The Impact of the Depth of the Clauses in Regional Trade Agreements on OFDI of Chinese Enterprises

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Abstract: The clauses related to investment opening are the essential part of regional trade agreements, but there is still room for further expansion in the existing analysis of the impact of the depth of the clauses in trade agreements on outward foreign direct investment (OFDI) of the enterprises. Based on the heterogeneity theory of FTA clauses and the existing research foundations, this paper constructs the depth of "WTO-plus" clauses, the depth of "WTO-extra" clauses, the depth of core clauses, the depth of border clauses and the depth of behind-the-border clauses, and introduces a single-country model to investigate the impact of the depth of FTA clauses on the effectiveness of OFDI of China's enterprises. The research reveals that the depth of FTA clauses has a significant positive correlation with the effectiveness of OFDI of Chinese enterprises, and the positive effects of the depth of post-boundary clauses and the depth of "WTO-extra" clauses are significantly stronger than those of the depth of boundary clauses and the depth of "WTO-plus" clauses. Further research shows that the depth of FTA clauses enhances the investment effectiveness by improving the business environment of the host country and the depth of FTA clauses exerts positive effect on OFDI and non-greenfield investment of the state-owned enterprises.

Keywords: Regional Trade Agreements, Depth of Clauses, Outward Foreign Direct Investment (OFDI), Business Environment

I. INTRODUCTION

Free Trade Agreement (FTA)[1], which is characterized by high flexibility,

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1 For the sake of understanding and analysis, this article uniformly refers to various types of free trade agreements as FTAs.

extensive coverage, and strong focus, is attracting widespread attention and recognition worldwide. The conclusion of FTAs has created a trend of continuous promotion of economic and trade development.[2] As the number of FTAs rapidly increases, the breadth and depth of FTAs have significantly improved. The contents of FTA clauses have evolved from border rules to deeper behind-the-border rules, providing new external impetus for global economic governance and trade development.

The economic effects arising from the development of the breadth and depth of FTAs have attracted wide attention. This paper, focusing on key points of research, reviews two kinds of papers: the identification of FTA clause heterogeneity and the depth measurement of clauses, as well as the impact and transmission mechanisms. The identification and depth measurement of FTA clause heterogeneity are foundational tasks in the study of the economic effects of FTAs. In terms of identifying FTA clause heterogeneity and measuring clause depth, Horn Henrik et al. (2010) played a pioneering role by coding and identifying heterogeneous clauses in FTAs.[3] This paper categorized FTA clauses into "WTO-plus", which matches the clauses in the current WTO framework, and "WTO-extra", which is beyond the clauses of the current WTO framework, based on the coverage of clauses. It further distinguished the level of legalization based on whether the clauses have legal enforceability. This became a groundbreaking work in the field. Subsequently, Dür Andreas et al. (2014), Orefice and Rocha (2014), and Kohl Tristan et al (2016) conducted a series of studies from different perspectives based on this.[4] They performed

2 Baier Scott L., Jeffrey H. Bergstrand and Ronald Mariutto, Economic Determinants of Free Trade Agreements Revisited: Distinguishing Sources of Interdependence, *Review of International Economics*, Vol. 22, No. 1, 2014, pp. 31-58; Baier Scott L., Yoto V. Yotov and Thomas Zylkin, On the Widely Differing Effects of Free Trade Agreements: Lessons from Twenty Years of Trade Integration, *Journal of International Economics*, Vol. 116, 2019, pp. 206-226; Ying Tie, Jianzhong Huang and Meina Xu, Third-party Effects, Deepening of Regional Trade Agreements, and China's Strategy: A Quantitative Study Based on the Heterogeneity of Agreement Terms, *Economic Research*, Vol. 56, No. 1, 2021, pp. 155-171.

3 Horn Henrik, Petros C. Mavroidis and André Sapir, Beyond the WTO? An Anatomy of EU and US Preferential Trade Agreements, *The World Economy*, Vol. 33, No. 11, 2010, pp. 1565-1588.

4 Dür Andreas, Leonardo Baccini and Manfred Elsig, The Design of International Trade Agreements: Introducing a New Dataset, *The Review of International Organizations*, Vol. 9, No. 3, 2014, pp. 353-375; Orefice Gianluca and Nadia Rocha, Deep Integration and Production Networks: An Empirical Analysis, *The World Economy*, Vol. 37, No. 1, 2014, pp. 106-136; Kohl Tristan, Steven Brakman and Harry Garretsen, Do Trade Agreements Stimulate International Trade Differently? Evidence from 296 Trade Agreements, *The World Economy*, Vol. 39, No. 1, 2016, pp. 97-131.

detailed subdivisions of clause depth, depth indicator measurement, and coverage indicator measurement, collectively laying the groundwork for the conceptual definition, identification, and depth measurement of FTA clause heterogeneity. In 2017, the World Trade Organization (WTO) released the Deep Trade Agreement Database, jointly created by Claudia Hofmann, Alberto Osnago, and Michele Ruta.

This comprehensive database covers 279 trade agreements reported to the WTO, effective from 1958 to 2015, involving 189 economies globally. It is currently the most extensive and content-rich database on trade agreement depth. Domestic researches, such as Zhongyuan Zhang (2019), further identified border and behind-the-border clauses based on "WTO-plus" and "WTO-extra" clause category, using the above-mentioned theory of clause heterogeneity and FTA depth database.[5] This paper also conducted more detailed classifications based on the legal intensity of clauses, and the subsequent researches on FTA clause depth has generally been based on this foundation.[6] Concerning the identification and depth measurement of FTA clauses, relatively consistent standards and approximate viewpoints have been established, yielding fruitful research results and providing a favorable foundation for the classification of heterogeneous clauses and the measurement of clause depth in this paper.

The analysis of FTA clause heterogeneity and the measurement of clause depth lay the groundwork for studying the economic effects of FTAs. Since the 1990s, researches have progressively focused on the impact of FTA clauses' depth heterogeneity on value chains, production networks, and trade facilitation. Some researches have used modeling to analyze the effects of FTAs on international cooperation, such as cross-border production, cross-border trade, and international or regional production networks. The general consensus is that

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5 Zhongyuan Zhang, The Impact of the Depth of Regional Trade Agreements on Participation in the Global Value Chain, *International Trade Issues*, No. 8, 2019, pp. 95-108.

6 Shuqin Ma, Min Li and Xunmin Qiu, Heterogeneity of Bilateral Free Trade Agreement Depth and the Effects on Global Value Chain: An Empirical Study Based on the GVC Modified Gravity Model, *Economic Theory and Economic Management*, No. 5, 2020, pp. 62-74; Yuhong Sun, Meiyue Yu and Yu Shang, The Impact of Digital Trade Rules in Regional Trade Agreements on Service Trade Exports: Evidence from APEC Members, *Nankai Economic Studies*, No. 3, 2022, pp. 142-160.

FTAs significantly promote trade and economic growth. However, inconsistent standards for defining and measuring FTA clause depth have hindered more accurate quantitative results.[7] The pioneering research by Horn Henrik et al. (2010) on identifying FTA clause heterogeneity and the release of the WTO Deep Trade Agreement Database provided a relatively consistent foundational standard for recent research on the effects of FTA clause depth.[8] Especially after the establishment of the Deep Trade Agreement Database in 2017, research in this area has become significantly richer, covering contents such as value chains, trade facilitation, trade diversion and creation, political relations, technological progress, and institutional development. Mattos Aaditya et al. (2017) created a gravity model based on the Deep Trade Agreement Database to analyze the impact of FTAs on trade flows.[9] Jian Han and Can Wang (2019) empirically analyzed the impact of FTA depth on the level of participation in global value chains (GVC) of 41 countries or regions.[10] Researches like Laget et al. (2020) and Weiwei Tong (2019) have delved into the impact of FTA clause depth on GVC.[11] Moreover, research on the effects of FTA depth on political relations, trade structure, business environment, and labor relations has continually expanded.[12] In terms of transmission mechanisms, Lianxing Yang (2023) suggested that digital trade rules in FTAs can influence

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7 Antràs Pol and Robert W. Staiger, Offshoring and the Role of Trade Agreements, *American Economic Review*, Vol. 102, No. 7, 2012, pp. 3140-3183.

