

The Possibility of Using Variable Interest Entities Structure to Marine Industry in China

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Abstract

Over the last several years, China's marine industry as well as variable interest entity (VIE) structure are very hot topics. However, there are few people talking about its possible integration and the benefits to be gained by integrating them. This article is to illustrate that the VIE structure can be utilized as an effective way for Chinese marine industrial firms to sidestep restrictions on foreign ownership and international capital markets entry, as well as generating new ways to acquire advanced technologies. By signing contracts instead of holding any equity interest, the establishment of VIE can surmount some of the obstacles related to a lack of foreign investment opportunities, restricted access to capital, and technological shortcomings. Particular focus will be given to how it supports major industries such as China's marine industry with foreign cooperation and financing opportunities, thus promoting growth and innovation. In conclusion, it is illustrated that VIE might act as an important mechanism to assist with financing and technology issues for China's Marine industry development, while further analysis finds out problems and difficulties it faces.

Keywords: Variable Interest Entity (VIE) Structure, China Marine Industry, Foreign Investment Restrictions, Financing Channels, Contractual Agreements; Regulatory Risks.

Introduction

Because of the poverty of land and energy over the globe, many countries are now paying more attention to their marine resources. China has also actively developed its ocean resources and made it part of the national economic plan. Subsequent policies further emphasized marine development in China. Following its 2002 ocean strategy and 2003 economic plan, China emphasized marine protection in its 2006-2010 Five-Year Plan. Later efforts aimed to expand maritime sectors (2007), launch a detailed plan (2008), optimize industrial structure (2011-2015), and achieve maritime power status by 2012. Thus, marine industry become more and more essential in decades [1]. A variable interest entity is a trust or any other legal structure used for business purposes. Investors from America or other countries will control domestic entities in China by contracts or agreements. Besides, investors over the globe can use contract to affect and even control the decisions. This paper explores the possibility of applying the Variable Interest Entity (VIE) system more widely to China's Marine

industry. This is to achieve more comprehensive development of China's Marine industry. The main reasons for choosing the VIE system as a solution to the existing difficulties of Chinese Marine enterprises include that there are lots of advantages in VIE structure involve breaking investment restrictions, attracting global funds, affecting corporate decision-making by contracts. Therefore, it may be a suitable solution to use VIE into marine industry, addressing the issues such as the operation and management of the company, the need of more input from investors, the flexibility and liquidity of capital and the innovation of the energy technology.

Variable Interest Entity Structure Overview of the VIE Mechanism

The VIE structure, also known as the control agreement mode, is an overseas listing mechanism that enables Chinese companies to bypass foreign ownership restrictions by establishing an off-shore-registered entity and securing control through contractual

agreements rather than direct equity ownership. For example, there are prominent Chinese enterprises such as Tencent, ByteDance, NetEase, and Alibaba which applied the VIE structures to make more profit in different industries, accessing foreign investment and international capital markets. Among them, Tencent is a classical example. Its VIE structure essentially divides the company into two segments: one restricted from foreign ownership (e.g., the domestic entity) and another permitting foreign investment (e.g., the Cayman listed entity) [2]. The typical VIE structure used in Tencent consolidates the restricted segment within the VIE, while placing the foreign-investment-permitted segment into a Chinese subsidiary of an offshore-listed public company. This subsidiary, termed a "wholly foreign-owned enterprise" (WFOE), is typically established in Hong Kong or other regions [3].

Advantages and Risks of VIEs.

There are a lot of benefits for Chinese enterprises and global investors to apply VIE structure to more and more industries in China: First, it can break through restrictions on foreign investment. Still using the example of Tencent, investors from America or other countries can finance in the shell company like the Cayman listed entity to acquire shares and thereby earn profits. Furthermore, they will use contracts or agreement to affect domestic company. Second, access to international capital: for domestic companies, which can only raise funds through listing in the Chinese market before, they can obtain funds from the investors to develop themselves at the same time. Thus, it is a win-win game from this situation. Thirdly, in terms of flexibility for financing and technology transfers, VIE helps establish a business relationship with foreign investors, bringing with it better management skills and technologies and relevant experiences.

However, there are also several disadvantages in VIE structure, including some legal or regulatory risks: First of all, the well-known VIE structure may have investment risks in a legal sense. For instance, the Alibaba company, founded by Jack Ma, initially operated under the VIE structure. However, later on, all the company's assets were transferred to another company under his full actual control, causing huge losses to other shareholders. In addition, the policies adopted by the Chinese government towards VIE show uncertainty. In most cases, the VIE structure is allowed to be used in China. However, when Didi Chuxing, which adopted this structure, went public on the New York Stock Exchange in the United States on June 30, 2021, it was intercepted by the government for certain reasons and subject to compulsory penalties. Generally speaking, from an economic perspective, the advantages of VIE outweigh the disadvantages. For instance, there are allegations that the VIE mechanism was unlawfully employed to circumvent accounting standards by keeping assets and liabilities off of audited consolidated financial statements [4].

