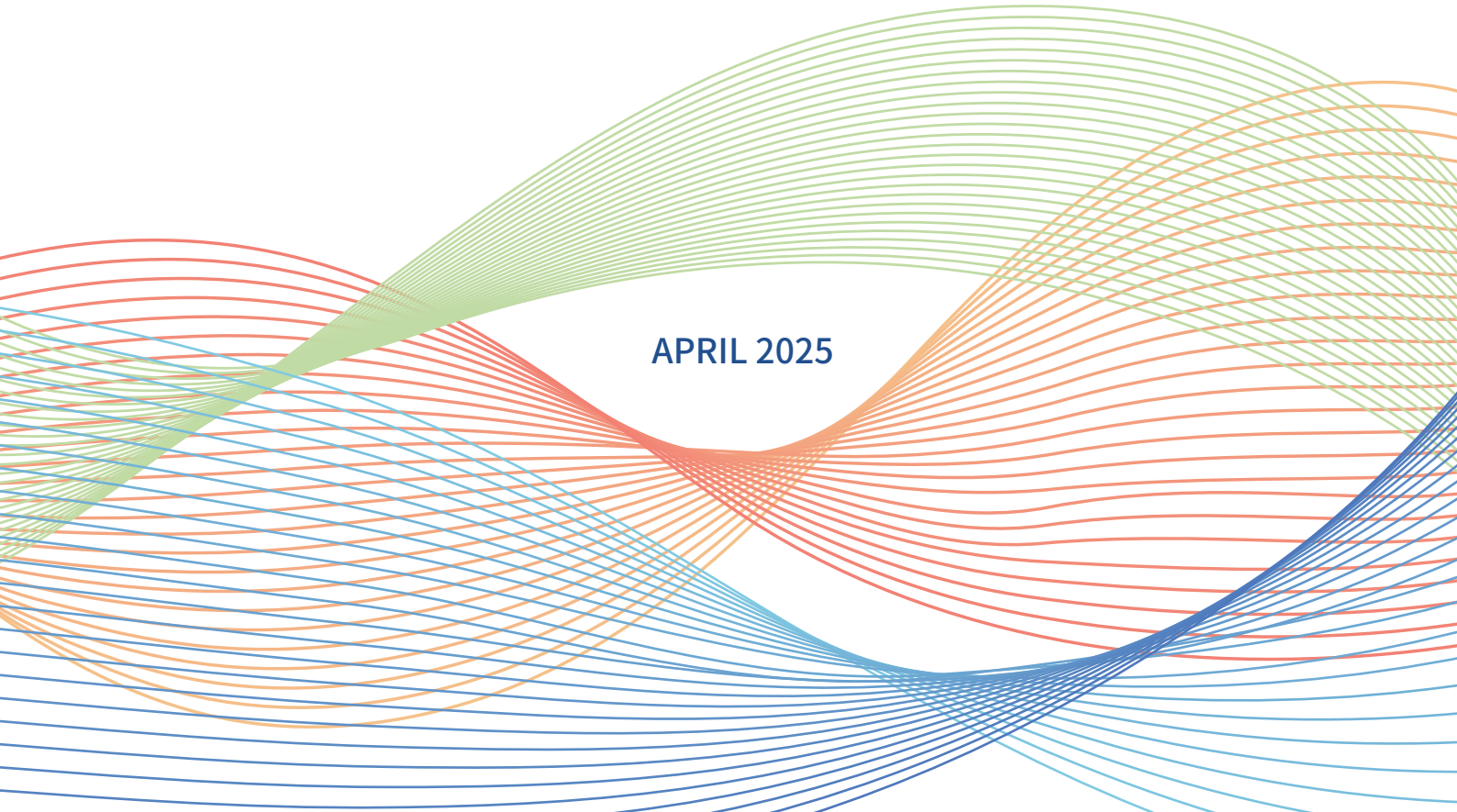
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Outcomes of World Internet Conference Think Tank Cooperation Program

FinTech Empowering the Belt and Road Initiative: A Case Study of Southeast Asia

Institute of International Studies
Fudan University



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FinTech Empowering the Belt and Road Initiative: A Case Study of Southeast Asia

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Executive Summary

As the Belt and Road Initiative (BRI) enters a new phase of high-quality development, financial technology (FinTech) is emerging as a key enabler for deepening regional cooperation and accelerat-ing strategic implementation. This report provides a comprehensive overview of FinTech development along BRI countries—particularly in Southeast Asia—examining market trends, major players, and investment strategies. More importantly, it analyzes the role of FinTech in facilitating the five key pillars of BRI cooperation: policy coordination, infrastructure connectivity, unimpeded trade, finan-cial integration, and people-to-people bonds.

FinTech, the report argues, is injecting fresh dynamism into the BRI by enhancing infrastructure financing efficiency, promoting interoperability in cross-border payment systems, supporting the expansion of cross-border trade and e-commerce, strengthening trust and security in financial trans-actions, and widening the reach of inclusive financial services. At the same time, Chinese companies face a range of emerging challenges, such as regulatory frictions, market fragmentation, intensified local competition, and geopolitical uncertainties. The report concludes with targeted recommendations for governments, enterprises, and financial institutions—emphasizing the importance of local adaptation, cross-border data governance, green FinTech development, and multilateral regulatory collaboration.

Overall, this report aims to offer a strategic framework and roadmap for China's participation in BRI FinTech cooperation, helping to translate domestic experience into actionable regional partner-ships and contributing to the development of an open, inclusive, and sustainable digital economy.

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Introduction

Since its inception in 2013, the Belt and Road Initiative (BRI) has evolved into a pivotal framework for advancing global infrastructure development and economic cooperation. In the context of accelerated globalization and the rise of the digital economy, financial technology (FinTech)—as a foundational pillar of digital transformation—has emerged as a key enabler in translating the BRI from vision to action. The global FinTech market is projected to expand from USD 228.24 billion in 2024 to USD 397.24 billion by 2029, with a compound annual growth rate of 11.72%. Beyond enhancing the efficiency of cross-border payments and investment flows, FinTech also promotes financial inclusion, streamlines supply chain finance, and elevates the overall quality of financial services—thereby contributing to the sustainable development goals of BRI partner countries.

Southeast Asia, as a strategically important region along the economic corridor of BRI, offers fertile ground for FinTech innovation. With over 650 million people and rising internet penetration, the region has rapidly adopted mobile payments, e-commerce platforms, and digital banking solutions. Close economic, trade, and investment ties with China — coupled with regional integration initiatives such as the Regional Comprehensive Economic Partnership (RCEP)—have further accelerated digital connectivity and FinTech policy alignment. Countries such as Indonesia, Thailand, and Vietnam have become primary targets for the globalization of Chinese payment systems like Alipay and WeChat Pay. Meanwhile, the Monetary Authority of Singapore (MAS) and the People's Bank of China (PBOC) have initiated deep cooperation in cross-border payments and digital currencies. Governments across Southeast Asia are actively exploring collaborative models with Chinese FinTech firms to advance their national digital economies.