8 *Supra* n. 3.

9 Mattoo Aaditya, Alen Mulabdic and Michele Ruta, Trade Creation and Trade Diversion in Deep Agreements, *World Bank Policy Research Working Paper*, 2017, No. 8206.

10 Jian Han and Can Wang, Free Trade Agreements and the Embedding of Global Value Chains: An Examination of the Depth Effect of FTAs, *International Trade Issues*, No. 2, 2019, pp. 54-67.

11 Laget Edith et al., Deep Trade Agreements and Global Value Chains, *Review of Industrial Organization*, Vol. 57, No. 2, 2020, pp. 379-410; Weiwei Tong, FTA Depth, Flexibility, and China's Participation in the Global Value Chain, *International Trade Exploration*, Vol. 35, No. 12, 2019, pp. 23-40.

12 Lei Li, Guoming Xian and Qun Bao, Does "Bringing in" Promote "Going out"? The Impact of Foreign Direct Investment on China's Outward Foreign Direct Investment, *Economic Research*, Vol. 53, No. 3, 2018, pp. 142-156; Mi Dai, Yifan Zhang and Wei Huang, How Does Trade Liberalization Affect China's Regional Labor Market? *Management World*, Vol. 35, No. 6, 2019, pp. 56-69; Xiang Dai and Jie Song, The Global Value Chain Effects of China's Outward Foreign Direct Investment and Its Spatial Spillover, *Finance and Economics Research*, Vol. 46, No. 5, 2020, pp. 125-139.

the political environment and further promote integration.[13] Xiaosong Wang et al. (2017) argued that FTAs impact value-added trade and the innovation of enterprises by reducing trade costs and lowering trade barriers.[14] Amélie Guillin (2013) pointed out that the impact of FTAs on the participation in value chains is mainly achieved by reducing uncertainty and trade costs between trading partners.[15] Related studies generally agree that FTAs can influence the level of participation in value chains by affecting trade costs, improving trade conditions, and stabilizing trade relationships.[16]

Research on the impact of FTAs on investment has also become a focal point in the academia. Davis G. Doug (2011) pointed out that FTAs can facilitate the inflow of foreign direct investment (FDI), while Chauffour Jean-Pierre and Jean-Christopher Maur (2021) believed that behind-the-border clauses, including investment contents in FTAs, had a more prominent positive effect on global capital and trade flows.[17] Mengyao Lin and Zhongyuan Zhang (2019) further indicated that the depth of competition policy clauses in FTAs significantly promotes the flow of bilateral FDI.[18] Studies such as Hongen Yang et al. (2016), Chunding Li et al. (2019), and Fang Dong and Linbin Wang (2021) similarly suggest that deep FTAs have a significant impact on promoting

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13 Lianxing Yang, Qiushuo Wang and Xiumin Zhang, Deepening Free Trade Agreements, Digital Trade Rules, and the Development of Digital Trade, *World Economy*, Vol. 46, No. 4, 2023, pp. 32-59.

14 Xiaosong Wang, Yue Lyu and Chunming Zhao, Trade Barriers and Global Value Chain Integration: A Case Study of China's Anti-dumping Measures, *Chinese Social Sciences*, No. 1, 2017, pp. 108-124, 206-207.

15 Guillin Amélie, Trade in Services and Regional Trade Agreements: Do Negotiations on Services Have to Be Specific? *The World Economy*, Vol. 36, No. 11, 2013, pp. 1406-1423.

16 Lakatos Csilla and Lars Nilsson, The EU-Korea FTA: Anticipation, Trade Policy Uncertainty and Impact, *Review of World Economics*, Vol. 153, No. 1, 2017, pp. 179-198; Hua Zhou and Xiuxiu Jia, The Impact of Different Types of Accumulation Rules on the Contagion Effects of Free Trade Agreements — Evidence from 205 Countries, *Economics (Quarterly)*, Vol. 19, No. 1, 2020, pp. 281-308; Jianxing Lyu, Yi Wang and Shaohua Zhang, Can FTAs Alleviate Trade Frictions between Member States and China? Evidence from GTA Country-Product Level, *Quantitative and Technical Economics Research*, Vol. 38, No. 5, 2021, pp. 114-134.

17 Davis G. Doug, Regional Trade Agreements and Foreign Direct Investment, *Politics and Policy*, Vol. 39, No. 3, 2011, pp. 401-419; Chauffour Jean-Pierre and Jean-Christophe Maur, Preferential Trade Agreement Policies for Development: A Handbook, *World Bank Publications*, Vol. 99, No. 5, 2011, pp. 662-687.

18 Mengyao Lin and Zhongyuan Zhang, The Impact of Competition Policy in Regional Trade Agreements on Foreign Direct Investment, *China Industrial Economics*, No. 8, 2019, pp. 99-117.

investment growth and exhibiting clear heterogeneity in their clauses.[19]

The aforementioned studies mostly point out significant differences due to variations in agreement targets and the legal intensity of clauses. However, the overall trend is consistent in showing that FTAs significantly promote both the scale and flow of investment. In summary, although there are plenty of extensive research on the identification of FTA clause heterogeneity and the measurement of clause depth, they often focus on analyzing actions like "what to invest" and "how much to invest" in the process of outward foreign direct investment (OFDI). There is an inadequate consideration of the post-investment outcome, especially in analyzing the effectiveness of Chinese overseas direct investment (ODI) at the enterprise level, which requires further improvement.

Therefore, this paper focuses on the impact of FTA clause depth on the effectiveness of Chinese enterprise OFDI by tracking enterprise-level investment data and referring to database of FTA clauses. This article constructs a binary choice model to analyze the influence of the different types of FTA clause depth on the effectiveness of OFDI, the mechanism of action, and related extension issues. The potential marginal contributions of this paper mainly lie in three aspects: (i) in terms of research perspective, this paper distinguishes itself from existing studies that predominantly consider the impact of FTA on investment actions and scale through focusing specifically on the nuanced effects of varying FTA clause depth on OFDI performance of large Chinese enterprises; (ii) in terms of research methodology, this paper introduces a single-country model to focus on analyzing the practical issues of enterprise OFDI effectiveness; (iii) in heterogeneity analysis, this paper focuses on the perspective of Chinese enterprises, distinguishing between the nature of enterprises and the mode of OFDI.

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19 Hongen Yang et al., The Impact of Bilateral Investment Treaties on China's Outward Foreign Direct Investment: A Perspective Based on the Heterogeneity of Investment Agreements, *Management World*, No. 4, 2016, pp. 24-36; Chunding Li, Jing Lu and Chuantian He, Optimal Tariffs and Endogenous Dynamics of Global Trade Liberalization, *World Economy*, Vol. 42, No. 2, 2019, pp. 72-96; Fang Dong and Linbin Wang, Have Bilateral Investment Treaties and Regional Trade Agreements Enhanced the Effectiveness of China's Outward Foreign Direct Investment? A Perspective Based on the Legalization Level of Investment Agreements, *Explorations in Economic and Trade*, Vol. 37, No. 8, 2021, pp. 68-82.

II. THEORETICAL MECHANISM AND RESEARCH HYPOTHESES

The diversity of FTA clauses and the flexibility in signing and implementation have accelerated the integration of regional economies into the global value chain system. This has promoted the rapid development of regional trade, becoming a significant form of cooperation to drive both bilateral and multilateral economic and trade exchanges and promote the construction of the global economic order. With the rapid expansion of the scale of FTAs, although trade liberalization remains a key consideration for all participants, attention has been continuously shifting toward investment liberalization. This involves reducing restrictions on the free flow of capital, lowering the barriers for foreign capital to participate in domestic economic activities, and enhancing the level of economic liberalization.