Overview of China's Marine Industry,

China's marine industry is mainly formed by several parts, including marine fisheries, shipping, marine engineering, marine biotechnology, and marine energy development. With so many coastlines and abundant marine resources, China has become a global leader in the field of marine industry. The loss of land resources, coupled with intensifying demographic and environmental pressures, has led numerous countries and regions to

look toward the oceans [5]. In addition, China's marine fisheries are the largest in the world, with its shipping industry being an important means to do international trade. "What's more, developing marine renewable energy, such as off-shore wind power generation, has become one of the focuses of this industry now, which is then promoted through Marine Power Strategy with a perspective to continuously work toward advancing technology as well as promoting sustainability. According to the data from the stock market, an increasing number of Chinese Marine companies are being registered and listed, which proves the significance of this industry [6].

Besides, the development of marine industries can encompass connotation, classification, and the establishment of a comprehensive evaluation system covering three dimensions: innovation, industrial structure, and achievements, which finds that the development level of China's Marine industry shows a positive trend and the progress is particularly obvious after the strategy of building a maritime power was proposed [7]. Nevertheless, most of the marine-related businesses under the Chinese government are still in a developmental situation. Take China National Offshore Oil Corporation for example, although engaging in exploring and producing offshore oil and gas, it still faces a series of difficulties, such as the challenges of attracting foreign capital input improving capital flexibility and liquidity, innovation of energy technology [8]. These challenges highlight the potential role of the VIE structure in overcoming financial and operational constraints.

Application of VIEs in China's Marine Industry

Firstly, a VIE structure will aid in defeating restrictions on foreign ownership and result in inviting the entry of different forms of foreign investments into the country. It becomes especially desirable for relatively high-risk but high-return investments like deep-sea oil exploration and offshore wind-power generating facilities, where sufficient capital is lacking domestically. In particular, it will provide significant support for the development of China's Marine industry and the oil drilling technology [9]. Secondly, it not only enhances the liquidity of funds but also ensures that enterprises can make full use of funds and enjoy corresponding economic benefits, thereby promoting technological progress. The external funds attracted by the VIE system not only fully guarantee the normal operation of China's Marine industry companies, but also provide more sufficient funds for technological research and development. Just as in the research process of integrating large-capacity offshore wind power into the microgrid of offshore oilfield groups, due to the lack of development of this technology, the equipment is very prone to failure and damage, and at this time, a large amount of funds needs to be invested for maintenance. The investment of foreign capital can provide more sufficient guarantees for such technological research [10].

Finally, the flexible capital pool from the VIE structure serves to hedge against overseas liquidity risks by actively participating in the international capital market. In addition, while facing many financial difficulties, the VIE structure is also beneficial for the marine energy development process, because some foreign high-tech leading figures are involved. Therefore, part of the essential technology for deep-sea exploration and offshore wind power can be brought into CNOOC's business, which greatly promotes

the breakthrough in the relevant technology difficulties, and lays an important foundation for CNOOC's performance as a world leader in marine energy R&D.

Technology and Innovation Implications

Firstly, the VIE structure has opened up a unique channel for China's Marine technology enterprises to enter the international capital market. Many fields involving Marine data, maritime services, Marine engineering and even high-end equipment often face restrictions on foreign investment access due to their strategic sensitivity. This means that even with top-notch technologies, these enterprises find it difficult to directly introduce international venture capital or strategic investment, let alone go public and raise funds in overseas markets. Through a series of complex legal agreements, VIE enables an overseas-listed entity registered in the Cayman Islands or the Virgin Islands to consolidate the financial statements of domestic companies holding relevant licenses and operating technologies. This step is revolutionary. It means that the operating conditions and future potential of this enterprise can be seen, recognized and valued by the international capital market. Thus, the doors of markets such as Nasdaq and the Hong Kong Stock market, which have more mature risk preferences and larger capital pools, were opened. Enterprises can raise hundreds of millions of dollars through additional share offerings. This money is precisely the "fuel" for conducting extremely expensive deep-sea experiments, building professional research vessels, continuously iterating algorithm models, and hiring the world's top engineers. Without capital support of this scale, many ambitious Marine innovation projects may remain at the paper stage.