This report seeks to answer a central question: How can FinTech facilitate the implementation of the BRI? By examining case studies of FinTech deployment across BRI countries—particularly in Southeast Asia—it assesses how digital technologies are enabling investment, infrastructure financing, cross-border trade, and digital economic integration. The analysis also highlights emerging risks and institutional challenges, and offers actionable recommendations to support the BRI's high-quality and resilient advancement.

I. FinTech Development Landscape in the Belt and Road Initiative Partner Economies

(I) Regional Profiles of FinTech Development

As the Belt and Road Initiative (BRI) continues to expand in scale and depth, financial technology has emerged as a strategic engine driving economic growth, trade facilitation, and broader financial inclusion across participating countries. FinTech applications along the BRI corridor are predominantly focused on cross-border payments, supply chain finance, digital banking, AI-powered risk management, and blockchain-based solutions. These innovations have significantly improved financial infrastructure, reduced transaction costs, and expanded access to financial services in regions that previously faced systemic financial constraints.

BRI countries—spanning over 150 economies across Asia, Europe, Africa, and Latin America—exhibit stark differences in FinTech maturity. Regions such as Southeast Asia, South Asia, and the Middle East are witnessing accelerated adoption of digital payments and inclusive financial tools. In contrast, countries in Central Asia and parts of Africa remain in the early stages of FinTech ecosystem development, with ongoing efforts centered on infrastructure building and regulatory experimentation. The following section provides a comparative analysis of FinTech trajectories across different regional clusters within the BRI framework.

1.Southeast Asia: A FinTech Frontier for Mobile Payments and Digital Banking

Southeast Asia has emerged as a strategic frontier for FinTech development under the Belt and Road Initiative (BRI), while also ranking among the fastest-growing FinTech markets globally. According to the *e-Conomy SEA 2023* report by Google, Temasek, and Bain & Company, the region's FinTech market exceeded USD 95.9 billion in value and is projected to reach USD 130 billion by 2025. This growth is fueled by high mobile internet penetration, a large unbanked population, and policy incentives that collectively foster rapid innovation in mobile payments, digital banking, and cross-border financial services.

Mobile payment has become the mainstream financial service across the region. Survey statistics show digital payment accounts for 50% of the total transaction value. It is projected that by 2030, the proportion of cash payments will further decrease to 34%. The widespread use of smartphones provides the foundation for the rise of mobile payment. Local players such as GoPay (Indonesia), GCash (Philippines), and TrueMoney (Thailand) have become main payment tools locally. In addition, Chinese platforms like Alipay and WeChat Pay are actively entering the Southeast Asian market, establishing cooperation with local payment systems to expand the payment ecosystem.

The rise of digital banking marks another significant transformation. Singapore, Indonesia, and Malaysia have rolled out digital banking licenses, encouraging the growth of fully online financial institutions aimed at overcoming physical access barriers. Prominent examples include Grab Financial Digibanks in Singapore and Boost Bank in Malaysia, both of which offer digital savings accounts, online lending, and wealth management services tailored to underserved consumers and SMEs.

Progress has also been made in cross-border payment interoperability. The Monetary Authority of Singapore (MAS) and the Bank of Thailand (BOT) have jointly launched a cross-border payment linkage, allowing users to make real-time payments in local currency via national e-wallet apps. This initiative significantly reduces transaction costs while

enhancing the convenience of regional trade and tourism. Looking ahead, Southeast Asia is expected to pursue further integration of its cross-border payment networks, laying the groundwork for a regional FinTech ecosystem that reinforces digital financial collaboration under the BRI framework.

2.South Asia: Leveraging Digital Lending and Blockchain for Inclusive Finance

South Asia is witnessing a rapid expansion of financial technology, driven by the proliferation of digital payments, mobile banking platforms, and blockchain solutions. Countries like India, Bangladesh, and Pakistan are investing heavily in digital financial infrastructure to extend services to underserved populations, particularly low-income groups and the unbanked. A confluence of policy incentives, surging market demand, and technological innovation has positioned South Asia as one of the world's most dynamic FinTech growth regions.

India has become one of the global leading FinTech markets. According to Boston Consulting Group (BCG) data, the Indian FinTech sector is valued at over USD 100 billion and is projected to sustain strong growth over the next five years. The government-backed Unified Payments Interface (UPI) ranks among the most advanced real-time payment systems globally, enabling seamless interoperability across banks and platforms. Major players such as Google Pay, PhonePe, and Paytm occupy the main share of India's digital payment market, offering financial services to hundreds of millions of users. In addition, the Reserve Bank of India is piloting a central bank digital currency—Digital Rupee —to further enhance the application depth of FinTech in the domestic market.

In Bangladesh, mobile financial services have become integral to the financial landscape. bKash, the country's leading mobile payments platform with over 50 million users, has garnered international attention for its scalable model. Through partnerships with local banks and global payment networks, bKash provides transfers, payments, and digital credit services, significantly advancing financial inclusion. Its success is now viewed as a model for mobile finance replication across the South Asian region.

Pakistan has also taken important steps in adopting blockchain technologies, particularly in digital identity systems and supply chain finance. The Pakistani government is working with Chinese firms to develop blockchain-based financial solutions that enhance transparency and security. The State Bank of Pakistan, for instance, is exploring how blockchain can support digital currency regulation and cross-border payment oversight. These innovations not only bolster digital financial resilience in South Asia but also create new opportunities for cross-border collaboration under the Belt and Road Initiative.

3.Central Asia: Advancing Digital Payments and Financial Infrastructure Modernization

Central Asia has witnessed significant strides in digital finance, with countries such as Kazakhstan, Uzbekistan, and Kyrgyzstan rapidly embracing mobile payments, digital banking, and blockchain technologies as engines of financial transformation. Fueled in part by the Belt and Road Initiative (BRI), collaboration between Chinese FinTech firms and local enterprises is accelerating the region's digital financial infrastructure development.

Mobile payments are emerging as a mainstream transaction method of Central Asia. Despite the region's historically underdeveloped banking systems, improvements in internet access and smartphone penetration have created the conditions for digital leapfrogging. Kazakhstan's Kaspi.kz, for instance, has grown into a dominant FinTech platform offering digital payments, lending, and wealth management services, while expanding its presence across the region. In Uzbekistan, state-backed payment networks like Uzcard and HUMO are

gradually replacing cash transactions and boosting the adoption of mobile payments. Chinese payment platforms—such as Alipay and WeChat Pay—are also entering Central Asian markets, working with local systems to enhance cross-border payment interoperability.

Digital banking and the modernization of FinTech infrastructure are also important directions for financial reform in Central Asian countries. Kazakhstan has vigorously developed the digital banking business. The Kazakhstan National Instant Payment System was launched on February 7, 2019, and within only two years, it accumulated more than 40,000 payment transactions with a total payment amount exceeding 4 billion tenge. Uzbekistan is also promoting the digital transformation of banks, and has issued policy regulations such as the "On measures to develop the digital economy in the Republic of Uzbekistan" "Decision on Approving the Strategy 'Digital Uzbekistan - 2030' and Measures for its Implementation" to support the development of digital banking and online financial services. In addition, blockchain technology is gradually being applied in the financial system of Central Asia. For example, Kyrgyzstan is exploring blockchain-based financial supervision to enhance transaction transparency and security.