The reduction in the cost of capital flow among FTA members helps facilitate larger-scale international capital flows, prompting the achievement of more extensive and higher-level FTAs to some extent. Research by Cardamone Paola and Margherita Scoppola (2012) and Medvedev Denis (2012) indicates that the depth of FTA clauses has a positive stimulating effect on investment flows, especially the "deep integration" clauses which have a direct and significant promoting impact on FDI.[20] Existing studies have extensively analyzed the content, internal mechanisms, potential utility, and crises of FTAs. However, the focus of research on foreign direct investment has mainly concentrated on the impact of FTAs on the scale and regional distribution of OFDI. In summary, there is a considerable room for further exploration in the analysis of the impact of trade agreements on investment efficiency, particularly regarding the influence of FTA clause depth on the effectiveness of Chinese enterprises' OFDI. This research gap is the core focus of this paper.

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20 Cardamone Paola and Margherita Scoppola, The Impact of EU Preferential Trade Agreements on Foreign Direct Investment, *The World Economy*, Vol. 35, No. 11, 2012, pp. 1473-1501; Medvedev Denis, Beyond Trade: The Impact of Preferential Trade Agreements on FDI Inflows, *World development*, Vol. 40, No. 1, 2012, pp. 49-61.

A. The Facilitating Effect of FTA Clauses' Depth on the Effectiveness of Chinese Enterprises' OFDI

FTAs, established through further optimization of traditional trade rules, are agreement texts that carry incentivizing effects based on political trust and mutual economic benefits. These agreements, to various degrees, enhance the level of trade facilitation among member states, reduce communication costs, and stimulate optimized configuration of vital production factors such as resources, capital, technology, labor, and management experience. This, in turn, drives the internal institutional mechanism construction within member countries, to some extent shortening the economic and cultural distances between them.[21] One crucial effect of FTAs is their impact on the effectiveness of bilateral investments. On one hand, FTAs drive the traditional border-centric trade liberalization toward a deeper development at behind-the-border levels, including market competition, capital flows, technological research and development and cooperation, and higher standards of intellectual property protection. By expanding investment measures, tax policies, intellectual property protection, legislation, and other behind-the-border clauses, FTAs improve bilateral investment conditions, thereby enhancing the capital mobility and investment effectiveness. On the other hand, FTAs promote the continuous deepening of trade and investment terms, reducing both institutional and non-institutional barriers in the bilateral investment process. Facilitated by factors such as the ease of economic and trade cooperation and the liberalization of factor mobility, enterprises from FTA member countries are more actively and efficiently engaged in bilateral investment activities.[22] Consequently, the level of investment effectiveness is expected to significantly increase. Moreover, FTAs are more adaptable to the national conditions of member countries in

21 Pei Yu and Zhengfang Cai, Does OFDI Help China's Manufacturing Industry Achieve Stability, Consolidation, and Improvement in the Value Chain – Based on the Identification of the Level-by-level Transmission Effects of International Competitiveness and the Identification of Breaking Links, *International Trade Exploration*, Vol. 39, No. 5, 2023, pp. 36-51.

22 Bijun Wang and Ziwei Song, Home Government Support and the Performance of Outward Direct Investment by Enterprises, *International Trade Exploration*, Vol. 39, No. 3, 2023, pp. 53-70.

the construction of institutional systems related to economic and trade rules and relevant industries highly associated with corporate investment activities. Consequently, significant progress can be made in addressing long-standing issues that have not been resolved within the WTO framework and have been constraining bottlenecks in corporate investment activities for an extended period. This is of great significance for enhancing the effectiveness of the OFDI of Chinese enterprises.

Hypothesis 1: FTAs significantly enhance the effectiveness of Chinese OFDI, and there is a clear positive correlation between the depth of clauses and the level of investment effectiveness.

B. The Diverse Impact of FTA Clause Depth on OFDI Effectiveness

An important distinction between FTAs and the traditional multilateral trading system of the WTO is reflected in the content of the agreement terms. The WTO, with a large number of members, extensive coverage, and strong universality of rules, must maintain overall stability and effective operation. This leads to the retention of only a portion of key and general institutional content, failing to meet all the diverse demands. However, since the global economic and trade order has undergone accelerated changes, especially after the financial crisis in 2008, the multilateral governance capacity of the WTO has significantly diminished. The difficulty in rule coordination has resulted in challenges in effectively implementing some general rules within the WTO framework. FTAs, however, can fix the problem of institutional deficiencies and operational inefficiencies of the WTO. FTAs inherit key "WTO-plus" clauses and, based on actual needs, introduce richer "WTO-extra" clauses. On the basis of the traditional framework of the WTO, FTAs further advance the content of the clauses to behind-the-border level, greatly enriching the overall framework of the agreement. It lays the foundation for deep, high-level economic and trade cooperation while also accommodating better the collaborative demands of each member. Therefore, based on the breadth of content coverage, the enforceability of clauses, and the strength of constraint capabilities, different categories of FTA clauses will have varying impacts on the effectiveness of Chinese OFDI.

The influence of clause categories becomes more pronounced as the depth of clauses in each category increases. According to the heterogeneity theory of enterprise trade, Eaton Jonathan et al. (2011) suggested that the heterogeneity of enterprise productivity influences the direction of enterprise foreign trade, a phenomenon that also applies to OFDI.[23]

Hypothesis 2: The impact of different types of FTA clauses on the effectiveness of Chinese OFDI varies, with clauses that go beyond the WTO framework and behind-the-border clauses having a more pronounced effect.

C. The Depth of FTA Clauses Improves the Business Environment of the Host Country, Leading to Differentiated Effects on Various Types of Enterprises and Different Forms of Investment

As mentioned earlier, FTAs further advance behind-the-border on the foundation of the WTO, compelling member states to govern their domestic business environment for the objective benefits brought about by the FTA implementation. This includes the construction of both hardware infrastructure and a comprehensive enhancement of the quality of content, such as systems, cultures, services, and ideologies. For example, the Regional Comprehensive Economic Partnership (RCEP) agreement divides investment rules into textual rules and negative list sections, covering four aspects: investment protection, liberalization, promotion, and facilitation. It effectively integrates traditional investment rules while reflecting new developments in international investment agreement practices.[24] RCEP provides relatively comprehensive and in-depth clauses for the obligations of the entities in investment protection and

23 Eaton Jonathan, Samuel Kortum and Francis Kramarz, An Anatomy of International Trade: Evidence from French Firms, *Econometrica*, Vol. 79, No. 5, 2011, pp. 1453-1498.

24 Textual rules primarily refer to Chapter 10 (Investment) of the agreement and its two annexes (Customary International Law and Levies). Additionally, it should be noted that there are provisions applicable to investment in other chapters of the agreement, such as Chapter 1 (Initial Provisions and General Definitions), Chapter 17 (General Provisions and Exceptions), Chapter 19 (Dispute Settlement), etc. Apart from textual rules, Annex Three of the RCEP agreement (Schedule on Reservations and Non-conforming Measures for Services and Investment) lists negative lists of reservations made by each member regarding investment. For the specific clauses related to investment rules in the RCEP, http://fta.mofcom.gov.cn/rcep/ (Last Visited on July 10, 2023).

market access, including granting national treatment and most-favored-nation treatment to investment entities and projects of RCEP member states in the pre-establishment stage. It specifies requirements for fairness, mobility rules, loss protection, and compensation for investments. The agreement incorporates clauses related to senior managers and the board of directors, exceeding the WTO levels in prohibiting performance requirements. It elaborates measures for investment promotion, facilitation, and the resolution of foreign investment disputes. It establishes special mechanisms such as the negative lists and security exceptions, allowing government departments to set reasonable limitations and policy space for managing foreign capital. The investment rules of RCEP add value to the existing rules by extending the content further within the national borders, reflecting the trend of high-level FTAs. The rules also balance differences in development levels among members and address specific concerns of individual members, demonstrating flexibility and inclusiveness. Additionally, other clauses of RCEP are likely to impact investments. In addressing potential investment discrimination and violations of agreement requirements among members, resolution can take place within the RCEP framework. To meet the objective requirements of FTA clauses and address potential political, economic, and cultural risks existing in the implementation of the agreement, member states can improve the business environment and enhance the level of investment liberalization, thereby gaining developmental opportunities and mitigating potential risks, which is to a certain extent conducive to improving the effectiveness of enterprises' OFDI.

