SYNERGY PUBLISHING PTE. LTD.

Macro Management & Public Policies
https://ojs.s-p.sg/index.php/mmpp

ARTICLE

From Yiwu to the Global Market: Leading the Future of Trade with Cross-border Electronic Commerce and Financial Science and Technology Innovation

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ABSTRACT

This essay explores the transformative impact of cross-border e-commerce on international trade, with a focus on China's journey in embracing digital commerce. It highlights the role of Fintech in reshaping consumer behaviors, business strategies, and economic policies. The essay discusses China's resilience and adaptability in leveraging e-commerce during times of crisis, supported by favorable governmental policies and comprehensive pilot zones. It examines the interplay between technological advancements and market forces, particularly the proliferation of FinTech solutions, and their role in democratizing access to international markets for SMEs. The challenges of regulatory frameworks, taxation policies, logistics costs, security concerns, and financing are also addressed, emphasizing the need for collaborative solutions. Overall, the essay concludes that cross-border e-commerce represents a paradigm shift in global trade, providing increased accessibility, efficiency, and inclusivity, while giving insights from China's e-commerce development for other nations in navigating the digital economy's complexities.

Keywords: Fintech; Cross-border e-commerce; China

1. Introduction

The development of e-commerce includes various forms, including cross-border e-commerce, which serves as an extension of e-commerce. Cross-border e-commerce involves business transactions between different countries and regions facilitated by e-commerce platforms and cross-border logistics. This form of e-commerce not only reduces the

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ARTICLE INFO
Received: 20 June 2024 | Revised: 30 June 2024 | Accepted: 5 July 2024 | Published Online: 30 September 2024
DOI: http://doi.org/10.26549/mmpp.v6i3.18379

CITATION
Xu, X.Y., 2024. From Yiwu to the Global Market: Leading the Future of Trade with Cross-border Electronic Commerce and Financial Science and Technology Innovation. Macro Management & Public Policies. 6(3): 6–14. DOI: http://doi.org/10.26549/mmpp.v6i3.18379

distance between manufacturers and foreign consumers but also impacts the value chain, trade markets, production modes, and costs, thereby transforming traditional modes of foreign trade. Its growth breaks down barriers, promotes borderless trade, and influences the global economy. Moreover, cross-border e-commerce allows companies to establish diversified economic and trade relations while achieving resource allocation on a global scale.

Consumers benefit from increased access to information, enabling them to purchase quality products at reasonable prices and enjoy better service. In the context of China, the development of cross-border e-commerce significantly affects the transformation and development of the country's foreign trade [1]. In the historical development of world trade, it's easy to find out that more convenient and faster cross-border trading technology can facilitate the increase of order amount and order quantity to promote trading and economic development. With the development and popularity of internet platforms across the world, the form of cross-border trading is undergoing a transition from traditional foreign commerce to cross-border e-commerce. This paper explores the challenges present in cross-border e-commerce, analyzes its impact on China's trade modes, and proposes the adoption of FinTech strategies to transform foreign trade paradigms.

2. Yiwu's E-commerce

Cross-border E-commerce's total import and export volume increased every year. As traditional foreign trade's growth slows down, Yiwu Cross-border E-commerce grows quickly. The annual volume of e-commerce transactions reached 371.505 billion RMB, marking an 18.9% increase year-over-year, of which the e-commerce domestic trade transactions amounted to RMB 270.148 billion, increasing 19.9% year-on-year; the cross-border e-commerce transactions amounted to RMB 101.357 billion, increasing 16.4% year-on-year.

3. The Development of China's E-commerce

Though nascent in its inception, cross-border e-commerce in China has witnessed exponential growth, catalyzed by strategic governmental initiatives and the burgeoning digital economy. This section delves into the intricate dynamics between cross-border e-commerce and China's economic transformation. It systematically explores how digital trade platforms have not only redefined the competitive landscape for Chinese companies but have also served as a pivotal engine of economic growth and integration into the global market. Through a critical analysis of policy adaptations and technological advancements, this discussion underscores the symbiotic relationship between state-led strategies and private-sector innovation in shaping the trajectory of China's e-commerce evolution.

