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Analyses of Sustainable Development of China's Finance Based on Commercial Banks

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ABSTRACT
China's economy has developed exceedingly fast over the years. However, behind the fast-growing economy, sustainable development seems lagging. To motivate further development in sustainable development, analysis of sustainable financing, in the scope of commercial banks, the credit providers of all the enterprise will be most effective. This paper will analyze China's sustainable development and finance progress, investigate the current problem thesis, and provides suggestions in the scope of commercial banks, using the power matrix and impact value chain theory analysis. Challenges that sustainable developments in finance are attracting more sustainable experts to leverage their support to the banks' operation, insufficient ranges of sustainable products, limited SMEs and the wider public engagement and insufficient strengths in sustainable financing unit comparing to international standard. These problems can be tackled by taking corresponding actions, such as implementing sustainable recruitment plan, actively cooperating and supporting with product development experts, establishing a fast track for green financing of small and medium-sized enterprises, and closely monitoring government reports, guidelines and reports, so as to obtain a higher market share and improve the influence of commercial banks and sustainable financing.

Keywords: *sustainable development, commercial banking, sustainable finance, SMEs.*

1. INTRODUCTION

While economic development and social progress are meeting the growing needs of human beings, rapid development has led to over-exploitation of resources and environmental pollution. With the enhancement of people's awareness of environmental protection, more and more countries begin to take environmental problems seriously and begin to plan and implement sustainable development. "Love Canal Tragedy" in the United States has brought to the public's attention that environmental pollution issues can lead to financial risks [1]. Gregory (2016) explains that the development of sustainable financial business requires a balance between social performance, competitive advantage, earnings persistence, and corporate value [2]. Bergset (2017) explains that the development of green finance is not only a matter of coordination and development between the financial and environmental industries but also requires challenges from various industries [3]. Chong (2019) elaborated on the significance of developing green finance in the sense of environmental protection [4]. The link between environment and finance is becoming stronger. However, there is limited research on China sustainable development, which has made impressive achievements in achieving the Millennium Development Goals (MDGs), laying the foundation for achieving the UN Sustainable Development Goals (SDGs). China still has many challenges to meet to achieve the environment-related SDGs by 2030. This paper will focus on discussing sustainable development of China's finance based on commercial banking. In details, the first part of this paper will examine sustainable finance development and its influence using the impact value chain. The second part of this paper will review the current shortcomings and problems commercial banks have in supporting sustainable development using Power Interest map analysis, and provides suggested actions in public, shareholders and government, customers and employee spectrum. Critically review and provide corresponding suggestions on China's current sustainable development, provide a basis for future analysis, and help China's regulators formulate the scope of future sustainable development goals and actions.

2. THE SUSTAINABLE DEVELOPMENT GOALS AND FINANCE

2.1.The Sustainable Development Goals

The development of industry has contributed to the advancement of society and the accumulation of wealth, but it has also brought about environmental pollution and the depletion of resources. In the face of non-renewable resources and the growing needs of people, the concept of sustainable development has been proposed and recognized by people around the world. The Sustainable Development Goals (SDGs) are the 17 Sustainable Development Goals proposed by the United Nations [5]. Four of these SDGs are directly related to the environment: Goal 6, Goal 13, Goal 14 and Goal 15. Goal 6 mainly provides access to and sustainable management of water and sanitation for all. Goal 13 takes urgent action to address climate change and its impacts. Goal 14 conserves and sustainably uses oceans and marine resources for conservation and sustainable use of oceans and marine resources for sustainable development. Goal 15 protects restores and promotes the sustainable use of terrestrial ecosystems, sustainably manage forests, combats desertification, halts and reverses land degradation, and halts the loss of biodiversity. Several others are also closely linked to environmental issues.