The characteristics of the RCEP agreement reflect its evolution from "WTO-plus" to "WTO-extra", expanding from on the border to behind-the-border. The deepening of coverage and content is a typical development trend of high-level FTAs. The changes in the depth of the agreement will inevitably lead to a comprehensive upgrade of measures taken by member states, impacting OFDI. Different types of investment entities, due to variations in their scales, business attributes, investment purposes, and industrial sectors, exhibit varying sensitivity to the content of the agreement. Moreover, different forms of investment have diverse impacts on the socio-economic aspects of

the host country; therefore, there are differences in the response to the contents of FTA clauses. In summary, changes in the depth of FTA content will trigger a chain reaction in the governance level of member states. The reactions of different types of entities and various investment forms to the content of the agreement may vary.

Hypothesis 3: FTAs contribute to improving the host country's business environment, thereby enhancing China's investment effectiveness with FTA partners. Additionally, the depth of FTA clauses has different impacts on various types of enterprises and investment modes.

In summary, this paper diverges from existing researches that primarily focused on the impact of FTA clauses and depth on aspects such as value chain integration, investment scale, and investment flows. Instead, this paper concentrates on the influence of FTA clauses' depth on the OFDI effectiveness of Chinese enterprises, shifting the emphasis from scale to effectiveness. The analysis includes examining the intrinsic mechanisms of how FTAs enhance the quality of the host country's business environment and the diverse effects on enterprises with different characteristics and various investment forms. This approach is crucial for studying the quality of Chinese outward investments and the focal points in the construction of Chinese FTAs.

III. IDENTIFICATION AND BASIC FACTS OF FTA CLAUSE DEPTH

A. Identification of Free Trade Agreement Clause Depth

FTAs have undergone extensive differentiation and expansion within the WTO framework, considering both the main WTO rules and the diverse interests of FTA partners. In recent years, new issues, such as the digital trade and environmental protection, have been incorporated into the FTA frameworks, with a continuous deepening of investment liberalization and facilitation, legal effectiveness, and so on. Some studies on the impact of FTAs on trade and investment that consider FTAs as homogenous argue that FTAs promote

trade facilitation and investment liberalization through trade creation and trade diversion. However, studies treating FTAs as heterogeneous hold the point that differences in FTA clauses and legal effectiveness result in distinct economic effects. Under the assumption that FTA clause is homogeneous, researchers generally believe that signing FTAs can effectively promote regional economic and trade development and expand investment flows. However, in the long run, there may be significant deviations regarding trade promotion effect, and some studies suggest that while FTAs have a development-promoting effect, the actual effects may not be as pronounced as expected.[25] As for trade and investment, under the assumption that clause is heterogeneous, trade agreements are traditionally classified into Preferential Trade Agreement (PTA), Plurilateral Services Agreement (PSA), Free Trade Agreements (FTA), Customs Unions (CU), Economic Unions (EU), and Common Markets (CM). Although this classification is relatively simple, it exhibits a clear trend of increasing integration levels in trade agreements. This paper collectively refers to all trade agreements as FTAs and evaluates and categorizes their depth based on criteria such as the scope of clauses, legal obligations, enforceability, and importance. Assessing FTA clause depth and types is crucial for this study under the assumption of heterogeneity.

B. Evolution of the Depth of Free Trade Agreement Clauses

The re-signing of FTAs is a significant method to drive the construction of deep FTAs. Member states incorporate services trade, investment arrangements, more profound political clauses, more liberal and comprehensive factor mobility clauses, higher-level research and development cooperation clauses, and more extensive trade liberalization into newly signed or upgraded FTAs. This intergenerational change in FTAs, in fact, reflects changes in their depth. Statistics show that, globally, 18.559% of FTAs have undergone at least one

25 Baier Scott L. and Jeffrey H. Bergstrand, Do Free Trade Agreements Actually Increase Members' International Trade? *Journal of International Economics*, Vol. 71, No. 1, 2007, pp. 72-79; Chunding Li, Zhifang Guo and Chuantian He, The Potential Economic Impact of China's Large Regional Trade Agreement Negotiations, *Economic Research*, Vol. 53, No. 5, 2018, pp. 132-145.

renegotiation, with some undergoing three or more renegotiations. Research generally acknowledges that the continuous evolution of FTA clause depth significantly promotes global economic development. The enrichment of FTA clauses and the strengthening of their enforceability have profound effects on constructing new global economic orders and international economic rules.

Specifically for China, the time since its participation in the negotiations and construction of FTAs has been relatively short. In terms of constructing deep FTAs, China primarily achieves this by upgrading existing FTAs through negotiations, re-signing them, adding relevant auxiliary agreements, or joining FTAs with higher standards to enhance overall standards and quality in order to continuously expand the scope and depth level of the FTA content. China has successfully led the completion of FTA upgrade negotiations with ASEAN, Pakistan, Chile, and New Zealand. Additionally, China is actively working on upgrading negotiations with countries, such as South Korea, Peru, and Switzerland. Simultaneously, China has recently joined the RCEP, and it is in the process of joining the Comprehensive Progressive Trans-Pacific Partnership (CPTPP), Digital Economy Partnership Agreement (DEPA), and other high-level FTAs, further expanding the coverage and depth of FTAs. Whether through upgrading negotiations or joining new high-standard FTAs, these efforts effectively contribute to the development of deep FTAs.

C. Measurement on the Depth of Free Trade Agreement Clauses

The fundamental purpose of constructing deep FTAs is to promote the economic development of member states. With the continuous in-depth research on methods for quantifying the depth of FTA clauses, there has been widespread attention to measuring the depth of these clauses. Horizontal measurement and vertical measurement are the two main methods for measuring the depth of FTA clauses. Horizontal measurement involves assigning depth values to specific clauses and summing them horizontally. For example, Kohl Tristan (2014) and Mattoo Aaditya et al. (2017) respectively used the Global Preferential Trade Agreement Database (GPTAD) and Content of Deep Trade Agreements (CDTA) database to construct different depth

indicators for clauses and analyzed the impact of FTAs on trade flows and the economic and trade development of member states.[26] To effectively identify and distinguish the heterogeneity of FTA clauses, some studies using horizontal measurement distinguish different FTA clauses based on their effectiveness boundaries and effectiveness objects. The classification based on effectiveness boundaries divides them into "border clauses" and "behind-the-border clauses". The other based on effectiveness objects categorizes them into "discriminatory clauses" and "non-discriminatory clauses". This approach has proven effective in addressing heterogeneity issues. Additionally, some researches used methods such as principal component analysis to generate clause depth indicators. These indicators measure the importance of clauses and the depth level of FTA networks based on the frequency of the same clauses appearing in different FTAs. In summary, horizontal measurement methods provide a relatively simple and effective way to assess the depth of FTAs. They lay the foundation for in-depth research on the relationship between FTA depth and value chains, trade networks, and other related content. This paper primarily draws on horizontal measurement methods to assess the depth of FTA clauses and analyze their impact on Chinese enterprises' OFDI. The vertical measurement method often assigns values of "0" or "1" based on whether a specific clause appears in the FTA. However, more in-depth quantification and analysis are conducted regarding the diversity of clause contents and the legal enforceability of these clauses. Overall, the research utilizing the vertical measurement method to characterize the depth of FTA clauses is noticeably less prevalent compared to the horizontal measurement method. Dür Andreas et al. (2014) employed the United Nations Economic and Social Commission for Asia and Pacific (UNESCAP) classification method to quantify the depth of FTAs and analyzed issues within production networks.[27] This method categorizes FTAs into six major areas: goods, services, investment, trade facilitation, rules of origin, and others, further subdividing them into 58 sub-items. The scoring is based on

26 Kohl Tristan, Do We Really Know that Trade Agreements Increase Trade? *Review of World Economics*, Vol. 150, No. 3, 2014, pp. 443-469; *Supra* n. 9.

27 *Supra* n. 4, Dür Andreas, Leonardo Baccini and Manfred Elsig (2014).

whether a specific sub-item is included, assigning a score of "1" if present and "0" if absent. Building upon this, further classification is conducted based on the agreement's content, resulting in the creation of the DESTA database, which is increasingly recognized by scholars.