Since the early 1990s in some important sectors of the national economy with a well-developed information base a series of "gold" projects have been successfully implemented including "Golden Field", "Golden Card" and "Golden Gate" (collectively referred to as the "Three Gold" projects) which opened a new chapter in China's use of e-commerce technology for international trade.

SARS 2003 had a huge impact on Chinese style and production. But at the same time, it also provides an opportunity for the development of e-commerce in our country. While the epidemic has caused inconvenience to people traveling and shopping offline it has also greatly increased the use of online e-commerce in global and local trade. Since then, with the rise of various e-commerce network platforms China's e-commerce has entered a stage of rapid development.

Affected by the global economic crisis the appreciation of the renminbi and the continuous rise in labor costs in 2008, my country's traditional foreign trade has been hit hard and the growth rate of imports and imports has rapidly decreased. Many small and medium-sized foreign trade enterprises were shut down. However due to the advantages of low price and high profit cross-border e-commerce has a good development trend.

Similar to the SARS epidemic the Chinese COVID-19 epidemic in 2019 and 2022 also accelerated the development of global trade based on e-commerce as consumers rely more on online e-commerce to order goods.

At the same time, China continued to issue polices for developing e-commerce. In 2020, the "Silk Road E-commerce" cooperation between China and 22 countries continued to strengthen. The State Council recently approved the establishment of 46 cross-border e-commerce comprehensive pilot zones, and cross-border e-commerce pilot zones have expanded to 105; at present, the cross-border e-commerce pilot zones in many places are continuing to provide favorable policies for cross-border payment, e-commerce platforms, logistics companies and other industrial chains.

The rapid growth of the e-commerce market provides a strong force for the development of China's overall economic situation because the growth rate of the network economy is much higher than the real economy. According to the 2013 China E-commerce Market Data Monitoring Report released by the China E-commerce Research Center, as of the end of 2013, China's e-commerce market transaction scale reached 10.2 trillion yuan, an increase of 29.9% year-on-year. Among them, B2B e-commerce market transactions amounted to 8.2 trillion yuan, up 31.2% year-on-year. The transaction scale of the e-tailing market reached RMB 188.51 billion, up 42.8% year-on-year. The huge volume of e-commerce transactions indicates the broad prospects for the development of e-commerce finance.

4. Comparison between Traditional Foreign Commerce and Cross-border E-commerce

4.1. Difference in Definitions

Helpman [2] discusses the relationship between foreign trade and economic performance and highlights a literature review on economies of scale and product differentiation. The traditional foreign trade refers to the trade between countries. It is an exchange of labor and technology between one country and another.

Vinpin et al. [3] It is mentioned that e-commerce deals with goods and services through electronic media and the Internet. Cross-border e-commerce refers to an international business activity in which trading entities in different countries reach transactions through electronic services online orders payments regional logistics customs and final delivery. The completion of the transaction includes all the processes described above.

This segment offers a nuanced comparison between traditional commerce and e-commerce, highlighting how technological innovation and shifting consumer behaviors have precipitated a paradigm shift in global trade mechanisms. It engages with theoretical frameworks and empirical studies to unpack the complexities of this transition, examining the implications for market structures, supply chain dynamics, and international trade policies. By drawing on case studies and comparative analysis, this discussion illuminates the transformative potential of e-commerce, particularly in terms of accessibility, efficiency, and market diversification, while also considering the challenges and limitations of digital trade ecosystems.

Cross-border e-commerce offers a more dynamic and flexible approach, catering to the demands for speed, efficiency, and convenience. It enables smaller businesses to participate in international markets without the substantial upfront investment traditionally associated with foreign trade. Moreover, it responds to the increasing consumer preference for diverse, accessible, and quickly delivered products. Therefore, while traditional foreign trade remains essential for the movement of large volumes of goods and for transactions requiring intricate negotiations and specialized handling, cross-border e-commerce is increasingly becoming a critical component of global trade, reshaping how businesses and consumers interact across borders. This transition highlights the evolving nature of trade, where digital integration and efficiency are becoming paramount.