Second, this capital flow channel greatly optimizes the attracting and incentive mechanism of talent. Most ultimately, the competition in marine science and technology comes down to a competition of talent. The platforms of overseas-listed enterprises with a VIE structure allow internationalized incentive plans to be put in practice, with companies awarding stock options or RSUs to senior scientists and leading tech personnel. It means the worth of their own share is closely linked to long-term business values as well as original innovation, instead of only receiving salary. The incentive puts the most talented researchers' lives into the company's long-term value, helping them obtain shares after their trials because they have made innovations. These incentives can maintain those top talents who are eager to solve the key technologies' bottlenecks, creating an atmosphere of "sharing and co-creation," to attract the best minds to the most difficult frontiers.

The VIE structure has given rise to an innovative model that is closer to the market. Pure national scientific research projects sometimes focus more on the technical indicators themselves, while enterprises that absorb international capital through VIE must confront the tests of the market and the pressure of commercialization directly. Their research and development directions will be more keenly focused on addressing real industrial pain points, such as how to reduce the operation and maintenance costs of offshore wind power, how to improve the efficiency and accuracy of seabed mapping, and how to achieve the intelligence and low-carbonization of ships. The attribute of international capital demanding returns will force enterprises not only to have excellent technology but also to be able to find sustainable

business models, thereby achieving a virtuous cycle of "technological innovation-market returns-reinvestment in research and development." This market traction is a key link in driving technology from the laboratory to the vast ocean. Nevertheless, this can also present difficulties. Multinational corporations tend to be profit-seeking so may place too much emphasis on quick success over investment in fundamental R&D projects that will only see returns after years of investment. At the same time, uncertainty exists concerning the legality of and risks inherent in the foreign-invested enterprises (FIE) structure for the development of marine technology. Moreover, management requires a very high risk-adjusting ability because of all the factors raised.

Policy Recommendations

For enterprises, the rational use of VIE structure to avoid risks requires the adoption of prudent and comprehensive strategies. First of all, enterprises must thoroughly understand and strictly abide by relevant laws and regulations, especially the provisions concerning Marine industries in the "Special Administrative Measures for Foreign Investment Access (Negative List)". All enterprises adopting the VIE structure, regardless of whether they involve actual cross-border capital flows or not, are required to handle foreign exchange registration as stipulated. Before setting up a VIE structure, it is recommended to collaborate with lawyers and foreign exchange advisors to design a compliance plan to ensure that the establishment of the special purpose company, shareholder changes and other steps meet the requirements. Secondly, enterprises need to carefully design and ensure the validity and authenticity of VIE agreements. The core of the VIE structure is a series of control agreements. Enterprises need to sign detailed and clearly defined service agreements with domestic operating companies to ensure the legality and enforceability of their interests. It is essential to ensure that the transaction behind the agreement is genuine and the pricing is fair, to avoid the risk of the agreement being invalid or facing back taxes and fines due to "using a legal form to cover up an illegal purpose" or being determined as "grossly unfair".

Furthermore, enterprises should enhance corporate governance and internal control. A sound corporate governance structure can effectively reduce the operational risks of the VIE structure. It is necessary to clearly define the rights and responsibilities among oversea-listed companies, wholly foreign-owned enterprises within the country and OPCO, maintain information transparency, improve the internal control mechanism of enterprises, and conduct regular compliance audits and risk assessments. Finally, enterprises need to prepare emergency response plans and maintain structural flexibility. Given that policies may change, enterprises should establish and improve policy risk early warning mechanisms, closely monitor domestic and international policy developments, and prepare emergency plans (such as organizational restructuring or dismantling). At the same time, in response to market changes and regulatory requirements, maintain the flexibility of the business model and structure, and be ready to make adjustments at any time.

For the government, supporting the innovative industry in terms of regulation and policy requires a balanced and forward-looking strategy. The government is confronted with a difficult balance between "encouraging innovation" and "preventing risks" in the issue of VIE structure. For cutting-edge fields such as

Marine science and technology that require foreign investment support, policy-making needs greater wisdom. Firstly, the government could consider gradually clarifying the legal status and regulatory rules of the VE framework. Although the VIE structure has not been explicitly recognized and accepted at present, it has existed for a long time. It is suggested that the regulatory authorities, on the basis of in-depth research, gradually clarify the regulatory rules for VIE structures, reduce the "gray areas", and provide the market with a stable expectation. The governance approach of "classification and grading" can be referred to, and differentiated regulatory strategies can be implemented based on the risk levels of different sub-sectors of the Marine industry (such as Marine exploration, Marine biomedicine, Marine new energy, etc.). Secondly, the government should strengthen mid - and post-event supervision and crack down on illegal and non-compliant behaviors. The focus of supervision should shift more from formal review to substantive review. Foreign exchange regulatory authorities, the China Securities Regulatory Commission and other relevant departments should enhance joint supervision, conduct thorough reviews of actual controllers, and ensure the authenticity and compliance of transactions.