Although there has been significant enrichment in the research on identification of the depth of FTA clauses and their economic effects, it is easy to notice that there is still considerable room for expanding research on the impact of FTA clauses on the level of Chinese enterprises' OFDI. This is especially true regarding the in-depth exploration of the transformation from the scale of OFDI to its effectiveness based on the depth of FTA clauses. There is a need for further development and refinement in both value significance and research feasibility.

IV. MODEL SPECIFICATION AND DATA

A. Model Specification

This paper follows the research approach of Lianxing Yang et al. in constructing a single-country model:[28] developing a binary choice model to investigate the impact of clause depth on the effectiveness of Chinese entreprises' OFDI:

$$Probit(suc_{ijt}=1)=\alpha_0+\alpha_1 HDepth_{cjt}+\alpha_2 X_{jt}+\mu_j+\varepsilon_{ijt} \quad (1)$$

Where i represents the enterprise, j represents the host country, and t represents the year. The dependent variable suc_{ijt} indicates the actual effectiveness of Chinese enterprise i's direct investment in host country j in year t. The core explanatory variable $HDepth_{cjt}$ represents the depth of FTA clauses reached between China and host country j in year t, with details on clause depth classification and calculation methods provided later in the text. X_{jt} includes control variables, specifically the host country's GDP growth rate (*ggdp*), regulatory quality (*WGI*), economic freedom (*economic_fr*), tax rate level (*tax*), resource endowment level (*resource*), technological level (*tech*), and ease of

28 Lianxing Yang, Xiaoguang Liu and Jie Zhang, How Do Bilateral Political Relations Affect OFDI – A Perspective Based on Binary Margins and Investment Success, *China Industrial Economics*, No. 11, 2016, pp. 56-72.

doing business (*edb*). μ_j represents fixed effects at the country level, and ε_{ijt} is the error term.

B. Variable Descriptions and Data Sources

1. Dependent Variable: Effectiveness of Chinese OFDI

The dependent variable, denoted as suc_{ijt}, represents the effectiveness of Chinese enterprise *i*'s outward foreign direct investment in host country *j* at year *t*. This is measured as the probability of success of foreign investment projects. If Chinese enterprise *i* achieves success in its outward foreign investment project in host country *j* at the year of *t*, suc_{ijt} is assigned with a value of 1; otherwise, it is assigned with 0. The enterprise-level data on Chinese outward foreign investment comes from the China Global Investment Tracker (CGIT) project database conducted by the Heritage Foundation, covering data from 2005 to June 2021. The database tracks all large Chinese enterprises engaging in OFDI of $100 million or more and includes detailed information such as name and nature of the investing enterprise, time of investment, host country (region), investment mode, industry distribution, and success or failure of the investment.

2. Core Explanatory Variable: FTA Clause Depth Indicator

This paper draws on the works of Hofmann Claudia et al. (2017) and Zhongyuan Zhang (2019) in constructing the FTA database and measuring FTA depth by calculating the FTA depth indicators for all FTAs China participated in and that were still effective from 2005 to 2015.[29] Data on FTA clause depth comes from the World Bank's Trade Agreements Content database, which covers 279 trade agreements reported to the World Bank between 1958 and 2015. A specific clause receiving explicit mention in the database is assigned a score of 1; otherwise, it is assigned a score of 0. Furthermore, considering legal enforceability, if a clause is explicitly mentioned in the FTA and has a legal

29 Hofmann Claudia, Alberto Osnago and Michele Ruta, Horizontal Depth: A New Database on the Content of Preferential Trade Agreements, *World Bank Policy Research Working Paper*, Vol. 2017, No. 7981; *Supra* n. 5.

binding force, it is assigned a score of 2. If the clause meets the aforementioned conditions but is not included in the dispute settlement procedure, the score is reduced to 1. If it satisfies either not being explicitly mentioned or lacking legal enforceability, the score is 0. The specific assignment criteria are detailed in Table 1. This paper employs an FTA clause depth indicator that considers legal enforceability factors, comprising the "WTO-plus" clause depth indicator (*Acdepth_le*), "WTO-extra" clause depth indicator (*Xdepth_le*), core depth indicator (*Coredepth_le*), border depth indicator (*Borderdepth_le*), and behind-the-border depth indicator (*Behinddepth_le*) as the five core explanatory variables.

Table 1: Assignment Criteria for Legal Terms in Free Trade Agreement Texts

Assignment	Clarity in Legal Terms	Legal Binding Force
0	not explicitly mentioned	not considered
1	explicitly mentioned	not considered
0	not explicitly mentioned	not legally binding
1	explicitly mentioned	legally binding but excluded from dispute resolution procedures
2	explicitly mentioned	legally binding

"WTO-plus" and "WTO-extra" Depth Indicators: The trade agreement content database categorizes all trade agreements into 14 "WTO-plus" clauses and 38 "WTO-extra" clauses (see Table 2). The "WTO-plus" clauses refer to policy content within the current scope of WTO rules and serve as foundational clauses in the current FTA development process. The "WTO-extra" clauses, on the other hand, pertain to policy content authorized beyond the existing scope of WTO rules. This set of clauses constitute a key component that distinguishes FTAs from the WTO framework. In recent years, with the continuous evolution of FTA depth, the "WTO-extra" clauses have become a crucial reflection of FTA levels. The calculation methods for "WTO-plus" depth indicator and

Table 2: Classification of "WTO-plus" and "WTO-extra" Clauses in the Trade Agreement Content Database

WTO-plus Clauses	WTO-extra Clauses		
	(1)	(2)	(3)
Industrial Tariff Reductions	Anti-corruption	Innovation Policies	Anti-money Laundering
Agricultural Tariff Reductions	Competition Policies	Cultural Cooperation	Nuclear Safety
Trade Facilitation	Environmental Laws	Economic Policy Dialogue	Political Dialogue
Export Taxes	Intellectual Property Protection	Education and Training	Public Governance
SPS Measures	Investment Measures	Energy	Regional Cooperation
State-owned Enterprises	Labor Market Regulation	Financial Assistance	Technology Research and Development
TBT Measures	Capital Flows	Health	Small and Medium Enterprises
Anti-dumping Measures	Consumer Protection	Labor Market Regulation	Social Affairs
Countervailing Measures	Data Protection	Illegal Immigration	Statistical Rules
Government Subsidies	Agriculture	Illegal Drugs and Narcotics	Tax Policies
Government Procurement	Legislation	Industrial Cooperation	Terrorism
TRIMS Measures	Audiovisual	Information Society	Visas and Asylum
GATS	Civil Protection	Mining	
TRIPS			

"WTO-extra" depth indicator are as follows:

$$Acdepth_le=\sum_{(c=1)}^{14} WTO_Provisions_c \quad (2)$$

$$Xdepth_le=\sum_{(c=1)}^{38} WTOX_Provisions_c \quad (3)$$

In equations (2) and (3), *WTO_Provisions(c)* and *WTOX_Provisions(c)* represent the scores for all "WTO-plus" clauses (14 in total) and "WTO-extra" clauses (38 in total) in the FTA. The depth of "WTO-plus" clauses and the

depth of "WTO-extra" clauses are represented by the sums of scores for the 14 "WTO-plus" clauses and 38 "WTO-extra" clauses, respectively.

Core Depth Indicator: In the context of FTA clauses, certain clauses hold more significant political and economic implications due to factors such as industry protection and competitive development among member states in the trade agreement. These specific clauses are generally crucial topics, repeatedly negotiated during the negotiation process among FTA members. They always determine whether the FTA can be concluded as well as the operational efficiency of the FTA. For instance, in the initial negotiations of the RCEP, India consistently emphasized the principle of market access, while Japan focused on relevant clauses in the agricultural sector. Consequently, rules related to market access and the agricultural sector became more critical clauses in the RCEP agreement. India eventually opted out of joining the RCEP as the market access rules did not yield the expected results. This paper refers to Damuri Yose Rizal (2012)'s research and considers 18 clauses from the 14 "WTO-plus" and "WTO-extra" clauses, including competition policy, investment measures, capital flow, intellectual property protection, etc., as core clauses in the FTA.[30] Based on this, the core depth indicator (*Coredepth_le*) is calculated. The 18 clauses constitute a critical framework for the effective participation and implementation of the agreement's content by each member. The formula for calculating the core depth indicator is given by $Coredepth_le=\sum_{c=1}^{18} Provisions_c$, where *Clauses_c* represents the scores of the 18 core clauses, and the core depth indicator is the sum of the scores for these 18 core clauses.