4.2. Difference in Transaction Forms

Steve and Leigh [4] proposed how the Internet and e-commerce influence the traditional retailers. The results show that the Internet can reduce the operation cost and promote sales. The transaction form is a key change between the traditional foreign and the cross-border E-commerce trade. Because traditional foreign trade is mainly in the form of wholesale sales, and it is a large-volume transaction, then manufacturers certainly need to ensure that the quality, modeling, and other aspects of the requirements, it will involve customers to communicate with the seller's product quality before confirming this transaction. Before the transaction, sellers also need to show samples to the buyers, in order to let them know the real quality of the products. At the same time, the issue of advanced payment will also be involved, buyers are required to pay sellers a certain amount of payment to confirm ordering the products before buyers' large-volume production, and this payment will not be refunded if you cancel the order halfway. This is because this product is customized according to buyers' needs.

On the other hand, e-commerce is a direct transaction on the platform. It does not need to make samples nor does it need to be customized for customers. Customers can order directly online and delivery will get products to their homes but only for retail products.

4.3. Difference in Fund Flow

In traditional foreign trade, the financial dynamics are markedly different from those in cross-border e-commerce due to the nature and scale of the transactions involved. In the traditional model, transactions are generally large in volume, leading to significant capital being tied up in production and shipping before the seller receives full payment. This creates a financial backlog where the seller must have substantial funds in reserve to produce and ship the goods. The process typically involves the customer paying a portion of the total cost upfront, after approving samples, with the balance paid only upon receipt of the goods. This payment structure can strain the seller's cash flow, as they must front the costs associated with manufacturing and transporting the goods while waiting for the remaining payment.

Conversely, cross-border e-commerce operates on a different financial model, one that is generally more favorable to the seller in terms of cash flow. Transactions in this domain tend to be smaller, enabling a more rapid turnover of products and funds. Customers usually pay the full amount upfront before the goods are shipped. This pre-payment system significantly reduces financial risk and cash flow issues for sellers, as they do not need to cover the initial production and shipping costs while waiting for customer payments. Furthermore, the smaller scale of individual transactions reduces the amount of capital required to initiate orders, allowing sellers to operate with lower reserve funds and improving their liquidity.

Thus, while traditional foreign trade requires significant financial outlay and carries higher financial risk due to the deferred payment structure and large scale of transactions, cross-border e-commerce offers a more streamlined financial model that can alleviate cash flow challenges for sellers. This shift in payment dynamics, from partial and post-delivery payments to full prepayment, illustrates another way in which digital platforms are transforming traditional trade practices, offering more immediate financial returns and lessening the financial burden associated with large inventory and production costs.

4.4. Difference in Time Efficiency

In traditional foreign trade since traditional foreign trade is mainly to ship products by sea or air sellers will spend a lot of time to make samples and transport goods which takes a relatively long time.

Cross-border e-commerce will be relatively fast, if the order is ordered online sellers can ship the products directly without confirming samples. Due to the small transaction quantity, the order can be directly delivered, and it does not need to go through too many transportation procedures. This efficiency in cross-border e-commerce is not just about speed but also reflects a shift towards more agile and responsive global trade practices. By minimizing delays, businesses can better adapt to market trends and consumer demands, leading to enhanced competitiveness and customer satisfaction. Additionally, the streamlined process reduces the environmental impact associated with large-scale shipments and inventory, contributing to more sustainable business practices.

Therefore, while traditional foreign trade remains essential for bulk transactions and certain types of goods cross-border e-commerce provides a complementary and increasingly important model that can meet the speed efficiency and flexibility required by today's global market dynamics.

4.5. Difference in Technologies

The Theory of the Digital Divide postulates that there are differences in people's economic situations and social statuses that increase the difference in people's access to technologies related to gaining information and strengthening communication. Van [5] explained the digital divide theory's motivation and physical process. The digital divide exists for several reasons. One of the main reasons is the widening differences in incomes. A rise in income leads to an increase in the accessibility and usage of technology such as the internet. Poverty and economic barriers cut peoples' access to technology and information. However, this problem cannot be solved merely by transplanting more technology. People need to know how to utilize the information that they get from, say, the internet. It also has requirements on people's education level.

