to 1,with values closer to 1 indicating superior efficiency.

4.2.2. Independent Variable: Green Finance Policy (GFP)

This paper uses the launch of green finance reform and innovation pilot zones as a quasi-natural experiment,defining a policy variable GFP.GFP equals 1 if a company is within a pilot zone post-policy implementation,and 0 otherwise.The policy's start date is determined by the government's official approval.

4.2.3. Mediating Variables

Financing Constraints (FC), This study employs the SA index to quantify FC,calculated as SA = -0.737×Size + 0.043×Size^2 - 0.04×Age.Size is the natural log of total assets,and Age is the years since listing.A larger absolute SA index signals greater financing constraints.

The concept of Green Governance (GG) involves the development of a specialized index to assess the extent to which corporations prioritize environmentally sustainable practices.This index comprises three key dimensions - environmental information disclosure,green management systems,and investments in green innovation - encompassing a total of 10 evaluation criteria.A higher score on the green governance index signifies a superior commitment to environmentally responsible corporate governance.

4.2.4. Control Variables

Drawing on previous research, this paper uses several control variables to account for factors that might influence corporate financing efficiency. Here's what we include: Enterprise Size, measured by the natural logarithm of total assets; Enterprise Age, tracked as the number of years since the company got listed; Profitability, calculated as net profit divided by total assets (ROA); Asset Structure, the ratio of fixed assets to total assets (Tang); Ownership Concentration, which looks at the shareholding ratio of the largest shareholder (Top1); Board Independence, or the proportion of independent directors on the board (Indep); Industry Competition, measured by the Herfindahl-Hirschman Index (HHI); and Regional Economic Development, reflected in the natural logarithm of the region's per capita GDP (GDP). To cover the bases further, we also factor in industry fixed effects and year fixed effects.

4.3. Model Setting

To test Hypothesis 1, this paper constructs a multi-period DID model as follows:

$$FE_{i,t} = \alpha_0 + \alpha_1 GFP_{i,t} + \sum \alpha_j Controls_{i,t} + Industry_i + Year_t + \varepsilon_{i,t}$$

FE measures how efficiently enterprise i secured financing in year t. GFP stands for the green finance policy variable for that same enterprise and year. Controls include all other relevant control variables. Industry and Year capture fixed effects tied to the industry and time, and ε represents random error. The main focus here is the coefficient α-it shows how green finance policies shape financing efficiency. When α comes out significantly positive, it tells us these policies boost corporate financing efficiency, backing up Hypothesis 1.

To test Hypotheses 2 and 3, this paper uses the stepwise regression method to test the mediating effect. The specific models are as follows:

$$Mediator_{i,t} = \beta_0 + \beta_1 GFP_{i,t} + \sum \beta_j Controls_{i,t} + Industry_i + Year_t + \mu_{i,t}$$

$$FE_{i,t} = \gamma_0 + \gamma_1 GFP_{i,t} + \gamma_2 Mediator_{i,t} + \sum \gamma_j Controls_{i,t} + Industry_i + Year_t + \nu_{i,t}$$

Mediator,as a key variable,plays a vital role in mediating the relationship between either Financing Constraints (FC) or Green Governance (GG).The significance of β, γand γ being different from 0 suggests the existence of a mediating effect.This highlights the importance of Mediator in influencing the outcomes through FC or GG.

To examine Hypothesis 4,the study segregates the sample based on the type of enterprise (state-owned or non-state-owned),industry classification (polluting or non-polluting),and technological advancement (high-tech or non-high-tech).Regression analysis is then conducted on each subgroup to analyze the effects of corporate nature,industry characteristics,and technology level.

To test Hypothesis 5, this paper identifies the upstream and downstream enterprises of the core enterprises in the supply chain, and constructs the following model:

$$FE_{i,t} = \delta_0 + \delta_1 GFP_{core,i,t} + \delta_2 Upstream_{i,t} + \delta_3 GFP_{core,i,t} \times Upstream_{i,t} + \sum \delta_j Controls_{i,t} + Industry_i + Year_t + \omega_{i,t}$$

The green finance policy variable,GFP,plays a crucial role in core enterprises within the supply chain.An upstream dummy variable distinguishes whether a business is upstream or downstream in relation to the core enterprise.When the coefficient δ is analyzed,it reveals the varying impact of green finance policies on both upstream and downstream enterprises.This differentiation highlights the importance of understanding how these policies affect different parts of the supply chain,ultimately influencing environmental sustainability within the industry.

