

A Brief Discussion on the Advantages and Future Development of Macao's Green Finance Market

Zhixian Ren^{1,a,*}

¹*Macao University of Science and Technology, Avenida Wai Long, Taipa, Macao, China
a. 1803061423@qq.com*

**corresponding author*

Abstract: As one of the world-renowned financial centers, Macao has a well-developed capital market and a relatively complete capital market system. Meanwhile, as a special administrative region with a unique political status, it can easily receive policy support and attract more investors to participate in the market. However, in today's ever-changing international environment, as well as factors such as the dominance of the gambling industry restricting the diversification of industrial institutions, there are still many challenges to achieving a leading advantage in the development of green finance markets. Therefore, this article will provide suggestions and recommendations on the advantages and future development of Macao's green finance market. The development of the green finance market system is the trend, and the country has given the Guangdong Hong Kong Macao Greater Bay Area an important mission to create a green development highland. The green finance market and bond market in Macao still have great development space, which can be further promoted by strengthening international cooperation, deepening financial innovation, and injecting fresh blood into the sustainable development of the Macao economy.

Keywords: Macao, green finance, green market, green bonds, policies.

1. Introduction

General Secretary Xi Jinping once pointed out that "the financial city is an important core competitiveness of the country." Green finance, as its name implies, refers to the financing behavior of financial institutions through energy conservation and environmental protection projects. Developing green finance can promote environmental protection, adjust industrial structure, and leverage regional and even national economic growth. [1] As one of the special administrative regions of China, the development of Macao's green finance market has attracted much attention. In recent years, the global emphasis on environmental protection and sustainable development has gradually increased, and the green finance market, as one of the important ways to promote sustainable development, has enormous development potential. With the increasingly severe global climate change, governments and businesses around the world have begun to attach importance to sustainable development and make green finance a key development direction. In this context, the advantages and future development of the green finance market have attracted much attention. Meanwhile, with the transformation and upgrading of Macao's economy and changes in the international environment, the future development of Macao's green finance market is also highly anticipated. Therefore, this paper aims to explore the advantages and future development directions of Macao's green finance

market, providing theoretical support and policy recommendations for Macao's development in the field of green finance. Through in-depth analysis of the current situation and future trends of Macao's green finance market, it can help the international community better understand the characteristics and development path of Macao's green finance market, and promote the development and cooperation of global green finance.

2. Advantages of Developing Green Finance Market in Macao

2.1. Economic Status of Macao

Macao's economic status holds a unique and important position in both China and the global economy. As a special administrative region, Macao has developed into a dynamic economy with its unique geographical location, policy advantages, and abundant resources.

According to data released by the SAR government, the real growth rate of local gross domestic product (GDP) in 2023 is 80.5%, with a per GDP of MOP 55.9, mainly driven by tourism service exports. According to the analysis of the main components of the local gross domestic product, the export of gambling services and other tourism services increased by 343.7% and 127.9% respectively year-on-year. According to Global Finance's 2023 ranking of the world's richest countries or regions, Macao's GDP has risen from the lowest 16th place during the pandemic to 5th place, with a per GDP of nearly \$90000. It is evident that Macao's economy has great potential for development and the prospect of exploring new green finance markets. With the launch of the Macao Central Securities Depository System (CSD) in December 2021, it marks a milestone breakthrough in Macao's financial development history as the country's bond market infrastructure has reached a world leading level.

2.2. Government Policy Support

As an administrative region with the tertiary industry as its pillar, Macao belongs to an outward oriented micro economy, and its economic situation is easily affected by external factors such as the environment. Its gambling and tourism industry presents a "one super, many strong" industrial structure in the special administrative region.[2]Therefore, the special administrative region government is adopting a "1+4" moderately diversified development strategy. "1" is in accordance with the goal of building a world tourism and leisure center, and "4" is to continuously promote the development of four key industries, including big health, modern finance, high paying technology, exhibition and commerce, and culture and sports. According to the first five-year development plan of the Macao SAR government in 2016, the development goal of "advocating green and low-carbon development and achieving ecological civilization" was clearly proposed, which pointed out the direction for the development of green finance. Although the green market and bond market system in Macao started late, relying on the support of the central government and the implementation of the SAR government can be said to have a bright future. Macao bond market started to develop from the end of 2018 to 2019. With the support of the central government, the Ministry of Finance issued treasury bond in Macao twice in 2019 and 2022, and Guangdong Provincial Government also issued offshore RMB government bonds in Macao in 2021 and 2022.