Cross-border financial cooperation is another strategic dimension of Central Asia's digital finance agenda. Under the BRI framework, Chinese and Central Asian actors are deepening cooperation in both traditional and emerging FinTech domains. UnionPay has established partnerships with banks in Kazakhstan and Uzbekistan, enabling local users to conduct cross-border transactions throughout the BRI region. Additionally, Chinese blockchain-based cross-border payment solutions are being piloted to streamline trade financing and reduce the costs associated with legacy systems such as SWIFT. As this cooperation expands, Central Asia is poised to play a more integrated role in the emerging FinTech ecosystem shaped by China's digital initiatives under the BRI.

4.The Middle East: FinTech Innovation as a Catalyst for Digital Economic Transformation

The Middle East is rapidly embracing financial technology as a strategic tool for accelerating digital economic development—particularly in countries such as the United Arab Emirates (UAE) and Saudi Arabia. With robust national strategies in place, the region has seen notable advancements in digital payments, blockchain infrastructure, and digital banking. Saudi Arabia's "Vision 2030" and the UAE's FinTech roadmap have laid a strong policy foundation for cultivating a dynamic digital financial ecosystem that fosters innovation, financial inclusion, and regional competitiveness.

The UAE has positioned itself as the region's leading FinTech hub. At the heart of this transformation is the FinTech Hive at the Dubai International Financial Centre (DIFC), which has attracted over 150 global FinTech firms working across sectors such as payments, blockchain, and AI-based risk management. The platform has played a dual role—nurturing domestic startups while also enabling international firms to enter and scale within the Middle Eastern market. Concurrently, the UAE government is implementing regulatory frameworks for digital assets and blockchain technology to enhance systemic transparency and financial integrity.

Saudi Arabia is following a parallel path. Under its Vision 2030 agenda, the Saudi Arabian Monetary Authority (SAMA) has launched a regulatory sandbox to facilitate the controlled testing of FinTech innovations. The initiative enables firms to introduce new products and services in a supervised environment, thereby accelerating market entry and innovation cycles. Saudi Arabia is also piloting a central bank digital currency (CBDC) as part of its

effort to optimize cross-border payments and enhance transactional security.

Cross-border payments have become a strategic priority in the region's FinTech agenda. A landmark agreement between the UAE and India has established a real-time bilateral payment system that reduces settlement costs and increases trade efficiency. This initiative also sets a precedent for broader cross-border financial cooperation under the Belt and Road Initiative (BRI). As Middle Eastern countries continue to advance regulatory reforms and experiment with digital currencies, the region is poised to assume a more influential role in shaping global FinTech trends and fostering digital financial collaboration among BRI economies.

5.Europe: Leading Digital Banking and Regulating the Future of FinTech

Europe stands as a global frontrunner in FinTech development, with numerous countries spearheading advances in digital banking, payment systems, and cryptocurrency regulation. The European Union (EU) has taken a proactive role in crafting a robust regulatory framework for digital finance while fostering innovation in both digital banking and central bank digital currencies (CBDCs) as part of its strategy to enhance competitiveness in the evolving global financial landscape.

Europe's digital banking ecosystem has experienced explosive growth. Leading FinTech firms such as Revolut (UK), N26 (Germany), and Klarna (Sweden) have rapidly expanded their global footprint, offering seamless, borderless digital financial services to both domestic users and emerging markets—including those along the Belt and Road Initiative (BRI) corridor. These firms combine AI-enabled risk management, fully digital operating models, and adaptive payment systems to offer agile financial solutions. Their success not only reflects Europe's domestic FinTech leadership but also introduces new paradigms of digital banking for BRI economies, advancing global financial inclusion through scalable and efficient technologies.

To complement this momentum, the EU has intensified its regulatory initiatives. In 2023, it launched the Markets in Crypto-Assets (MiCA) Regulation—the world's first comprehensive legislative framework governing cryptocurrencies and blockchain assets. MiCA delineates clear rules for token issuance, trading platforms, and custodial wallets, aiming to mitigate systemic risk while safeguarding investors. Beyond its domestic impact, MiCA is poised to shape global digital finance standards and offers a critical reference point for emerging economies—particularly BRI participants—seeking to build their own regulatory ecosystems.

Simultaneously, the European Central Bank (ECB) is progressing with its digital euro initiative to reinforce the EU's position in the digital payments arena. Designed as a complement to cash, the digital euro aims to bolster financial system resilience and enhance transaction efficiency within and beyond the eurozone. The ECB has entered the technical development phase and plans to conduct pilot testing over the coming years. This initiative is not only central to Europe's digital sovereignty but also offers a platform for international cooperation, providing BRI countries with a potential model and partner for developing interoperable digital currency infrastructure and cross-border payment solutions.

6.Africa: Unlocking Financial Inclusion through FinTech Innovation

Despite historically low banking penetration, Africa is rapidly emerging as a frontier for FinTech-driven financial inclusion. With 57% of Sub-Saharan Africa's population remaining unbanked (World Bank, 2023), the rise of mobile payments, blockchain, and digital banking is transforming how underserved communities access financial services. FinTech is not merely bridging infrastructure gaps—it is reshaping the foundations of inclusive finance across the continent.

A flagship example is M-Pesa, the mobile money platform launched by Kenya's telecom giant Safaricom. By enabling millions of users to transfer funds, pay bills, and access credit via mobile phones, M-Pesa has revolutionized financial access. It now serves over 38 million users, with transaction volumes exceeding 50% of Kenya's GDP. The model has been successfully replicated in Tanzania, Uganda, Rwanda, and beyond. M-Pesa exemplifies how low-tech, high-impact innovation can leapfrog traditional banking and offers a valuable model for FinTech engagement under the Belt and Road Initiative (BRI).

In Nigeria, Flutterwave has emerged as a regional FinTech leader, facilitating cross-border B2B payments through its powerful API-based infrastructure. Adopted by numerous multinational firms, Flutterwave connects African SMEs to global financial networks, reducing friction in regional and international trade. Its success underscores both the market appetite for agile payment systems and the potential for partnerships with Chinese FinTech firms aiming to scale in Africa.

Blockchain innovation is also accelerating. Nigeria's pilot of the eNaira—a central bank digital currency—represents a bold move to enhance transaction transparency and provide secure digital payment alternatives for the unbanked. As more African nations explore digital currency frameworks, opportunities will grow for collaborative governance, infrastructure sharing, and policy coordination with BRI economies.

With mobile payments, digital banks, and blockchain applications expanding across the continent, Africa's financial inclusion landscape is poised for deep transformation—unlocking new potential for equitable development and strengthening digital financial cooperation under the BRI umbrella.