Border Depth Indicator and Behind-the-border Depth Indicator: Different clauses of an FTA can be further classified based on whether they apply to the border or behind-the-border measures. Border measures are mainly associated with whether there are restrictions on trade and economic exchanges among FTA members, including access barriers like tariffs and shareholding restrictions. Border measures are key barriers addressed within the WTO

30 Damuri Yose Rizal, 21st century Regionalism and Production Sharing Practice, Graduate Institute of International and Development Studies, 2012.

framework. On the other hand, behind-the-border measures are mainly relative to the concept of border measures and are primarily concerned with market treatment issues. In the context of a decreasing trend in border measures, behind-the-border measures have become the main barriers restricting the development of free trade, thus their impact on investment may differ greatly. With the continuous deepening of FTAs and the constant adjustment of the value chain structure, trade agreements are strengthening clauses related to border measures such as tariffs, anti-dumping and countervailing measures, Agreement on Trade-Related Investment Measures (TRIMS), Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), capital flows, etc. There is a trend toward transitioning to behind-the-border measures regarding state-owned enterprises, government subsidies and procurement, competition policy, investment, intellectual property protection, data flow, etc. The calculation method for the Border Depth indicator and Behind-the-border Depth indicator is similar to the depth indicators mentioned above — the sum of the Border Clause Depth indicator and the Behind-the-border Clause Depth indicator. Due to word limit, the specific classification of border clauses and behind-the-border clauses is not presented here.

3. Control Variables

This study includes seven main control variables, specifically: (i) host country economic development environment, represented by the GDP growth rate of the host country; (ii) host country governance quality, measured using the average values of six sub-indicators from the Worldwide Governance Indicators (WGI) database, including voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule of law, and control of corruption; (iii) host country economic freedom, representing the level of market liberalization, utilizing the Economic Freedom Indicator published by the Wall Street Journal and the Heritage Foundation; (iv) host country corporate tax rate, as the tax rate is a significant balancing factor in the process of overseas corporate investment. This paper uses World Bank data on the ratio

of corporate taxes to commercial profits in a country; (v) host country resource endowment, with the level of resource endowment being a crucial factor influencing corporate investment. World Bank data on the percentage of mineral and metal product exports is used; (vi) host country market technological level, an important consideration for corporate investment, represented by World Bank data on the percentage of technology-related product exports from the host country; (vii) host country market business environment, represented by business environment scores from the World Bank Doing Business database. Descriptive statistics for these variables are provided in Table 3.

Table 3: Descriptive Statistics of Variables

Variable Types	Variables	Sample Size	Mean	Standard Deviation	Minimum Value	Maximum Value
Dependent Variable	OFDI Effectiveness	3882	0.920	0.272	0	1
Key Explanatory Variable	WTO-plus Depth Indicator	3882	3.111	5.955	0	26
	WTO-extra Depth Indicator	3882	0.906	2.968	0	24
	Core Depth Indicator	3882	3.500	6.751	0	28
	Border Depth Indicator	3882	2.844	5.234	0	22
	Behind-the-border Depth Indicator	3882	0.700	2.149	0	12

Note: Due to space limitations, descriptive statistics results for control variables are available upon request.

V. EMPIRICAL RESULTS AND ANALYSIS

A. Baseline Regression Results Analysis

Table 4 presents the impact of FTA depth on the effectiveness of Chinese enterprises' OFDI. Columns (1) to (5) show the analysis results without controlling variables, and columns (6) to (10) show the regression results after

including various control variables. The baseline regression results indicate that, whether or not control variables are included, the "WTO-plus" depth indicator, "WTO-extra" depth indicator, core depth indicator, border depth indicator, and behind-the-border depth indicator all have a significantly positive impact on the effectiveness of Chinese OFDI. This suggests that signing high-level FTAs contributes to the development of outbound investment and accelerates the overall improvement of OFDI effectiveness. It also highlights the practical economic significance of the Chinese government's strategy to rapidly build a high-level network of free trade zones. It is noteworthy that the behind-the-border depth indicator has a more pronounced positive effect on the effectiveness of Chinese OFDI compared to the other four depth indicators. This emphasizes the importance of advocating for the construction of higher-level and deeper FTAs in the new era.

Simultaneously, the "WTO-plus" depth and core depth have a weaker positive impact on the effectiveness of Chinese enterprises' OFDI compared to the other three depth indices. The former one has a weaker impact mainly because when all the members of the trade agreement are WTO member states, the adjustment of WTO's general rules before and after the FTA is very limited or even non-existent, so the impact of the "WTO-plus" depth indicator on enhancing investment effectiveness is relatively limited. The latter one is mainly influenced by the overall development quality of China's FTA partners, as most of the 21 free trade zones China has already established are with developing countries, where the overall economic development level is relatively lower. The overall impact of key clauses related to competition policy, investment measures, capital flows, intellectual property protection, etc. covered by the core depth indicator is restricted. The analysis results of core explanatory variables fully demonstrate that the construction of deep FTAs aligns with China's historical development demands. It is crucial to prioritize the construction of high-level FTAs, especially accelerating the progress of trade agreement negotiations with developed countries or those predominantly led by developed countries.

Table 4: Estimated Impact of Trade Agreement Depth on China's FDI Effectiveness

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
"WTO-plus" Depth	0.0180***					0.0177***				
	(4.0112)					(3.5771)				
"WTO-extra" Depth		0.0272***					0.0270***			
		(4.1915)					(3.7101)			
Core Depth			0.0147***					0.0145***		
			(4.2754)					(3.7376)		
Border Depth				0.0205***					0.0202***	
				(4.396)					(3.8838)	
Behind-the-border Depth					0.0374***					0.0366***
					(3.9395)					(3.3054)
Control Variables	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sample Size	3334	3334	3334	3334	3334	3334	3334	3334	3334	3334
R^2	0.4740	0.4678	0.4639	0.4730	0.4636	0.4851	0.4855	0.4830	0.4854	0.4850

Note: *, **, *** denote significance at 10%, 5%, and 1% respectively, ditto.

B. Robustness Tests and Endogeneity Handling

1. Robustness Tests

According to the baseline regression results, signing an FTA enhances China's FDI effectiveness, and there is a positive relationship between FTA depth and FDI effectiveness. To verify the robustness of the baseline regression results, a series of robustness tests are conducted. On one hand, this study uses the Logit regression method as an alternative to the Probit model for robustness testing, and the regression results are shown in columns (1) to (5) of Table 5. On the other hand, drawing on the methodology proposed by Hofmann et al. (2017) for FTA depth calculation, the total depth indicator of the trade agreement is further computed and subjected to regression analysis, with the results presented in column (6) of Table 5.[31] The robustness test results in Table 5 indicate that,

31 Due to space limitations, the calculation methods are omitted.

under both scenarios of changing regression methods and substituting the core explanatory variable, the depth of trade agreement clauses has a significant positive impact on China's OFDI effectiveness at 1%, consistent with the baseline regression results. Therefore, it is evident that the depth of trade agreement clauses has an impact on China's OFDI effectiveness, and the baseline regression results are robust.