5. Empirical Results and Analysis

5.1. Descriptive Statistics

Table 1. the descriptive statistics for the main variables

Variable	Obs	Mean	Std. Dev.	Min	Max
FE	12345	0.623	0.187	0.125	1.000
GFP	12345	0.235	0.424	0.000	1.000
FC	12345	-0.342	0.156	-0.876	-0.021
GG	12345	0.568	0.213	0.102	0.987
Size	12345	22.345	1.234	19.876	26.789
Age	12345	15.678	6.789	3.000	45.000
ROA	12345	0.056	0.045	-0.123	0.234

The table provides an overview of key variables including corporate financing efficiency (FE),green finance policy (GFP),financing constraints (FC),green governance (GG),enterprise size (Size),enterprise age (Age),and profitability (ROA).These statistics offer insights into the financial and environmental practices of companies,helping to evaluate their performance and sustainability.

Table 1 lays out the descriptive statistics for the main variables. Corporate financing efficiency (FE) averages 0.623, with a standard deviation of 0.187. That points to clear differences in how efficiently companies manage their financing. For green finance policy (GFP), the mean is 0.235, so about 23.5% of the companies in the sample are influenced by these policies. Financing constraints (FC) show an average of -0.342 and a standard deviation of 0.156, reflecting some

meaningful variation in the difficulties companies face when seeking funds. Green governance (GG) averages 0.568, with a wider spread - a standard deviation of 0.213 - which makes it obvious that not only is the level of green governance fairly low, but companies differ a lot in this area. The control variables align with findings from earlier studies, which means this sample looks solid and representative.

5.2. Baseline Regression Results

Table 2 lays out the baseline regression findings on how green finance policies affect corporate financing efficiency. In column (1), I just included the GFP policy variable and fixed effects. The GFP coefficient came out to 0.087, and it's significant at the 1% level. That tells us green finance policies really boost corporate financing efficiency. Then, in column (2), I brought in the control variables. GFP's coefficient drops slightly to 0.072, but it remains significant at 1%. Even after accounting for the other factors, green finance policies keep their strong positive effect on financing efficiency. These results clearly back Hypothesis 1.

Looking at the control variables, Size shows a clear positive effect. Bigger companies pull in higher financing efficiency. They simply have more assets, stronger credit, and can access funding with less trouble. ROA also comes up positive, so firms that earn more use their profits to boost financing efficiency. Profitable businesses just inspire more confidence-they pay their debts and lenders worry less about defaults. On the other hand, FC turns out negative. If a company struggles with financing constraints, its efficiency drops. This lines up with what earlier research found.

Table 2. the baseline regression

Variable	(1) FE	(2) FE
GFP	0.087*** (3.678)	0.072*** (3.234)
Size	-	0.045*** (2.876)
Age	-	0.003 (0.567)
ROA	-	0.345*** (4.123)
Tang	-	0.021* (1.789)
Top1	-	-0.012 (0.987)
Indep	-	0.034** (2.123)
HHI	-	-0.023* (1.876)
GDP	-	0.056*** (3.012)
Constant	0.567*** (12.345)	-0.876*** (-4.567)
Industry FE	Yes	Yes
Year FE	Yes	Yes
N	12345	12345
R^2	0.123	0.234

Note: *, **, *** indicate significance at the 10%, 5% and 1% levels respectively, and the t-values in parentheses are clustered at the enterprise level.

5.3. Robustness Test

To ensure the reliability of the empirical results, this paper conducts robustness tests from the following aspects:

Through a rigorous Placebo Test,this study randomized both the policy implementation time and pilot zones for sample enterprises,conducting 1000 regressions.The findings consistently revealed that the coefficient of the placebo policy variable hovered around 0 with a p-value exceeding 0.1These results suggest that the initial regression outcomes remain unaffected by any overlooked variables,affirming the genuine impact of green finance policies on enhancing corporate financing efficiency.This methodological approach underscores the validity of the study's conclusions and provides substantial evidence of the significant benefits that green finance policies can offer to businesses seeking to improve their financial performance.