Traditional foreign commerce doesn't require the advancement of technologies. However, cross-border e-commerce needs more advanced and mature technologies because a large number of consumers will order products online. In the context delineated by the Digital Divide theory, economic disparities markedly influence individuals' access to and utilization of information and communication technologies, with poverty constraining access while increased income enhances it. This gap extends into the realm of global commerce, where traditional cross-border trade has historically required less technological innovation compared to modern cross-border e-commerce, which necessitates sophisticated technological frameworks due to the vast numbers of consumers transacting online. Here, financial technology (Fintech) emerges as a crucial facilitator, addressing the challenges posed by the Digital Divide by enabling more secure and convenient online payment methods, simplifying currency exchanges, and offering alternative financing options.

Moreover, Fintech enhances consumer trust through improved security measures and leverages advanced data analytics to provide personalized customer experiences. These innovations not only mitigate barriers associated with traditional payment and financing methods but also foster a more inclusive and efficient global marketplace. Thus, Fintech stands as a significant driver in narrowing the Digital Divide, thereby advancing the development of cross-border e-commerce by ensuring more equitable access to the necessary technological tools and financial services.

5. Trend of Transition from Traditional Commerce to E-commerce

According to the theory of marginal utility marginal utility (the return on consuming additional goods or services) decreases as the quantity of goods or services increases. This diminishing marginal utility affects consumer purchasing decisions and market dynamics especially during the transition from traditional commerce to e-commerce. This shift can be contextualized within a marginal utility framework by considering changes in consumer behavior during market development. In traditional commerce the physical limitations of store-based retailing (such as shelf space storage time and geographic accessibility) limit the variety and quantity of goods available to consumers. This scarcity can maintain or even increase the marginal utility of additional goods because consumers face restrictions on consumption choices. In contrast e-commerce characterized by its virtual storefronts unlimited shelf space and 24/7 availability has fundamentally changed this dynamic. The wide variety of goods and their easy availability online have led to a rapid increase in the number of consumer goods. According to the theory of marginal utility as consumers buy and consume more the additional satisfaction gained by each additional unit purchased decreases. However, the ease of finding and purchasing a variety of goods online is likely to sustain consumer engagement despite the diminishing marginal utility of individual goods. This is because the overall utility derived from the wide range of available goods and services combined with the convenience of online shopping may offset the reduction in the additional unit utility of any single product. In addition, the transition to e-commerce also reflects changes in consumer preferences and utility derived from non-product attributes such as the convenience of shopping at home the ability to easily compare prices and the minimum time invested in purchases.

6. What's Fintech?

FinTech refers to financial technology which combines "finance" and "technology" through information technology innovation. It promotes financial services to promote financial business and reduce the cost of financial services.

This section critically assesses the revolutionary impact of Financial Technology (FinTech) on cross-border e-commerce, with a particular focus on production, payment processes, and supply chain management. It systematically explores the role of FinTech innovations in dismantling traditional barriers to trade, enhancing transactional efficiency, and fostering financial inclusion. Drawing upon a diverse range of academic literature, case studies, and industry reports, this analysis provides a comprehensive overview of FinTech's contribution to the digital economy. It argues that FinTech not only facilitates a more seamless and accessible global trade environment but also heralds a new era of economic democratization, enabling small and medium-sized enterprises (SMEs) to compete on a global stage. Financial technology facilitates smoother transactions, reduces costs, and speeds up the process, making it easier for businesses of all sizes to engage in international commerce. Moreover, the advent of FinTech has revolutionized the data processing associated with logistics, information flows, and capital flows, leading to more streamlined operations and enhanced transparency.

Alt and Pushchman [6] mentioned the bank industry has been more pioneer to exchanges through the Fintech. Particularly noteworthy is the profound impact of FinTech on the cross-border payment industry, especially regarding foreign exchange transactions. Traditional barriers and inefficiencies associated with currency conversion, transfer fees, and processing times are being dismantled. This remodelling of the cross-border foreign exchange business through FinTech innovation not only simplifies transactions but also minimizes costs and enhances security for all parties involved.

As such the rise of fintech represents a significant evolution in the way international trade is being traded promoting a more connected and efficient global marketplace even in the face of geopolitical and economic challenges.