We will resolutely crack down on malicious fraud, capital flight and threats to national security through the VIE structure, and maintain market order and financial security. Furthermore, the government needs to optimize the financial support system in the field of technological innovation. The core purpose of many Marine technology enterprises seeking the VE architecture is financing. Therefore, it is of vital importance to build a science and technology finance system that is compatible with scientific and technological innovation. We should vigorously develop angel investment, venture capital and private equity investment, better leverage the role of government investment funds, support banking and financial institutions in innovatively developing technology finance, and improve support policies for early-stage, small-scale, long-term and hard-tech investment, so as to reduce the helplessness of outstanding enterprises being forced to choose VIE structures for financing. Finally, the government should deepen the "streamlining administration, delegating power, improving regulation and upgrading services" reform. For Marine industries that do not involve national core security, it is possible to consider further lowering the threshold for foreign investment access to attract "greenfield investment." Simplify the filing process for enterprises' overseas listings and enhance policy transparency. Protect intellectual property rights, improve the coordinated and connected mechanisms for administrative law enforcement, judicial protection, arbitration and mediation, industry self-discipline, and credit supervision of intellectual property rights, and provide a fair competitive market environment for all enterprises (regardless of their structure).

Conclusion

To sum up, although there are legally-regulatory-related difficulties regarding the VIE structure, they do not overshadow its multiple advantages—especially for China's marine enterprises

such as CNOOC, which seek to skirt around foreign ownership restrictions to attract foreign investment, acquire higher levels of technology, and develop joint ventures with them on a global scale. As they take a steady stride across financial and technological gaps between the rest of the world and China, they aim to complete their mission to build up China's entire marine industry (e. g., overseas wind energy, and offshore oil exploration). So long as China upholds its paramount maritime power strategy, it will continue to depend on the VIE structures for unleashing maximum potential in China's marine assets. Meanwhile, this paper puts forward that while the VIE structure provides good and creative ways to solve problems of financing and technology in China's marine sector, it also comes with dangers such as risks and difficulties caused by possible regulatory disagreements and legal ambiguities; future research could be done to improve existing knowledge and to confirm specific benefits for some marine sub-sectors.

References

1. Yan, X., Yan, L., Yao, X. L., & Liao, M. (2015). The marine industrial competitiveness of blue economic regions in China. *Marine Policy*, 62, 153–160.
2. Xu, F. (2020). A variable interest entity mode-based study on financial risk management of marine economy. *Journal of Coastal Research*, 107, 97–100. <https://doi.org/10.2112/JCR-SI107-025.1>
3. Kluwer, W. (2025). Acquiring a variable interest entity. *GAAP Update Service*, 25(12), 1–8.
4. Lange, C. D., & Fornaro, J. M. (2017). Consolidation of variable interest entities for private companies. *The CPA Journal*, 87(2), 46–50.
5. Song, M. L., Wang, Q. Y., Wang, S. H., & Zhou, L. (2021). Specialization and diversification of the marine industry and marine economic growth: An example from Chinese coastal areas. *Journal of Coastal Research*, 37(1), 203–215.
6. Guo, X. M., Peng, L., & Xie, Z. R. (2020). Executive stock ownership, dynamic adjustment of capital structure and corporate performance: Evidence from Chinese listed marine industry companies. *Journal of Coastal Research*, 106(sp1), 300–304.
7. Ji, J. Y., Liu, H. M., & Yin, X. M. (2023). Evaluation and regional differences analysis of the marine industry development level: The case of China. *Marine Policy*, 148.
8. China Oil & Gas Report. (2025). China oil & gas report (Q3, Issue 3, pp. 1–95).
9. Li, Z. (2023). Progress and prospect of key technologies for drilling and completion of "Deep Sea No.1" gas field of CNOOC. *Petroleum Drilling Techniques*, 51(4), 88–94.
10. Wan, G. F., Wei, C., Qiu, Y. F., & Huang, C. (2025). Transient stability of large-capacity offshore wind power connected to offshore oilfield microgrids: Taking the connection project of "CNOOC Guanlan" to the Wenchang oilfield power grid as an example. *China Offshore Oil and Gas*, 37(1), 211–220.