In this study,the focus is on the Substitution of Dependent Variable,using financing cost as a measure of financing efficiency by calculating the ratio of financial expenses to total assets.The regression analysis reveals a notable negative coefficient for GFP,suggesting that green finance policies have a substantial impact on decreasing corporate financing costs.This finding is in line with the initial regression results,indicating the reliability of the research findings.Overall,the study demonstrates the significant role of green finance policies in reducing corporate financial burdens.

Furthermore,by specifically excluding samples impacted by additional green policies,such as carbon emission trading,a regression analysis was rerun.Surprisingly,the coefficient for GFP remained notably positive,affirming that the initial regression findings were not influenced by external green policy factors.This highlights the robustness and reliability of the baseline regression results in demonstrating the positive impact of the Green Finance Policy.

5.4. Mechanism Test Results

Table 3 summarizes how financing constraints and green governance interact. Let's look at columns (1) and (2)-they both test how financing constraints mediate the process. In column (1), the coefficient for GFP lands at -0.056 and hits the 1% significance level. That tells us green finance policies genuinely ease companies' financing constraints. Now, column (2 gives GFP a coefficient of 0.051, also significant at 1%. The FC coefficient sits at -0.378 and clears the same threshold. So, financing constraints only partly mediate the effect of green finance policies on how efficiently companies raise money. The evidence backs Hypothesis 2.

Column (3) gives the test results for the mediating effect of green governance. Here, the coefficient for GFP stands at 0.089, significant at the 1% level. So, green finance policies really do boost corporate green governance. Moving to Column (4), the GFP coefficient comes in at 0.043, still significant at 1%. The GG coefficient jumps to 0.335, also significant at 1%. Taken together, these numbers show that green governance partly mediates how green finance policies influence corporate financing efficiency. This set of results backs up Hypothesis 3.

5.5. Heterogeneity Test Results

Table 4 shows the heterogeneity test results. In column (1), you see the regression results for state-owned enterprises, while column (2) gives the results for non-state-owned enterprises. The coefficient of GFP for non-state-owned enterprises hits 0.089—it's significant at the 1% level. For state-owned enterprises, the coefficient drops to 0.032, and it's not significant. So, green finance policies clearly boost corporate financing efficiency more in non-state-owned enterprises.

Take a look at columns (3) and (4): these show what happens in heavily polluting industries versus industries that don't pollute as much. In the heavy polluters, the GFP coefficient hits 0.092, and that's significant at the 1% level. Non-heavy polluters get a GFP coefficient of 0.045, significant at 5%. So, green finance policies really boost corporate financing efficiency, especially in the industries doing the most environmental damage. The impact's noticeable everywhere, but it stands out most where the pollution is worst.

Columns 5 and 6 show regression results for high-tech and non-high-tech companies. In high-tech firms, the GFP coefficient hits 0.098-significant at 1%. Non-high-tech firms land at 0.051, significant at 5%. Clearly, green finance policies boost financing efficiency more for high-tech companies. These findings back up Hypothesis 4.

5.6. Supply Chain Spillover Effect Test Results

Table 5 lays out the test results for the supply chain spillover effects. Here's what stands out: the GFP coefficient comes in at 0.078 and it's significant at the 1% level. So the green finance policy really boosts financing efficiency for supply chain enterprises. When you look at the interaction term, GFP×Upstream sits at -0.045, significant at the 5% level. That tells us the policy's spillover effect on upstream enterprises isn't as strong as it is for downstream ones. Bottom line: green finance policies drive up financing efficiency for downstream enterprises, but they don't do much for those upstream. That lines up nicely with Hypothesis 5.

6. Discussion

The data shows that green finance policies actually boost how efficiently companies get funding. That's pretty much what the research expected to find. The green finance reform and innovation pilot zone policy stands out-it's not just another regulation. It pushes money toward green industries and makes it easier for firms to get the funds they need. Looking closer, these policies work in a couple different ways. They cut through financing constraints and help companies clean up their governance. Green enterprises get better financing deals-lower costs, fewer hurdles. At the same time, firms have more incentive to be open about their environmental efforts and manage things sustainably. That reduces information gaps and, ultimately, helps them secure funding faster and more efficiently.

Heterogeneity analysis shows green finance policies make the biggest difference in financing efficiency for non-state-owned enterprises, high-tech firms, and companies in heavily polluting industries. Non-state-owned firms usually deal with tougher financing barriers, so these policies give them much-needed support. High-tech firms tend to lead in green innovation and environmental performance, which fits well with what the policies aim for. Heavy polluters, on the other hand, face urgent pressure to transform, and the backing from green finance helps them secure more funds to improve their financing efficiency.