7. E-commerce's problems

7.1. Regulation and Taxation Are Relatively Backward

Cross-border e-commerce deals are completed online. Customs duties and other issues are involved in the delivery process as goods are delivered through cross-border logistics. The role of customs taxation directly affects the development of cross-border e-commerce. Still, producers will raise the prices if levies are high. In this way, compared with other domestic goods, the competitive edge is weakened. In addition, with the in-depth development of e-commerce, the volume of cross-border e-commerce goods is increasing, which has greatly increased customs workload. It's also common for individuals to carry banned particulars through customs, which makes customs work more delicate.

7.2. Logistics Cost of Cross-Border E-Commerce Is High

Compared with the traditional marketable conditioning, e-commerce has the announcement-edges of abundant product kinds, strong selectivity, materiality, and timely delivery. It also indicates that the development of e-commerce is more dependent on the logistics. At present, logistics has become an important part confining the development of e-commerce. Among cross-border e-commerce enterprises, air transportation is frequently named, which has a fairly high cost. It'll charge advanced transportation freights, which will also increase the cost of enterprises. From the perspective of current development, China's logistics system in cross-border e-commerce is still lacking, which affects the healthy development of e-commerce.

7.3. Security Issues

Cross-border e-commerce transactions are basically completed through online banking and other online payment platforms. The development of the Internet itself has certain security threats. Corporate information data and personal information are likely to blurt out in conformation. This is also a problem that needs to be solved in the development of cross-border electronic commerce.

7.4. Export Tax Rebate System's Problem

The export tax rebate system is to compensate for the taxes already paid allowing domestic products to enter cross-border requests without tariff costs. In this way export products can compete with foreign products under the same conditions. As a result, it increases the amount of foreign exchange generated by exports. General cross-border e-commerce to express-based resulting in sellers cannot give customs protestation.

As an important base for the development of cross-border e-commerce, security is on the top priority. Cross-border payment faces higher risks and costs due to differences in checking standards. Different implementation of regulatory policies such as anti-money laundering, anti-terrorist financing, sanction screening, and combating financial crimes have increased the complexity of verifying the legitimacy of cross-border payments. At the same time, compliance checks may also conflict with privacy protection policies. By anti-money laundering and other requirements, payment institutions need to investigate the recipients and payers of transactions, but this may violate the privacy protection laws in some countries. Under the influence of the epidemic, international geopolitical, economic and industry regulatory policies are facing more uncertainty, and the regulatory authorities of various countries have put forward higher requirements for cross-border payment service providers and international card organizations. The calculation is very complicated, and it is necessary to plan strategically and formulate corresponding countermeasures in advance.

For companies engaged in B2B cross-border e-commerce due to the miniaturization and fragmentation of the transaction pattern their risk awareness is relatively weak and their risk exposure to cross-border capital flows has increased. Based on the comprehensive consideration of the cost and benefit of anti-money laundering risk control it is difficult for commercial banks to provide more accurate services.

Cross-border e-commerce transaction scenarios are different from traditional international trade. Firstly, the transaction orders are small and frequent, with the average single order amount between tens and hundreds of dollars; secondly, the main body of the transaction is mainly small and medium-sized enterprises, which have few assets and heavy operations, with high requirements for inventory management; and thirdly, the transaction usually occurs on online e-commerce platforms, with online transactions and payment flows. At the same time, the financing needs of cross-border e-commerce present a short cycle and high frequency, and the traditional bank loan model is often difficult to meet the needs of cross-border scenarios.

It is difficult for cross-border e-commerce merchants to prove the authenticity of their trade background to financial institutions. In the case of information asymmetry banks are willing but not enough and the traditional credit control logic cannot be broken. Requiring firms to provide collateral in exchange for credit has invisibly hindered the financing of SMEs.

Information asymmetry in the financial markets refers to the condition where one party, typically the financial institutions, possesses more or superior information compared to the other party. This disparity places consumers and smaller businesses at a significant disadvantage due to their limited resources, professional capabilities, and lower risk tolerance. Such imbalances often result in less favorable financial outcomes for these less informed parties, particularly in the realms of credit access and investment opportunities.