7.Latin America: A Flourishing FinTech Frontier

Latin America has rapidly emerged as one of the world's most dynamic FinTech markets, fueled by widespread smartphone adoption, booming e-commerce, and persistent gaps in traditional banking services. According to research the region's FinTech market has surpassed USD 66 billion in value and is projected by Virtue Market Research to grow to around USD 102 billion through 2030. Brazil, Mexico, and Argentina are leading this transformation. Brazil's Nubank, now one of the world's largest digital banks, boasts a user base of over 70 million. In parallel, Konfio in Mexico and Ualá in Argentina have gained traction in digital payments, consumer lending, and SME finance—offering accessible alternatives to underserved populations long excluded from the formal banking system.

Cross-border payments and digital banking are at the core of Latin America's FinTech momentum, but blockchain and cryptocurrency applications are also deeply embedded in the region's financial landscape. Amid widespread currency volatility, individuals and businesses are increasingly turning to stablecoins like USDT and USDC for payments and asset preservation. Central banks in countries such as Argentina and Brazil are also piloting central bank digital currencies (CBDCs) to bolster monetary stability and promote trust in digital financial systems.

China's tech firms are taking notice and have entered the Latin American market through strategic partnerships with local FinTech players—driving the adoption of mobile payments and digital credit solutions. These engagements not only expand China's digital influence but also align with broader Belt and Road Initiative (BRI) goals by fostering deeper digital economic cooperation with Latin American economies.

(II) The Global FinTech Competitive Landscape

The global FinTech ecosystem is increasingly defined by strategic competition among leading firms, each leveraging technological innovation, regulatory environments, and cross-regional expansion

strategies. Dominant players can be broadly grouped into three categories: Chinese technology giants, Western (primarily US and EU-based) firms, and emerging FinTech companies in Belt and Road Initiative (BRI) partner economies. These actors not only compete in areas such as cross-border payments, digital banking, supply chain finance, and AI-driven risk assessment but also collaborate to capture shared market opportunities.

1.Chinese FinTech Enterprises: Expanding the Reach of Digital Finance

China's FinTech companies have significantly scaled their presence in BRI economies, capitalizing on their comparative advantages in mobile payments, blockchain innovation, and AI-powered financial infrastructure.

- Ant Group (Alipay, AntChain):
  Alipay has expanded its overseas market, now covering more than 200 countries and regions, supporting settlements in 40 currencies for over 10 million offshore merchants. It has expanded its business territory through cross-border partnerships, such as collaborations with local payment platforms including Indonesia's DANA, the Philippines' Gcash, and Malaysia's TNG Digital, promoting seamless cross-border payments. Ant International has launched the WorldFirst cross-border payment and fund management platform to support Chinese small and medium-sized merchants in developing cross-border trade, currently serving over 1 million merchants, connecting to more than 120 global e-commerce platforms, and covering more than 70 countries and regions. Its blockchain technology, AntChain, has been applied to cross-border trade financing, enhancing supply chain transparency and financial security in countries along the Belt and Road Initiative.

- Tencent Financial Technology (WeChat Pay):
  Tencent's WeChat Pay is expanding overseas markets through a social payment model, with WeChat cross-border payment now covering 74 countries and regions, supporting settlements in 31 currencies for over 6 million overseas merchants. Combining fintech capabilities, it is building a digitalized cross-border payment network using the "1+1+1" model that connects the WeChat ecosystem, global payment partners, and overseas lifestyle service platforms to enhance cross-border consumption, remittance, and trade experiences. Through strategic investments in Southeast Asian payment companies such as GoPay and Shopee, it has expanded WeChat Pay's international influence.

- JD Technology:
  JD Technology focuses on digital supply chain finance, providing AI-based credit scoring and intelligent risk control tools to SMEs in BRI countries. In 2023, JD's FinTech division formed partnerships with financial institutions and corporate clients in the Middle East and Africa to deliver advanced analytics and financial inclusion solutions.

2.Western FinTech Giants: Maintaining Global Dominance Through Scale and Network Advantages

FinTech enterprises from Europe and North America continue to exert global influence by capitalizing on robust financial backing, mature infrastructure, and technological leadership. Their dominance is particularly evident in cross-border payments and B2B financial services—sectors that remain foundational to global digital finance.

- Visa and Mastercard
  As the world's leading payment network operators, Visa and Mastercard jointly command over 50% of the global credit card market. They are increasingly investing in interoperability across emerging markets. Moreover, Visa, together with Southeast Asia's leading FinTech platform Fiuu and Southeast Asia's digital asset infrastructure provider StraitsX, has achieved a

three-dimensional penetration of the Southeast Asian digital financial market.

- PayPal and Stripe
  PayPal remains a dominant player in online payments, holding approximately 15.4% of the global market in 2023. Stripe, by contrast, has positioned itself as a key enabler of cross-border e-commerce, providing scalable payment solutions that attract merchants from across Belt and Road economies—particularly in fast-growing markets such as the Middle East and Southeast Asia.

- Revolut and N26
  European neobanks such as Revolut and N26 are redefining international digital banking. Revolut's multi-currency accounts support frictionless financial activity for users in BRI countries by facilitating low-cost, cross-border transactions. While N26 focuses largely on Europe, it has begun expanding into Southeast Asia, promoting "borderless banking" to optimize global user experiences and enhance international financial integration.

3.Local FinTech Enterprises: The Strategic Rise of Regional Champions

Across Belt and Road Initiative (BRI) countries, domestic FinTech firms are rapidly gaining ground. These emerging players are not only competing with Chinese and Western giants but also collaborating with them—reshaping the dynamics of regional financial ecosystems.

- Southeast Asia
  - Grab Financial: With a 2023 valuation over USD 20 billion, Grab Financial offers an integrated suite of payments, lending, and investment services, positioning itself as a regional competitor to Alipay and WeChat Pay.
  - Gojek Pay (Indonesia): Among the country's largest mobile payment providers, Gojek has forged strategic partnerships with Chinese FinTech leaders like Tencent.
  - Sea Money (ShopeePay): As the payment arm of Shopee, it has become Southeast Asia's largest e-commerce payments platform, boasting over 60 million active users.

- Middle East
  - Tabby (UAE): A fast-growing BNPL platform, Tabby has established partnerships with Visa, signaling its cross-border ambitions.
  - STC Pay (Saudi Arabia): Launched by the Saudi Telecom Company, this digital wallet has integrated with global networks including Visa, expanding regional payment connectivity.

- Africa
  - M-Pesa (Kenya): The globally leading mobile payment platform, M-Pesa commands market shares of 94.9% in Kenya and 37.12% in Tanzania and is gradually expanding into the Middle East.
  - Flutterwave (Nigeria): Specializing in B2B payments, Flutterwave raised USD 250 million in 2023 and now operates across multiple African markets.
  - Paga (Nigeria): Serving more than 10 million users, Paga is building critical digital infrastructure to expand financial inclusion.
  - Paystack (South Africa): Focused on serving SMEs, Paystack was acquired by Stripe and is poised for further regional and global expansion.