2.3. High Quality Development of Macao's Green Bond Market

As of September 6, 2023, the total scale of bonds issued and listed in Macao has reached MOP502.1 billion, of which the scale of green bonds listed is about MOP90 billion.[3] The number of MOX bonds issued and listed in Macao has increased by 285.7% year-on-year, and the total scale has increased by 62.4% year-on-year. Previously in 2021, Macao had already become the preferred listing

location for Asian issuers, and in 2022, Macao became one of the three major listing destinations for Asian issuers after Hong Kong and Luxembourg.

In addition, in 2018, the Lotus Bond originated in Macao developed rapidly, becoming a new path for the development of green bond financing. Successful cases include: In December 2021, Mingyang Smart Energy Group Co., Ltd. issued a \$200 million green bond, becoming MOX's first national green lotus bond. The final bond issuance rate was 1.6%, attracting investors from mainland China, Macao, Hong Kong, and Europe to participate, which is of great significance. [4]

3. The Current Status of Green Finance Development in Macao

3.1. Challenges Faced by The Development of Green Finance in Macao

As a Chinese special administrative region mainly focused on the tertiary industry, Macao has advantages in developing green finance. However, at the same time, the challenges it faces lie in the singularity of industries and sources of income. As a special administrative region, Macao has always been committed to developing green finance to address global climate change and environmental challenges. Firstly, it is necessary to understand the current situation of green finance development in Macao, including the challenges it faces, in order to explore the advantages and future development of Macao's green finance market.

The current green finance market situation in Macao can be said to be in a preliminary stage of development. Although there has been some support at the policy level, there is still a certain gap compared to the international advanced level. In terms of green financial products, the Macao market still lacks sufficient variety and innovation. At the same time, investors have limited understanding and acceptance of green finance products, and insufficient market demand has become one of the important factors restricting development. The awareness and participation of the green finance market still need to be improved.

In addition to these, the development of green finance in Macao also faces many challenges. Firstly, the regulatory mechanism is not yet sound enough, and the regulatory standards and regulatory systems have not been established, resulting in insufficient standardization and transparency of market operations. The second issue is the lack of unified evaluation standards and certification systems in the green wealth management market, which makes it difficult for investors to accurately evaluate and compare green wealth management products. Moreover, the lack of professional knowledge and experience in the field of green finance among financial institutions also hinders the deepening development of the market.

In addition, the development of green finance markets also poses certain environmental risks and impacts of climate change. The uncertainty brought about by global environmental issues and climate change has made investors more cautious about the slower than expected growth rate of demand for green financial products.

To address the above challenges, Macao's green finance market has strengthened its regulatory system and improved relevant laws and policies to enhance market transparency and standardization. At the same time, enhancing market attractiveness and competitiveness requires strengthening innovation and diversification of green financial products. In addition, establishing a sound team of green finance talents to provide strong support for the sustainable development of the market is also the key to strengthening talent cultivation and professional knowledge dissemination.

Overall, although the green finance market in Macao faces certain challenges, it also has great potential and opportunities for development. Through the cooperation of multiple parties such as the government, financial institutions, and enterprises, we can jointly promote the development of the green finance market and achieve a win-win situation for sustainable development of economic growth and environmental protection.

3.2. The Promotion of Green Finance Market in Macao by Government Policies

As a special administrative region, Macao has always been committed to promoting the development of green finance, and its green finance market has gradually shown its advantages and potential under the guidance of government policies. This article will explore the current situation of the green finance market in Macao and explore the role of government policies in promoting it.

The current situation of Macao's green finance market can be described as positive. Firstly, the Macao government has always attached great importance to environmental protection and sustainable development, and has included green finance in the important agenda of government work. The government has established a favorable policy environment and institutional system, and through the introduction of relevant policies and regulations, the development plan of green finance has been formulated, and green finance has been constructed to promote the participation of financial institutions in green investment and financing, providing strong support for the healthy development of Macao's green finance market.

Secondly, in terms of tax policies and financial support, the government has also taken a series of measures to promote the green development of the financial market. For example, for financial green finance businesses, tax incentives or fiscal subsidies can be provided while reducing operating costs; Establish special green funds to support the development of green initiatives. On February 20, 2019, the National Development and Reform Commission and the Government of the Macao Special Administrative Region signed the Arrangement between the National Development and Reform Commission and the Government of the Macao Special Administrative Region on Supporting Macao to Fully Participate in and Assist in the Construction of the "the Belt and Road", supporting financial institutions participating in and assisting in the construction of the "the Belt and Road" to further strengthen cooperation with Macao, establishing branches in Macao according to business needs, strengthening cooperation with the financial market of Macao, further strengthening cooperation with Macao, and promoting these policies and measures to provide real interest incentives for enterprises and institutions to participate in the green financial market to become stronger and develop healthily.[5] In addition, the government has strengthened supervision, urged financial institutions to strengthen internal management, prevent green finance risks, ensure the stable operation of the market, and standardize the design and sale of green finance products.