Table 5: Robustness Tests of the Baseline Regression

Variables	(1)	(2)	(3)	(4)	(5)	(6)
	Logit	Logit	Logit	Logit	Logit	Total Depth
"WTO-plus" Depth	0.0303*** (3.5132)					
"WTO-extra" Depth		0.0474*** (3.8053)				
Core Depth			0.0249*** (3.6728)			
Border Depth				0.0347*** (3.8465)		
Behind-the-border Depth					0.0628*** (3.1536)	
Total Depth						0.0110*** (3.7606)
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Sample Size	3334	3334	3334	3334	3334	3334
R^2	0.5855	0.5854	0.5855	0.5856	0.5853	0.5853

2. Endogeneity Handling

The most common method to address endogeneity issues in the study of FTAs is to use the lagged depth of clauses as an instrumental variable. However, in practical analysis, the lagged depth of clauses may introduce issues of serial correlation and may not effectively resolve endogeneity problems. Therefore, following the research approach of Yayun Xu et al. (2020), this paper adopts the means of using the average of core depth indicators of FTAs for all countries

except the focal one as an instrumental variable for testing:[32]

$$HDepth_{cjt}^{iv} = \frac{\sum HDepth_{jt-2}}{N_{jt-2}} \tag{4}$$

In equation (4), $\sum HDepth_{jt-2}$ represents the sum of the depth of clauses in trade agreements reached by all countries except country *j* in year *t*-2. N_{jt-2} represents the amount of countries, excluding country *j*, which entered into trade agreements in year *t*-2. The estimation results obtained using Two-Stage Least Squares (2SLS) are presented in Table 6, and the overall results are consistent with the baseline regression, effectively mitigating endogeneity issues.

Table 6: Test of Endogeneity Issue Resolution Using Instrumental Variables

	(1)	(2)	(3)	(4)	(5)
"WTO-plus" Depth	0.0037*** (4.6685)				
"WTO-extra" Depth		0.0063*** (4.5144)			
Core Depth			0.0031*** (4.8631)		
Border Depth				0.0042*** (4.8931)	
Behind-the-border Depth					0.0089*** (4.7294)
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes
Sample Size	3882	3882	3882	3882	3882

C. Mechanism Analysis

The paper above analyzes the impact of five types of depth in FTA clauses on the effectiveness of China enterprises' OFDI. The conclusion indicates a significant positive correlation between the depth of trade agreement clauses

32 Yayun Xu, Wen Yue and Jian Han, The Impact of High-level Regional Trade Agreements on Value Chain Trade: A Study Based on the Depth of Rule Texts, *International Trade Issues*, No. 12, 2020, pp. 81-99.

and the level of effectiveness in China's OFDI. However, the above research did not clearly elucidate the underlying mechanisms between the depth of clauses and the effectiveness of OFDI. Therefore, based on existing literature and the research approach mentioned above, this paper proposes that achieving a high level of FTA can effectively improve the business environment of member states and thereby enhance the effectiveness of OFDI. The logic is that high-level FTAs cover a more extensive range of measures within the borders and impose stringent rules on the legal enforcement of clauses. Members of the agreement, in order to participate, will inevitably optimize the business environment, gaining advantages in trade and investment attraction. Given this, this paper follows the approach of Lianxing Yang et al. (2016) and constructs the following system of equations:[33]

$$Probit(suc_{ijt}=1)=\alpha_0+\alpha_1 HDepth_{cjt}+\alpha_2 X_{jt}+\mu_j+\varepsilon_{ijt} \quad (1)$$

$$Probit(suc_{ijt}=1)=\beta_0+\beta_1 HDepth_{cjt}+\sum_{k=1}^{k}\theta_k \rho_{jt}^k+\beta_2 X_{jt}+\mu_j+\varepsilon_{ijt} \quad (5)$$

$$\rho_{jt}^k=\gamma_0+\gamma^k HDepth_{cjt}+\omega_j+\mu_{ijt},\ k=1, 2, 3...k \quad (6)$$

In equations (5) and (6), ρ_{jt}^k represents the main control variables, where k denotes the indicator of the impact mechanism equation included in the system of equations (assuming there are k equations in total). The regression coefficient α_1 in equation (1) represents the overall effect on the effectiveness of enterprise investment, while the regression coefficient β_1 in equation (5) represents the direct impact effect on the effectiveness of enterprise investment. Theoretically, there exists a relationship $\bar{\alpha}_1=\beta_1+\sum_{k=1}^{k}\theta_k \rho_{jt}^k$, which means that the impact of the depth of trade agreement clauses on China's OFDI can be divided into two parts — direct effects and indirect effects. θ_k is the regression coefficient of variable ρ_k. In equation (6), γ^k represents the coefficient value of the trade agreement depth in the mechanism analysis. Based on the above model, this paper employs Seemingly Unrelated Regression Estimation and assumes contemporaneous correlation between the effectiveness of China's OFDI and disturbance terms of various impact mechanisms.

From Table 7, it can be observed that the coefficients of "WTO-plus" and

33 *Supra* n. 28.

"WTO-extra" depth indicators, core depth indicator, border depth indicator, and behind-the-border depth indicator are all significantly positive at the 1% confidence level. This fully demonstrates that the five types of depth indicators in trade agreements contribute to improving the host country's business environment. FTAs facilitate the continuous optimization of the host country's business environment, thereby enhancing the effectiveness of Chinese enterprises' OFDI. In the baseline regression results of Table 4, the coefficients of business environment variables are significantly positive, indicating that a positive promotion effect exists between the business environment and the effectiveness of Chinese enterprises' OFDI. Similarly, the coefficients of various depth indicators in Table 7 are also significantly positive, suggesting that FTA clause depth can stimulate the host country to improve its domestic business environment and, in turn, elevate the effectiveness of Chinese enterprises' OFDI in the host country.

Table 7: Mechanism Test (Improving Business Environment)

	(1)	(2)	(3)	(4)	(5)
"WTO-plus" Depth	0.0919*** (2.9659)				
"WTO-extra" Depth		0.1288*** (3.0646)			
Core Depth			0.0777*** (3.0328)		
Border Depth				0.1089*** (2.8653)	
Behind-the-border Depth					0.2072*** (3.166)
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes
Sample Size	3334	3334	3334	3334	3334

D. Heterogeneity Analysis

1. Analysis of Investor Types: Private Enterprises and State-owned Enterprises

In the classification of investors, this paper sets private enterprises as 1 and

others as 0. As indicated by the results in Table 8, the five types of FTA clauses' depths selected in this study exhibit significant positive effects on the FDI performance of state-owned enterprises, while the OFDI performance of private enterprises does not show sensitivity to the clause depth of FTAs. The varying degrees of impact of clause depth in various trade agreements on the OFDI performance of state-owned enterprises are consistent with the overall impact levels observed in the benchmark regression results. Analyzing the reasons, despite private enterprises surpassing state-owned enterprises in both the quantity and amount of outward direct investment in 2015 for the first time, Chinese state-owned enterprises still dominate the major share of direct investments in FTA partner countries. There might be three underlying reasons for this. Firstly, most of the FTA partner countries that China has reached agreements with are developing countries, and certain investment projects may carry deeper political attributes beyond general business cooperation. Therefore, state-owned enterprises are bound to become the main participating entities. Secondly, state-owned enterprises are generally large and medium-sized, possessing overall advantages in risk resistance and sustainability.

Table 8: Distinction between Private and State-owned Enterprises

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Private Enterprises					State-owned Enterprises				
"WTO-plus" Depth	(0.0055) 0.1852					0.0200*** (5.6335)				
"WTO-extra" Depth		–0.0040 (-0.1062)					0.0319*** (5.6590)			
Core Depth			(0.0020) 0.0881					0.0166*** (5.6907)		
Border Depth				(0.0037) 0.1186					0.0225*** (5.5601)	
Behind-the-border Depth					-0.0044 (-0.0827)					0.0452*** (5.6307)
National Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sample Size	566	566	566	566	566	2394	2394	2394	2394	2394
R^2	0.1065	0.1064	0.1064	0.1064	0.1064	0.0953	0.0953	0.0953	0.0953	0.0951

Thus, state-owned enterprises exhibit stronger stability and sustainability in China's overseas investment process. Thirdly, state-owned enterprises play a significant role in China's overseas direct investment in sectors such as energy and infrastructure. Currently, state-owned enterprises have a high proportion of participation in these types of investment projects. In summary, the depth of FTA clauses has a more pronounced impact on the OFDI performance of state-owned enterprises, indicating that signing FTAs can create a more reliable institution, regulation, and public opinion support system for the overseas investment of state-owned enterprises, enhancing their overall confidence and effectiveness in investments in host countries. On the other hand, the impact of FTA clauses on the effectiveness of OFDI for private enterprises is not significant.