Taken together, global FinTech competition is increasingly shaped by a triadic structure: Chinese enterprises, Western incumbents, and agile local innovators. Chinese firms, supported by the BRI, are embedding themselves in emerging markets through

infrastructure development and strategic alliances. Western players continue to dominate high-trust sectors such as cross-border payments and B2B finance, leveraging brand power and regulatory reach. Meanwhile, local FinTechs are rising rapidly with contextualized products and user-centric models, serving as both challengers and collaborators in the evolving global FinTech landscape.

As this tripolar structure matures, the global FinTech race will likely intensify in areas such as technological innovation, regulatory interoperability, and inclusive finance. For BRI economies, this ecosystem offers not just competitive services—but also the promise of digital financial empowerment and long-term development.

(III) Chinese FinTech's Engagement with Belt and Road Economies

1.Strategic Globalization and Localization Approaches

Chinese FinTech enterprises are pursuing multifaceted globalization strategies across Belt and Road Initiative (BRI) economies, employing a mix of direct investment, technological transfer, and market adaptation. Given the wide variation in regulatory environments, economic maturity, and consumer behavior across partner countries, these firms have adopted nuanced localization strategies to enhance user engagement and market penetration.

Regarding market entry, Chinese firms often acquire or invest in local FinTech players to quickly gain market share and existing user base. For example, Ant Group's strategic investment in India's largest mobile payment platform Paytm exemplifies this approach, supporting the firm's rise as a leading FinTech company in South Asia while offering technological and risk management capabilities. In addition, Chinese companies also actively establish strategic partnerships with local financial institutions, such as WeChat Pay cooperating with Thailand's Bangkok Bank and Malaysia's PayNet to promote the application of WeChat Pay in these countries; while Alipay's collaboration with the Philippines' GCash facilitates both cross-border transactions and e-wallet adoption. At the same time, some Chinese FinTech companies choose to build their own brands and directly expand into overseas markets. For example, Alibaba's Lazada Pay focuses on the Southeast Asian e-commerce payment scenario, while JD Technology launched digital financial services in the Southeast Asian market, with supply chain finance and credit payment as the core, supporting the development of regional e-commerce and logistics companies.

Localization lies at the heart of China's FinTech globalization. In Southeast Asia, where smartphone adoption is high and a large population has not enjoyed traditional banking services, mobile payment has become the most important FinTech application scenario. For example, in the Middle East, to respect Islamic law (Sharia) principles, Chinese FinTech firms have adjusted the design of credit products and partnered with local banks to launch digital credit services that comply with Islamic financial compliance requirements, avoiding interest calculation issues to ensure product approval by local regulators. In addition, in Africa, where most of the population lacks traditional bank accounts, Chinese companies invest in mobile wallet and microloan platforms. Huawei's support for Kenya's M-Pesa is one such example, as it delivers low-cost digital financial services and promotes the popularity of mobile payment.

In sum, China's FinTech expansion across BRI economies reflects a sophisticated interplay of strategic investment and cultural adaptability. These dual strategies not only enable effective market integration but also reinforce China's role as a driver of digital financial inclusion under the broader BRI framework.

2.Investment and Multilayered Collaboration Models

Chinese FinTech firms are advancing their internationalization through a mix of direct investments, joint ventures, and multi-level partnerships across Belt and Road Initiative (BRI) economies. These models—tailored to varying national contexts—have accelerated infrastructure deployment while enhancing both the global footprint of Chinese firms and the maturity of local digital financial ecosystems.

Direct Investments: Strategic Capital and Accelerated Market Entry

Equity stakes and acquisitions remain core to China's FinTech expansion. For example, Ant Group's investment in India's Paytm in 2015 provided the company with rapid scale-up capabilities, complemented by Alipay's technological and risk management expertise. In the third quarter of 2024, Paytm reached 100 million monthly active users, cementing its role as a regional digital payments leader. Likewise, Tencent and Alibaba's investment in Indonesia's Gojek catalyzed the growth of GoPay, now a key pillar of Southeast Asia's mobile payments ecosystem.

Strategic Alliances: Localization Through Embedded Collaboration

Chinese firms increasingly rely on partnerships with local financial institutions, banks, and FinTech companies to foster technology integration and market adaptability. For example, Alipay's partnership with Siam Commercial Bank (SCB), one of Thailand's largest commercial banks, jointly promotes SCB EASY PAY, supporting the application of the Alipay model in Thailand. As Thailand is a significant tourist destination for Chinese travelers, this collaboration not only enhances the payment experience for tourists but also boosts the acceptance of digital payments among local Thai merchants. Meanwhile, Ant Group's collaboration with TNG Digital in Malaysia promotes the interconnection of e-wallets, enabling Alipay users to directly use the local Touch 'n Go e-payment system in Malaysia, thereby improving the convenience of cross-border payments.

Layered Cooperation: G2G, B2B, and PPP Frameworks

China's FinTech outreach is increasingly structured across three interrelated cooperation models:

- G2G (Government-to-Government): China has pioneered cross-border CBDC experimentation through initiatives such as the mBridge pilot, launched with the UAE, Thailand, and Hong Kong. Utilizing blockchain technology, mBridge enables multi-jurisdictional digital currency settlements, reducing reliance on SWIFT and improving transaction efficiency.
- B2B (Business-to-Business): Platforms like Alipay and WeChat Pay have formed extensive networks with regional banks (e.g., Thailand's Kasikornbank), enabling QR payments and cross-border e-commerce support across 100+ markets. Their integrated solutions are expanding financial access for both merchants and travelers.
- PPP (Public-Private Partnerships): Chinese financial institutions cooperate with international organizations and local governments to provide FinTech support for countries along the "Belt and Road" initiative. For example, the World Bank and Bank of China jointly launched the "Belt and Road" FinTech project to help emerging market countries improve their financial infrastructure and provide inclusive financial services to micro and small enterprises and low-income groups. In addition, the governments of Southeast Asian countries are also actively attracting foreign-funded FinTech companies. For example, the Indonesian government signed a memorandum on strengthening investment cooperation in the digital economy field with China to encourage Chinese companies, including Alipay and WeChat Pay, to invest in FinTech infrastructure,

promoting the development of the local digital economy.

By orchestrating G2G, B2B, and PPP engagement strategies, Chinese FinTech companies are not only embedding themselves in local financial systems but also accelerating the evolution of digital financial ecosystems across the BRI corridor. These models are shaping a more interconnected, efficient, and inclusive global FinTech architecture.

3.Market-Driven Regional Strategies

Chinese FinTech enterprises are strategically deploying operations across major Belt and Road Initiative regions—namely Southeast Asia, South Asia, the Middle East and Africa, and Europe. Each region's unique regulatory landscape, technological readiness, and user preferences have shaped highly localized market entry approaches and innovation priorities.

In the Southeast Asian market, Chinese FinTech firms mainly cooperate with local banks and payment platforms to deepen the electronic payment ecosystem. For example, Alipay and Ant Group cooperate with local financial institutions such as Malaysia's CIMB Bank to promote the popularity of their mobile payment services in Southeast Asia. In terms of supply chain finance, JD Technology launched digital supply chain financing services in Southeast Asia to provide more efficient capital flow support for SMEs, helping to boost the growth of cross-border trade within the region.