The greening of the economy is generally not a drag on growth, but rather a new engine of growth and an important strategy to combat persistent poverty [6].The impact value chain clearly illustrates the process affecting regional energy use and heavy industry development. As shown in figure 1, the first is 'Input', which is divided into capital, technology, and energy including trees, coal, oil, steel, and ore, which of course always conjures up images of serious pollution, no doubt about it. The second step is "Activity", which is mainly the work of workers. "Output" is the product that is produced, including the toilet paper and plastic bags used every day, as well as the steel and rubber tires used to produce cars. The "Outcome" consists of the increased ease of work and quality of life for the users, the wages for the workers, and the profits for the producers. Finally, there is the “Impact”, which is seen in two ways. Adverse impacts include the aforementioned violation of Goal 7(affordable and clean energy) and Goal 15(life on land), in addition to the possible violation of Goals 6(clean water and sanitation), Goal 12(responsible consumption and production), and Goal 14(life below water). Damage to the environment eventually leads to economic losses. A study by Hutton and chase (2016) found that the lack of water and sanitation facilities may damage more than 7% of a region’s GDP, excluding negative social, environmental and other impacts [7].

The UN SDGs are mutually influential and reinforcing. In addition to the social and environmental damage, the use of energy and the development of heavy industry have a positive impact on the achievement of the UN goals. The most direct industrial development requires labor and leads to improvement of local employment rate, which in turn contributes to the achievement of Goal 8 (decent work and economic growth) and contributes to the goals of Goal 1 (no poverty) and Goal 2 (zero hunger). The development of industry also contributes to the achievement of Goals 9(industry, innovation, and infrastructure) and 11(sustainable and communities), and through the accumulation of technology, to the achievement of Goal 10(reduced inequalities) and some extent to the achievement of Goals 3(good health and well-being), 4(quality education), and 5(gender equality).

This is a simple ideal model. Finance and technology can improve energy efficiency and provide lower-cost fuels at a lower environmental cost [8]. Reducing the share of energy in 'Inputs' can be effective in mitigating environmental damage and achieving the SDGs’ environment-related targets. It requires increased investment in 'Inputs' in terms of both finance and technology.

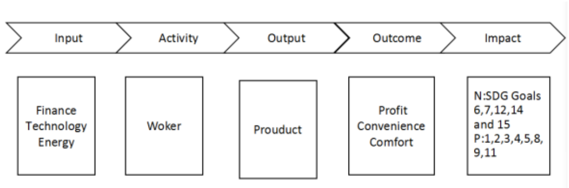


Figure 1 The Impact Value Chain

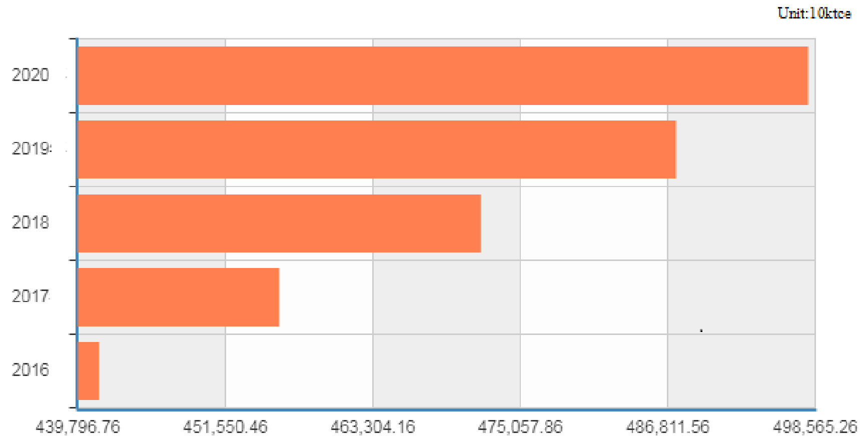
2.2.Sustainable finance

Sustainable finance refers to financial activities that integrate sustainable development into financial products, policies, and practices, resulting in the reallocation of financial resources and the optimal adjustment of financial behavior. In October 2015, the United Nations Environment Programme (UNEP) released the report “The Financial System We Need” [9], which emphasizes the need to integrate finance and sustainable development. In November 2017, UNEP and the World Bank jointly released the Roadmap for a Sustainable Financial System [10], which calls on countries to promote a sustainable financial system. The system, calling on countries to promote sustainable financial systems and change the role of the financial sector in modern societies. In September 2019, during the 74th UN General Assembly, UN Secretary-General Guterres released the Roadmap for Financing the 2030 Agenda for Sustainable Development, which sets out one major goal, three plans, six areas, and 15 initiatives, serving as a global guide for action on finance for sustainable development [11]. Nowadays, sustainable finance has become the trend of the global financial industry.