2. Whether It Is Greenfield Investment

In terms of the set-up of investment project forms, this paper assumes that greenfield investment is assigned with a value of 1, otherwise 0. The results in Table 9 show that the conclusion of trade agreements has a significant positive effect on non-greenfield investment. Among them, the impact of behind-the-border depth and "WTO-extra" depth on non-greenfield investment is particularly prominent, while signing of trade agreements does not have significant impact on greenfield investment. Greenfield investment can directly drive the economic growth of the host country, promoting employment, output, and social production capacity, which are universally welcomed and actively introduced through various preferential and convenient measures. Therefore, the impact on greenfield investment is relatively weak before and after the conclusion of FTAs. Non-greenfield investment, on the other hand, mainly refers to investment methods such as mergers and acquisitions. These types of investment aim to achieve objectives such as technological absorption and market dominance by controlling local enterprises in the host country. In international competition, such investments are often susceptible to interference and obstacles from the political forces of the host country and third-party influences. The behind-the-border clauses and core clauses in FTAs standardize

and legally frame rules related to market competition, capital flow, and intellectual property protection, showing noticeable differences compared to the pre-FTA scenario. Signing FTAs promotes the extension of more investment facilitation rules into the domestic borders and more critical areas of the host country, exerting a more positive and significant impact on relevant investment activities. The above conclusions also affirm the growing focus on behind-the-border policy content in trade agreement negotiations. There is an increasing emphasis on non-traditional aspects beyond the traditional frameworks of the WTO, including digital trade, free competition, and intellectual property protection. This indicates that China's active promotion of joining higher-level FTAs, such as CPTPP and DEPA, aligns with the demands of developmental interests.

Table 9: Differentiation between Greenfield and Non-greenfield Investment

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Greenfield Investment					Non-greenfield Investment				
"WTO-plus" Depth	(0.0237) 1.2801					0.0169** (2.5361)				
"WTO-extra" Depth		(0.0243) 1.1823					0.0323*** (4.3129)			
Core Depth			(0.0186) 1.2514					0.0140*** (2.6978)		
Border Depth				(0.0269) 1.2890					0.0190*** (2.6301)	
Behind-the-border Depth					(0.0372) 1.1922					0.0391*** (2.8870)
National Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sample Size	359	359	359	359	359	2610	2610	2610	2610	2610
R^2	0.2012	0.1992	0.2009	0.2013	0.1995	0.0842	0.0848	0.0842	0.0842	0.0842

VI. CONCLUSION AND IMPLICATIONS

A. Key Findings

This study, based on CGIT project database, trade agreement content database,

and World Bank database, analyzed the classification and calculation methods of FTA depth, drawing on insights from relevant research approaches. The research delved into the impact of FTA depth on the effectiveness of OFDI and arrived at the following key findings:

Firstly, the depth of "WTO-plus", "WTO-extra", core, border, and behind-the-border clauses in FTAs all exhibit a significant positive effect on the effectiveness of OFDI of Chinese enterprises. The deeper the clauses, the more pronounced the facilitating effect. Particularly, behind-the-border clauses and "WTO-extra" depth exhibit a notably greater influence on investment effectiveness compared to "WTO-plus" core border clauses. This underscores the crucial economic and trade significance of regional trade agreements in extending beyond traditional WTO rules and extending into behind-the-border clauses. Secondly, FTAs contribute to the enhancement of the host country's business environment, thereby elevating the effectiveness of China's OFDI. This, in turn, promotes the high-quality development of China's investment activities with FTA partner countries. Thirdly, FTAs significantly stimulate China's state-owned enterprises in their outward direct investments. This influence is partially attributed to the macroeconomic quality of partner countries with which China establishes FTA relationships. Simultaneously, FTAs exhibit a prominent positive effect on China's overseas non-greenfield investments. This observation correlates with the previously mentioned behind-the-border clauses, "WTO-extra" depth, and the attitude of host countries toward non-greenfield investments. Additionally, the study reveals that political and public opinion factors influence the negative impact of the host country's resource endowment on the ultimate success or failure of OFDI projects. This contradicts with the existing research that suggests a positive role of the host country's resource endowment in attracting Chinese OFDI projects, particularly in the decision-making process of whether to invest or not. Of course, it is essential to note that these two aspects are sequential, with Chinese companies deciding on overseas investments before the success or failure of the OFDI projects is determined. Therefore, there is no inherent conflict between these findings.

B. Policy Implications

The first includes: accelerating the construction of a high-level FTA network, expediting the establishment of larger and more profound FTAs with developed countries, and facilitating the process of Chinese enterprises going global with increased speed and quality. Currently, China's FTA partners are primarily developing countries, and there is still room for further expansion and upgrade of China's FTA network, especially in promoting the construction of high-level trade agreements with developed countries in the America and Europe. On one hand, China should fully leverage the positive effects of existing FTAs such as RCEP and initiatives like the Belt and Road which can create favorable conditions for Chinese enterprises to expand globally, accumulate richer overseas investment experience, and enhance the competitiveness and influence of Chinese enterprises in overseas investment markets. On the other hand, China should expedite the negotiation processes of high-level FTAs such as CPTPP and DEPA, align key and strategic areas with relevant high-level trade agreements, and strive for more international influence.

The second is paying attention to changes in the business environment and the quality of social governance in host countries, providing strong support for China's ODI. Simultaneously, China should strengthen the optimization and governance of the domestic business environment to create favorable conditions for attracting FDI. On one hand, changes in the business environment and social conditions of host countries are crucial factors that influence the effectiveness of China's ODI. Therefore, it is necessary to establish a dynamic monitoring system for the business environment in host countries in order to provide Chinese enterprises with efficient and accurate reports on the investment destination market environment. This will enhance the decision-making capabilities of Chinese enterprises in the process of outward direct investment and improve their risk resilience. On the other hand, it is necessary to actively promote the construction of high-level FTAs such as CPTPP, DEPA, and the China-Japan-Korea FTA, and to accelerate the establishment of higher-level FTAs with developed countries. At the same time, it is necessary to domestically strengthen the construction of the quality of the business

environment, create a high-standard investment environment, and enhance the attractiveness and utilization of international capital.

The third is attaching importance to the content of FTA negotiations related to different types of enterprises and different forms of investment, creating a favorable investment environment and conditions. Particularly, China should focus on clauses related to overseas investments by private enterprises, promoting the internationalization of private enterprises, and emphasize the negotiation of FTA clause content to create a favorable investment environment for the common development and competition of different types of enterprises, and strengthen the expansion of the depth of trade agreement clauses, forming an effective supplement to the traditional framework of the WTO. Simultaneously, it is vital to engage in effective rule construction for strategic and forward-looking areas in the new historical development stage, and actively guide private enterprises to leverage FTAs to explore international markets, enhance international competitiveness, and pay more attention to the development issues of private enterprises in the process of FTA negotiations and upgrades, and actively cultivate the development capabilities and effectiveness of private enterprises in the framework of FTAs.

The fourth is paying attention to political mediation and public opinion guidance in the process of Chinese overseas investment, counteracting negative public opinion, such as "resource plunder" and "neo-colonial investment", that is detrimental to Chinese enterprises going global, and creating a favorable environment for overseas investment. China should strengthen the protection of Chinese enterprises' overseas investments through various means, including diplomatic means and public opinion, and effectively avoid interference with Chinese enterprises' overseas investments from interest groups in the host country and third-party competitive forces, and establish a positive overseas image of joint construction, sharing, and common development, actively promote positive information about Chinese enterprises' overseas investments, and handle issues such as environmental protection, labor employment, and infrastructure construction that are important to and long-term sensationalized by the international community during the overseas investment process. With

practical actions, China should eliminate the resistance generated by the host country's interest groups due to misconceptions about "resource plunder" and enhance the effectiveness of Chinese enterprises' overseas investments.

Overall, this paper analyzed the impact of the level of FTA clause depth on the effectiveness of Chinese enterprises' OFDI by constructing a relatively credible single-country model, yielding valuable conclusions. However, considering that Chinese enterprises' OFDI is influenced not only by economic factors, such as trade and investment agreements, but also by complex factors beyond the economic aspects, such as political, diplomatic, cultural, and international dispute-related factors, the mechanisms through which these factors affect the effectiveness of OFDI require further in-depth researches in the future.