The government is also actively promoting the development of green finance standards and the construction of certification systems. On December 29, 2023, the "Opinions of the National Development and Reform Commission and the Ministry of Commerce on Supporting the Special Measures for Relaxing Market Access in the Hengqin Guangdong Macao Deep Cooperation Zone" pointed out the need to improve market transparency and credibility, attract more investors and funds to enter the green finance market, and strengthen the relaxation of market access in the Hengqin Guangdong Macao Deep Cooperation Zone. In terms of future development, Macao's green finance market still faces certain challenges and opportunities. Encourage financial institutions to increase their green investment efforts, promote innovation in green financial products, and enhance market competitiveness. The government needs to continue to improve relevant policies and regulations, and strengthen alignment with international green finance standards. At the same time, the government should strengthen cooperation with relevant departments and international organizations to promote interaction and integration in Macao's green finance market, in order to achieve sustainable development and draw on and absorb international experience.

4. Future Development Strategy of Macao's Green Finance Market

As an international financial center, Macao has gradually begun to transform into a green finance market, which is crucial for its sustainable development in the future. We will now discuss the

advantages of Macao's green finance market and its future development, and propose strategies for the future development of Macao's green finance market.

4.1. Advantages of Macao's Green Finance Market

Location advantage: Macao is located in the Pearl River Delta economic region, adjacent to major cities such as Hong Kong and Guangzhou, making financial capital flow and resource integration very convenient; Policy support: The Macao government actively advocates the development of green finance and provides a favorable development environment for green finance institutions, introducing a series of support policies including tax incentives and financial innovation support; Diversification of Financial Services: The financial market system in Macao is mature, covering various financial institutions such as banks, securities, and funds, providing ample space for research and promotion of green financial products; Cultural background: Macao has a history of Portuguese colonization and a cultural tradition that combines Eastern and Western cultures, giving it a certain advantage over international green finance concepts.

4.2. Future Development Strategy of Macao's Green Finance Market

One is to increase regulatory efforts and establish standards: establish a sound regulatory system for the green finance market, improve relevant laws, regulations, and standards, regulate market behavior, and ensure the quality and transparency of green wealth management products; The second is to promote financial innovation in green finance, encourage the development of green funds and other products, and meet the investment needs of investors for green initiatives; The third is to strengthen international cooperation: actively participate in international cooperation and exchanges in green finance, learn from international experience, promote the development of cross-border green finance business, and enhance Macao's influence in the international market of green finance; Fourth, promote energy transformation: support the development of green energy to promote energy transformation and reduce carbon emissions, and promote sustainable economic development; Five of them. Strengthen talent cultivation: Increase investment in talent cultivation in the field of green finance, enhance employees' professional level and awareness of green finance, and lay a talent foundation for the long-term development of Macao's green finance market.

5. Conclusion

Macao, as a special administrative region with important advantages in developing green finance markets, has a unique geographical location and environmental resources. Macao has made achievements in the field of green finance, which is a manifestation of analyzing the current development status and policy support of Macao's green finance market. The Macao government has introduced a series of policies and measures to encourage the development of green finance and promote the development of green financial instruments.

The green finance market in Macao still faces some challenges and opportunities in the future. To further develop the green finance market, it is necessary to strengthen the construction of the regulatory system, improve market transparency and standardization, and promote innovation and diversification of green finance products. At the same time, Macao also needs to continuously optimize its business environment, attract more international capital and enterprises to participate, and contribute to the green finance market that promotes sustainable development of the green economy.

In summary, with broad prospects for future development, Macao's green finance market has certain advantages and potential for growth. I hope to provide some theoretical insights for the further improvement of Macao's green finance market through the research and exploration in this article.

References

- [1] Ping, L. (2019). *Green development lights up China's economy*. *Public Relations World*, 21, 58–59.
- [2] Yun, Z., & Huan, H. (2023). *Research on the development of modern finance in Macao in the course of moderate economic diversification*. *Urban Insight*, 87(5), 19–30.
- [3] Laizhi, H. (2023). *Actively implement Macao's modern financial strategy*. *China Finance*, (5), 43–44.
- [4] Ruyi, C., & Danyi, Z. (n.d.). *A New Approach to Overseas Financing of Chinese Enterprises—Based on a Comparative Analysis of Traditional Offshore Bonds and Lotus Bonds*. *Journal of Jilin Financial Research*, 5, 54–57.
- [5] Linsheng, W. (2019). *Modern Cultural Market System: Approaches and Direction of High-Quality Development of Cultural Industry in the Greater Bay Area*. *Journal of Shenzhen University (Humanities and Social Sciences Edition)*, 36(4), 61–70.