3. COMMERCIAL BANKS AND SUSTAINABLE FINANCE

3.1.Shortcomings of commercial banks in supporting sustainable development

As the world's largest carbon emitter, China is facing an increasingly challenging situation in terms of energy conservation and emission reduction. As shown in figure 2, China's energy consumption is increasing year on year [12]. Environmental pollution and resource carrying capacity in many places have reached or are approaching their limits, and credit risks associated with the closure of polluting enterprises are beginning to increase. The financial sector faces huge challenges in promoting energy conservation and emission reduction, practicing sustainable economic and natural development, and achieving its sustainable development. In recent years, China's gradual transformation of its production and lifestyle, and its proposal at the 75th UN General Assembly to reach its carbon peak by 2030 and carbon neutrality target by 2060 [13], have led to a series of changes in the socio-economic sphere, and have driven corresponding changes in the financial sector. As the main form of financial institutions, commercial banks are also supporting sustainable development, but there are still some deficiencies [14]. These shortcomings are mostly reflected in the lack of sustainable financial talent, insufficient product innovation, and low investment in customer development and maintenance.



(x-axis: KTCE (thousands of tones of coal equivalent), y-axis: years)

Figure 2 Total Energy Consumption

3.2.Stakeholders of commercial banks

Freeman, acknowledged as the earliest formulation of stakeholder theory, thinks that stakeholders with different resources will have different degrees of influence on the firm. Depending on the resources they hold, Freeman classified stakeholders into three kinds: ownership stakeholders, a category of people who hold shares in the company, commonly board members and managers; economic dependent stakeholders refer to relevant groups who have economic dealings with the company, such as employees, creditors, internal service providers, employees, consumers, suppliers, competitors, local communities and management machines; social stakeholders Stakeholders are groups with a social interest in the company, such as government authorities, the media, and special groups [15].

Frederick, on the other hand, divides stakeholders into two categories based on the way they influence the company [16]. Direct stakeholders, i.e. groups with a direct interest in the company, include shareholders, employees, creditors, suppliers, retailers, consumers, competitors, etc. Other stakeholders are classified as indirect stakeholders. Based on Freeman and Frederick's theory and taking into account the characteristics of commercial banks, this paper focuses on the main stakeholders of commercial banks, including shareholders, employees, government, customers, regulators, and the public.

3.3.Problem thesis analysis of commercial banking using Stakeholder map

Mendelow (1981) proposed a 'power-interest' stakeholder matrix, which classifies stakeholders according to the amount of power they hold about each other and the extent to which they show interest in the company [17]. Based on Mendelow's theory, this paper classifies the main stakeholders of commercial banks into four categories, as shown in Figure 3. Based on the four types of characteristics, this paper further analyzes the deficiencies in stakeholder relations in commercial banks and makes some recommendations.

Level of power of stakeholders		
	Meet their needs regulators the public	Manage closely shareholders government
	Keep into account employees	Keep informed customers
	Level of interest of stakeholders	

Figure 3 "Power–Interest" stakeholder map

（power interest classified stakeholders by the level of power and level of interest and hence provides a holistic scope on problem thesis analysis）

3.3.1.Commercial bank's lack of sustainable talents to supports its sustainable operation

The first type is 'keep into account', which includes employees. While each type of stakeholder can be a key factor in the development of a business, there is a need to rationalize the stakeholders to focus management efforts. The fact that most commercial banks in China do not have a dedicated sustainable finance function reflects the lack of attention paid to sustainable finance by bank management, the weak lending base to support sustainable development, and the lack of sustainable finance talent.