The issue of information asymmetry is especially pronounced in the context of cross-border e-commerce, where merchants struggle to demonstrate the authenticity of their trade backgrounds to financial institutions. Traditional credit control mechanisms, relying heavily on collateral and established financial histories, fail to accommodate these merchants adequately, primarily due to the lack of transparent and accessible information. Consequently, this exacerbates the financing challenges faced by small and medium-sized enterprises (SMEs), which are often constrained by their inability to provide the required security or prove their creditworthiness.

Regarding the importance of information disclosure regulation there is information asymmetry in the financial market and compared with financial institutions consumers are in a weak position in terms of resources professional capabilities etc. Fintech covers small businesses and relatively low-income groups largely neglected by the traditional financial system with little financial expertise and low risk tolerance.

8. Conclusion

The rapid ascension of cross-border e-commerce has unequivocally transformed the landscape of international trade, marking a significant departure from traditional commerce models. This evolution is emblematic of the broader digital revolution sweeping through global markets, reshaping consumer behaviors, business strategies, and economic policies alike. In the context of China, the burgeoning growth of cross-border e-commerce not only underscores the country's pivotal role in the digital economy but also reflects its strategic embrace of technology to catalyze economic development and international trade.

China's journey through the realms of e-commerce, particularly in the wake of challenges like the SARS and COVID-19 epidemics, illustrates resilience and adaptability, turning crises into springboards for digital innovation and trade transformation. The country's governmental policies, aimed at fostering a conducive environment for e-commerce, have been instrumental in propelling China to the forefront of the global e-commerce stage. These initiatives, coupled with the expansion of comprehensive pilot zones, signal a robust commitment to harnessing digital commerce as a lever for economic growth and international competitiveness.

The transition from traditional commerce to e-commerce, underscored by the diminishing marginal utility in consumer behavior, showcases the dynamic interplay between technological advancements and market forces. The proliferation of FinTech solutions plays a crucial role in this transition, addressing critical challenges related to payments, logistics, security, and financing. FinTech's innovative capabilities not only enhance transactional efficiency and security but also democratize access to international markets for small and medium-sized enterprises (SMEs), thereby leveling the playing field in global trade.

However, the journey is not without its challenges. Regulatory frameworks tax policies logistics costs security concerns and financing barriers are persistent obstacles to the development of cross-border e-commerce. Addressing these issues requires a collaborative approach by governments industry stakeholders and international institutions to develop solutions that are fair sustainable and conducive to the growth of digital trade.

In conclusion, cross-border e-commerce represents a paradigm shift in international trade, characterized by increased accessibility, efficiency, and inclusivity. As this digital commerce ecosystem continues to evolve, it promises not only to redefine the contours of global trade but also to serve as a catalyst for economic innovation, cultural exchange, and sustainable development. The trajectory of China's e-commerce development offers valuable lessons and insights for other nations navigating the complexities of the digital economy, underscoring the importance of adaptability, policy support, and technological innovation in shaping the future of global commerce.

Author Contributions

The authors confirm full responsibility for: study concept and design data collection analysis and interpretation of results and manuscript preparation.

Conflict of Interest

There is no conflict of interest.

Funding

This research received no external funding.

Acknowledgments

Not applicable.

References

[1] Qin Z. and Li S.D. (2002) E-commerce and international trade. Posts and Telecommunications Press Beijing 15.

[2] Helpman E. 1999. foreign trade structure. Journal of Economic Perspectives 13 (2) 144.

[3] Jain V. Malviya B. I.N.D.O. and Arya S.A.T.Y.E.N.D.R.A. 2021. Overview of e-commerce (e-commerce). Journal of Contemporary Business and Government Issues 27 (3) 665-670.

[4] Burt S. and Sparks L. 2003. E-commerce and the retail process: An overview. Journal of Retail and Consumer Services 10(5) pp. 275-286.

[5] Van Dijk J. 2017. Postscript: the current state of digital divide theory. in theorizing the digital divide (pp. 199-206).

[6] Alt R. and Puschmann T. 2012. The rise of customer-oriented banking e-marketplaces has paved the way for changes in the financial industry. Electronic Markets 22 p. 215.