In South Asia, Chinese investments are concentrated in digital payments and e-commerce, with a strong emphasis on enabling financial inclusion through digital credit services. Ant Group's early investment in India's Paytm has helped scale the platform into one of the region's dominant FinTech players, serving over 350 million users by 2019. Tencent's backing of Flipkart, India's largest online marketplace, has supported its evolution into a key node in South Asia's emerging digital economy.

In Central Asian markets, Chinese FinTech enterprises have strategically concentrated on three key areas: cross-border payment systems, supply chain finance solutions, and localized digital transformation initiatives. Alipay has formed a strategic partnership with Kazakhstan's Kaspi Bank to implement cross-border QR code payment capabilities between China and Kazakhstan, significantly facilitating commercial transactions for tourists and Chinese-invested enterprises operating in the region. Since establishing its representative office in Uzbekistan in 2004, ZTE has cultivated robust cooperative relationships with local institutions, including Uzbektelecom, contributing substantially to the development of digital infrastructure and digital transformation processes throughout the region. Furthermore, within the China-Kazakhstan Khorgos Special Economic Zone, Chinese enterprises have been actively engaged in developing cross-border financial data corridors, enhancing the digital circulation of financial resources across the region.

In Middle Eastern markets, Chinese financial technology enterprises have strategically concentrated on developing cross-border settlement systems, digital currency partnerships, and digital payment infrastructure. The United Arab Emirates and Saudi Arabia have recently implemented progressive policies aimed at establishing digital financial hubs, intensifying financial cooperation with China within the framework of the Belt and Road Initiative. The Bank of China initiated a collaborative pilot project with the Central Bank of the UAE to develop a cross-border payment system utilizing the Multiple Central Bank Digital Currency Bridge (mBridge), exploring programmable settlement mechanisms between the digital renminbi and the dirham. These strategic partnerships have simultaneously strengthened the position of Chinese enterprises within the Middle Eastern fintech ecosystem and accelerated the adoption of the renminbi as a settlement currency in regional trade transactions.

In Europe, Chinese FinTech enterprises are pursuing deeper financial integration through blockchain partnerships and cross-border digital banking. Institutions in the UK and Germany are increasingly engaging with Chinese firms in areas like clearing, tokenization, and digital currency interoperability. London, as a global finance hub, has become a gateway for Alipay and WeChat Pay, which are gradually embedding themselves in Europe's consumer payment landscape. The EU's push for regulatory clarity—via the MiCA regulation and the digital euro—is also creating new avenues for Sino-European collaboration in digital infrastructure development.

In African markets, Chinese financial technology enterprises are advancing financial inclusion through strategic infrastructure development and technology transfer initiatives. Huawei has established a partnership with M-Pesa, Kenya's dominant mobile payment platform, to deliver enhanced stability and security in digital payment infrastructure throughout East Africa. Given the limited penetration of traditional banking services across the African continent, mobile financial platforms like M-Pesa represent critical vehicles for expanding financial inclusiveness, with Chinese technological expertise accelerating the proliferation of these alternative financial models. Within the Belt and Road Initiative framework, the Forum on China-Africa Cooperation has prioritized digital financial inclusion as a key strategic objective. Currently, numerous African nations are expediting the digitalization of their domestic currencies, while Chinese enterprises are intensifying their engagement in digital wallet systems, security chip technologies, and cross-border settlement mechanisms, providing sustained impetus for the development of Africa's digital financial ecosystem.

In Latin American markets, Chinese enterprises have adopted a dual strategy emphasizing both technology exportation and strategic investment, expanding their payment and digital credit operations through comprehensive partnerships with local fintech platforms. In 2018, Alipay established a collaborative relationship with Mexico's Openpay to implement digital transaction systems, successfully attracting over 17,500 merchants within a single month of operation. Furthermore, in 2019, Tencent led a significant investment round in Ualá, an Argentine fintech company, transferring its expertise in WeChat Pay ecosystem development, microlending expansion, and credit establishment practices to the Argentine market. These developments clearly indicate that financial technology is emerging as a crucial new domain in Sino-Latin American digital cooperation.

In conclusion, China's FinTech expansion across BRI markets reflects a nuanced, multi-regional deployment strategy that adapts to diverse local conditions. Whether through payments, lending, blockchain, or infrastructure partnerships, Chinese firms are increasingly shaping the architecture of digital finance in emerging and advanced economies alike—positioning themselves as pivotal actors in the future of global financial connectivity.

II. Harnessing FinTech to Advance the Belt and Road Initiative

This section explores how financial technology serves as a strategic enabler in realizing the five core pillars of the Belt and Road Initiative (BRI): policy coordination, infrastructure connectivity, unimpeded trade, financial integration, and people-to-people bonds. By examining each dimension, the analysis reveals how FinTech tools—including blockchain, AI, mobile payments, and digital lending—can strengthen regional interdependence and institutional alignment under the BRI framework.

(I) How FinTech Enhances "Policy Coordination"

Policy coordination is a foundational pillar of the Belt and Road Initiative (BRI), designed to foster mutual trust and institutional alignment among participating nations. In the digital finance domain, this entails harmonizing regulatory frameworks, standardizing technical protocols, and reducing cross-border compliance frictions. Recent advances in CBDCs, regulatory blockchain tools, and AI-powered policy analytics have opened new avenues for digital financial governance. China, in collaboration with ASEAN and other regional partners, is actively shaping an interconnected and secure BRI financial architecture through multilateral policy cooperation.

1.Digital Financial Policy Alignment

Central bank digital currencies (CBDCs) have emerged as a pivotal mechanism for fostering policy coordination under the BRI. China's central bank, together with its counterparts in the UAE, Thailand, and Hong Kong, launched the mBridge pilot, leveraging blockchain to test real-time cross-border CBDC settlements. With transaction volumes already reaching several million USD, mBridge offers a blueprint for decentralized, high-efficiency payment infrastructures within the BRI. Parallel to this, China and the Monetary Authority of Singapore (MAS) have initiated cooperation between China's digital renminbi(e-CNY) and Singapore's blockchain-based payment network(Project Ubin), seeking seamless interoperability in digital currency transactions. These bilateral and multilateral frameworks represent early moves toward regional CBDC mutual recognition, accelerating financial integration across Asia.

In addition to digital currencies, the growing importance of data sovereignty is reshaping digital financial policy discourse in Southeast Asia. Countries such as Indonesia, through legislation like the 2022 Data Protection Law (PDPA), now require cross-border payment companies to ensure "adequate and binding personal data protection". This necessitates that Chinese enterprises comply with the data regulatory frameworks of various countries when deploying FinTech business in Southeast Asia, which poses higher requirements for policy coordination. To solve the problem of cross-border data compliance, China and ASEAN are advancing a regional framework for cross-border data governance that aims to balance financial data security with the convenience of cross-border business.