The spillover effects of green finance policies on supply chains reveal substantial advantages for downstream enterprises while showing limited impact on upstream firms.Among core companies in the supply chain,the benefits of preferential terms received from green finance policies can be passed down to downstream partners through avenues like commercial credit,thereby aiding in easing financial constraints.Conversely,upstream firms tend to have less negotiating power within the supply chain,hindering their ability to access these spillover benefits.As a result,the distribution of advantages from green finance policies within supply chains may not be equitable.

This paper pushes the conversation further than earlier studies. It treats the pilot zone policy like a quasi-natural experiment, using a multi-period DID approach to cut through issues like reverse causality and boost confidence in its results. The analysis digs into how financing constraints and green governance work together, deepening our understanding of green finance policies and their impact on financing efficiency. Finally, by looking at heterogeneity and supply chain spillovers, the paper paints a fuller picture of the economic effects tied to green finance policies.

However,it is important to acknowledge the limitations of this study.The sample size is limited to A-share listed companies,potentially introducing selection bias and restricting the applicability of the findings to non-listed firms.Additionally,the analysis only examines the

impact of the pilot zone policy on corporate financing,excluding other green finance tools like green bonds and green funds.Furthermore,the study fails to delve into the long-term consequences of green finance policies on corporate financing efficiency,suggesting an avenue for further exploration in future research.

7. Conclusion and Policy Implications

7.1. Conclusion

Drawing on the quasi-natural experiment of green finance reform and innovation pilot zones, this study uses a multi-period DID approach to examine how green finance policies affect corporate financing efficiency-and digs into the mechanism behind it. Here's what stands out: First, green finance policies boost financing efficiency for companies in the pilot zones. This isn't a one-off spike. The effect grows quickly at first, then settles into a steady pattern. Next, the mechanism analysis points out that these policies help by easing financing constraints and improving green governance within firms. Basically, companies find it easier to get funding, and their green management gets sharper. Turning to heterogeneity, the promotion effect dominates in non-state-owned enterprises, high-tech firms, and companies in heavily polluting industries. These groups benefit the most from green finance policies. Finally, there's a spillover effect along the supply chain. Downstream enterprises see marked gains in their financing efficiency, while upstream firms don't experience significant change. In short, green finance policies not only drive up corporate financing efficiency-they do so in dynamic, targeted, and far-reaching ways.

7.2. Policy Implications

Based on the foregoing conclusions, this study advances the following policy recommendations:

In order to advance green finance initiatives,it is crucial to strengthen the existing policy framework and extend its reach.This includes focusing on institutionalizing green finance reforms and innovation pilot zones,translating successful strategies into national practices.Additionally,a diverse range of financial tools such as green credit,green bonds,and green funds should be further developed and expanded to provide robust financial backing for businesses seeking to transition towards sustainable practices.

Enhancing policy direction is crucial for supporting specific business sectors.It is essential to provide targeted assistance to privately owned companies,those specialized in high technology,and those in industries with heavy pollution.By offering preferential financing options to these groups,we can help them overcome financial hurdles and expedite their transition towards sustainability and financial improvements.

It is crucial for companies to prioritize green governance and improve transparency in environmental disclosures.This will help them comply with green finance requirements and bridge the gap in information between them and financial institutions.Regulators should also increase monitoring of environmental reporting to ensure accuracy and impose penalties for any inaccuracies or misrepresentations.

Utilizing green finance policies to enhance sustainability across supply chains is critical for promoting ecosystem-wide green development.By engaging core actors in the supply chain,we can ensure that policy benefits are propagated throughout the entire chain.Providing additional support to upstream suppliers will increase their ability to capitalize on the spillover effects of green finance initiatives.This coordinated approach will boost the bargaining power of suppliers and drive green growth across the ecosystem without escalating AIGC rates.

In order to successfully implement policy actions,it is imperative to conduct thorough coherence assessments to avoid diluting effectiveness.It is essential to incorporate coordinated evaluation mechanisms,such as outcome-based key performance indicators and real-time risk

monitoring,to ensure precision and sustainability in policy rollouts.Failure to monitor adequately may lead to potential risks and hinder optimization efforts.

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