From a management perspective, this requires commercial banks to optimize their sustainable finance management capabilities and build a three-dimensional talent team for sustainable finance business development. Banks should attach importance to the construction of a sustainable finance business talent team, set up special sustainable finance business function departments, establish and improve sustainable finance assessment in each operating institution, and set up special account manager positions to ensure the promotion and implementation of sustainable finance business at the grassroots level.

3.3.2.SupplySide bottleneck in range of products banks offered, driving down performance

The second type is "meet their needs". This stakeholder group is characterized by high levels of interest but low levels of power, including customers of commercial banks. Due to the low innovation capacity of sustainable finance products, where China has one of the largest green bonds trading markets and carbon exchange markets, Chinese issuers and investors see limited development in the agriculture and buildings sectors [18]. China has low sustainable market share, poor profitability, and few effective customers, especially the lack of small and medium-sized customers. The proportion of sustainable finance in the financial field of commercial banks needs to be further improved. Commercial banks should play to the strengths of their large clients and increase the proportion of sustainable finance to public business, and more importantly develop a wide range of products. On this basis, they could increase the proportion of sustainable finance customers, develop more SME customers, expand the scale while increasing the number of customers maintained, and accelerate the increase of the local sustainable finance market shares.

3.3.3.Limited attentions from the SMEs

The third category is "keep informed". This type of stakeholder has a high level of power over commercial banks but little interest in them, including main regulators and the public. In detail, SME represents more than 90% of the origination in any given supply chain. However, SMEs are often too small in scale that they tend not to reach the participation threshold of the carbon pricing scheme or other sustainable financing markets [19].

Commercial banks can promote the upgrading of green credit in the region, open up a fast lane for the approval of SME green credit projects, exercise veto power over businesses that do not meet the scale requirement, and update and establish the risk assessment system and post-loan management system of sustainable financial business. By better fulfilling their corporate social responsibility, commercial banks can gain the support from SMEs.

3.3.4.The need for further strengthen sustainable financing unit to reach international standard

The last category is "manage closely". Stakeholders in this category are those who have a high degree of interest and power over commercial banks, including government and shareholders. Both government and shareholder decisions can influence the development of commercial banks, and commercial bank interests have an important impact on both government and shareholders. Commercial banks should further develop their sustainable finance business, tap into the potential financial business of green industries in the region, pay attention to the regional industrial plans mentioned in the government's work report, and further enhance the brand influence and market share of commercial banks in the green industry sustainable finance market.

China is committed to becoming an important emerging global player in global governance, sustainable development, and climate change, raising the awareness and capacity of developing countries for sustainable development, and contributing Chinese wisdom and strength to the implementation of the UN 2030 Agenda for Sustainable Development [20]. Against the backdrop of global attention to finance and sustainable economic and social development, the implementation of "sustainable finance" is not only a practical need to implement the scientific concept of development, but also an inevitable choice to follow the international trend and to bring China's finance into line with international standards.

4. CONCLUSION

The UN Sustainable Development Goals are interlinked and through the impact value chain, this paper argues that finance has an important role to play in facilitating the achievement of the SDGs. Especially in China, where the manufacturing sector is the most developed, sustainable finance has an irreplaceable role to play in fulfilling its responsibilities as a major power and promoting the achievement of SDGs. Commercial banks are an important part of China’s financial system. By understanding the needs of Chinese commercial banks’ stakeholders, this paper analyses the shortcomings of their development and offers some suggestions for the future direction of Chinese commercial banks, including attracting more sustainable talents to support the banks’ operation, offering wider ranges of sustainable financial products in multiple sectors, upgrading credit system to engage more SMEs and the wider public and continue to strengthen sustainable financing unit to reach the international standard. However, whilst this paper took the relatively holistic qualitative analysis over existing commercial banking pitfalls to provide respective suggestions, it does not analyze the problem based on past case studies and quantities evidence. Further research could focus on specific commercial banks and provide more ideas on how commercial banks can contribute to the development of sustainable finance in China through a quantitative approach, and progress towards achieving their goals, which is the role of sustainable finance for UN SDGs.

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