2.Financial Regulation Harmonization

One of the key challenges facing financial integration under the Belt and Road Initiative (BRI) is the divergence of regulatory systems among participating countries. In response, China is deepening cooperation with ASEAN partners to promote the standardization of FinTech regulation, particularly in critical areas such as Anti-Money Laundering (AML) and Know Your Customer (KYC) compliance.

The system is based on smart contract technology, making it easier for countries along the Belt and Road to mutually recognize the customer identities of financial institutions, thereby reducing the risk of financial fraud and money laundering. For example, the UAE Financial Intelligence Unit and the China Anti-Money Laundering Monitoring and Analysis Center are also strengthening cooperation, to track large cross-border payments and performing compliance reviews. These efforts can improve the financial governance capabilities of the Belt and Road initiative and provided a reference for regulatory cooperation among multiple central banks. China has also signed a memorandum of understanding on cooperation in the exchange of financial intelligence on anti-money laundering and counter-terrorist financing with Thailand to further deepen cooperation with Southeast Asian countries in the field of AML and counter-terrorism financing.

3.Regional Financial Governance Framework

FinTech is playing an increasingly important role in the governance systems of countries along the "Belt and Road" initiative, particularly in financial cooperation coordination mechanisms and policy risk management. In recent years, the China ASEAN FinTech Cooperation Plan has promoted payment connectivity between ASEAN countries, facilitating the integration of regional financial systems. In 2025, UnionPay and National ITMX, the operator of Thailand's national e-payment system PromptPay, signed a QR code cross-border interconnection cooperation agreement. This cooperation model not only reduced cross-border payment costs but also enhanced financial connectivity within Southeast Asian countries under the Belt and Road framework. Policy risk assessment is an important part of Belt and Road investment. In recent years, AI and big data analysis technologies have been widely used for policy environment monitoring in countries along the route. In 2024, JD Technology took the lead in exploring the Intelligent Total-Care Platform (AI-TAMP) model and launched an intelligent investment and financing assessment system. Through AI algorithms, it predicts potential policy risks in infrastructure investment in Southeast Asian countries, helping Chinese enterprises optimize investment decisions. In the same year, Ant Group promoted full-link security and risk control products and services such as identity security, business security, industrial risk control, and compliance security in countries along the Belt and Road initiative, combining big data analysis of the credit environment, financial stability, and regulatory compliance of various countries, improving the level of intelligence in Belt and Road financial governance. The application of these technologies enables countries along the Belt and Road initiative to more accurately assess financial policy risks and improve investment sustainability.

(II) How FinTech Supports "Infrastructure Connectivity"

Infrastructure interconnection lies at the heart of the Belt and Road Initiative (BRI). In the age of digital globalization, financial infrastructure—spanning cross-border payments, trade finance, and digital currencies—has become a critical enabler of economic integration. Emerging FinTech tools such as blockchain, central bank digital currencies (CBDCs) like the digital renminbi, and smart contracts are revolutionizing the way infrastructure projects are financed, monitored, and executed.

1.Blockchain-Driven Supply Chain Finance: Unlocking Capital for BRI Infrastructure Projects

Despite robust demand for infrastructure investment across BRI regions, projects are often hindered by long time horizons and elevated financial risk profiles. FinTech offers a strategic solution: by leveraging blockchain's tamper-proof ledgers and smart contract automation, stakeholders can achieve unprecedented levels of transparency and efficiency in capital deployment. These tools mitigate default risk, reduce transaction friction, and increase the

traceability of fund flows—thereby enhancing trust in complex, multi-party infrastructure financing.

In recent years, Chinese FinTech companies have actively deployed blockchain-driven supply chain finance solutions to optimize infrastructure financing along the Belt and Road initiative. For example, in 2022, China Construction Bank (CCB) launched the "Cross-Border Wing Payment" product, providing blockchain-driven supply chain finance services for countries along the Belt and Road initiative. This system uses smart contracts to automate the financing process, making the flow of funds between different participants more secure and convenient. In addition, the Hong Kong Monetary Authority (HKMA) and the Bank of Thailand (BoT) jointly conducted a blockchain cross-border payment pilot under the Belt and Road framework, exploring how to use Distributed Ledger Technology (DLT) to improve the efficiency of cross-border trade finance.

2.Deploying the Digital Renminbi in Cross-Border Infrastructure Financing

As digital currencies gain traction globally, e-CNY is emerging as a strategic instrument in the financing and settlement of Belt and Road Initiative infrastructure projects. In contrast to traditional cross-border payment systems, the e-CNY offers lower transaction costs, greater operational efficiency, and insulation from foreign exchange volatility, especially from the U.S. dollar. These attributes make it well-suited to address the financial complexity of large-scale international development projects.

China formalized digital currency cooperation agreements with the United Arab Emirates and Saudi Arabia, initiating pilot implementations of e-CNY in infrastructure-related transactions under the BRI (PBOC, 2023). Earlier, during the Beijing 2022 Winter Olympics, the e-CNY was successfully deployed in cross-border payment scenarios, offering a proof-of-concept for its broader application in international settings.

3.Upgrading Regional Payment Infrastructure through FinTech Cooperation

A major constraint on financial integration within the Belt and Road Initiative (BRI) is the fragmented and uneven state of payment systems in several participating regions, particularly in Southeast Asia. In response, Chinese FinTech firms are playing a catalytic role in modernizing local payment infrastructure, exporting scalable technologies, and enabling seamless transaction ecosystems across borders.

One key initiative is led by China UnionPay, which has achieved system interoperability with national payment platforms in Singapore, Malaysia, and Thailand. This integration enables UnionPay cardholders to conduct transactions throughout the region, thereby expanding access to China-linked digital financial services and accelerating the region's alignment with Asian financial architectures .

In addition, with the support of the People's Bank of China, all 10 ASEAN countries have joined the Cross-Border Interbank Payment System (CIPS), significantly improving the payment efficiency of countries along the "Belt and Road" initiative in international trade. This system allows Southeast Asian countries to directly settle infrastructure investments in RMB, reducing the exchange rate risk brought by US dollar transactions. For example, the Bank of Thailand is working with the PBOC to explore the application of the digital RMB in bilateral trade settlement and large-scale infrastructure projects.

(III) How FinTech Facilitates "Unimpeded Trade"

A central pillar of the Belt and Road Initiative (BRI) is the promotion of unimpeded trade, which hinges on the efficiency and inclusiveness of cross-border transaction systems. Traditional trade mechanisms are often encumbered by high settlement costs, fragmented payment infrastructures, and the lack of

reliable cross-border credit verification tools. FinTech offers a transformative solution by enabling seamless cross-border payments, digitized supply chain finance, and AI-powered e-commerce platforms, thereby reshaping the contours of international commerce.

1.FinTech-Enabled Cross-Border Payments: A New Settlement Architecture

Cross-border payments remain a bottleneck for trade integration, particularly in Southeast and South Asia, where domestic payment systems are often siloed and regulatory inconsistencies across jurisdictions increase transaction frictions. In this context, Chinese FinTech companies are pioneering payment interoperability through innovations in third-party payment platforms and central bank digital currencies (CBDCs).

In recent years, Chinese payment systems have been accelerating their expansion in the ASEAN market. For example, UnionPay announced in 2023 the realization of interconnection with local payment systems such as Thailand's PromptPay and Singapore's PayNow, allowing Chinese tourists and local users to seamlessly complete transactions through QR code payments. This kind of cooperation between Chinese enterprises and local payment platforms has reduced the cost of traditional cross-border payments relying on the US dollar and better benefited China and countries along the Belt and Road initiative.

2.Blockchain and Smart Contracts: Reshaping the Foundations of Cross-Border Trade

Traditional cross-border trade processes are hindered by information asymmetries, inefficient credit assessments, and manual settlement procedures. From procurement to payment, the lack of transparency undermines trust and slows transaction velocity. Blockchain technology—by ensuring tamper-proof traceability and enabling automated contract execution—is now emerging as a game-changing infrastructure for digital trade governance within the Belt and Road Initiative.

In 2023, Ant International partnered with StraitsX, utilizing Ant Group's self-developed Whale blockchain technology treasury management platform to implement innovative protocols such as Purpose Bound Money, facilitating faster, more secure, and more cost-effective cross-border transactions, thereby improving price stability.

In addition, in 2020, the Blockchain-based Service Network (BSN), under the overall planning and top-level design of the State Information Center and jointly initiated by China Mobile, China UnionPay and other entities, is also in the process of global expansion, capable of providing underlying blockchain infrastructure for various applications, including cross-border payments, in countries along the Belt and Road initiative.

3.AI and Big Data: Powering the Next Wave of Cross-Border E-Commerce in the BRI

Southeast Asia has emerged as a global hotspot for cross-border e-commerce, yet many local enterprises face persistent structural challenges—including fragile credit infrastructures, high logistical costs, and limited digital analytics capabilities. To address these pain points, Chinese FinTech firms are deploying artificial intelligence and big data-driven solutions that enhance both operational resilience and commercial agility across e-commerce platforms in Belt and Road economies.

For example, in 2023, Alibaba signed a global trade platform cooperation agreement with the Cambodian Ministry of Commerce, providing digital training to nearly 100 Cambodian SMEs and deeply integrating China's big data and artificial intelligence technologies into the e-commerce development model in Southeast Asia to promote its rapid development. In addition, Tencent Cloud is cooperating with multiple e-commerce platforms in Southeast Asia to introduce AI-driven precision

marketing technology to help merchants improve the effectiveness of advertising. Through AI-driven product recommendation, intelligent customer service and credit assessment technologies, Chinese FinTech companies are providing more efficient support for Belt and Road cross-border e-commerce.

(IV) How FinTech Strengthens "Financial Integration"

Financial integration is a core pillar of the Belt and Road Initiative (BRI), designed to ensure the efficient allocation and transnational mobility of capital for infrastructure, industry, and trade across participating countries. Yet legacy financing models remain constrained by high borrowing costs, fragmented credit ecosystems, and regulatory barriers to capital flows—especially in low- and middle-income countries. Emerging FinTech solutions, including AI-powered risk modeling, blockchain-based trade finance, and digital currency settlement, are now reshaping financing environments across the Global South. Chinese FinTech firms, in particular, are deploying these tools to enhance cross-border liquidity and build more resilient financial infrastructure along the BRI corridor.

1.Reconfiguring Infrastructure Finance through Digital Innovation

Infrastructure financing continues to pose significant challenges in BRI countries, where traditional credit mechanisms often fail to serve local needs. In response, Chinese banks and FinTech firms are introducing digitally optimized financing platforms that address inefficiencies in loan origination, risk assessment, and transaction transparency.

For example, Conflux Network has launched a "super-scale blockchain infrastructure platform" aimed at establishing a public blockchain infrastructure to support cross-border cooperation projects in countries along the Belt and Road. These innovations mark a shift toward adaptive, data-driven capital allocation models, ensuring that infrastructure development under the BRI is not only adequately funded, but also financially sustainable.

2.Digital Currencies Facilitating Financial Connectivity

Digital currencies are playing an increasingly vital role in financial connectivity under the Belt and Road Initiative, particularly in cross-border settlement and financial stability. In recent years, the People's Bank of China has actively promoted pilot applications of the digital renminbi in BRI countries to improve the efficiency of international trade settlements and reduce dependency on the U.S. dollar in cross-border transactions.

In addition to the previously mentioned cooperation between the People's Bank of China and the central banks of Thailand, the UAE, and Singapore to launch Project mBridge, a pioneering blockchain-based platform for multi-jurisdictional CBDC settlement, in 2022, China and Singapore launched a digital RMB pilot project under the China-Singapore Connectivity Initiative. Furthermore, Chinese enterprises such as the Agricultural Bank of China, China Merchants Bank, and the Land-Sea New Passage Company are actively exploring the implementation of characteristic application scenarios in Southeast Asia. The application of this digital currency not only enhances the level of financial cooperation between China and ASEAN countries but also promotes the internationalization of the RMB within the Belt and Road initiative.

3.Supply Chain Finance as a Pillar of Sustainable Investment

The importance of cross-border supply chain finance is increasingly prominent under the Belt and Road initiative, especially in capital-intensive fields such as trade and infrastructure. Traditional supply chain financing models are often limited by imperfect credit systems and high financing thresholds, while the application of blockchain and artificial intelligence technologies is driving supply chain

finance innovation and improving the sustainability of Belt and Road financing. For example, Ant Group has launched the Trusple platform, a global trade and financial services platform aimed at optimizing cross-border trade processes for SMEs and financial institutions. This platform is expected to significantly improve the efficiency of supply chain finance in countries along the Belt and Road and enhance trust between these countries.

(V) How FinTech Promotes "People-to-People Bonds"

At the heart of the Belt and Road Initiative lies the vision of "people-to-people bonds"—a commitment to fostering mutual trust through enhanced economic cooperation, cultural dialogue, and social inclusion. Within this context, financial innovation has emerged as a strategic vector for building shared prosperity and intercultural understanding, particularly in regions marked by uneven access to formal financial systems.

Chinese FinTech firms are playing a critical role in translating this vision into reality. Through the deployment of mobile payment platforms, digital microcredit systems, and electronic Know-Your-Customer (e-KYC) infrastructure, these companies are expanding the frontiers of financial inclusion in Southeast Asia and other key BRI corridors. In doing so, they are not only enabling millions of individuals to access essential financial services, but also helping to narrow socioeconomic divides and fortify regional trust networks.

1.FinTech as a Vehicle for Financial Inclusion and Social Integration

A critical challenge for many countries along the Belt and Road — particularly in Southeast Asia — is the persistent exclusion of vast populations from formal financial systems. High rates of unbanked and underbanked individuals, coupled with the limited reach of conventional banking infrastructure, have long constrained access to credit, payments, and basic financial services for both individuals and microenterprises. Recent advances in FinTech—most notably in mobile payments and digital microlending — are reshaping this landscape and laying the foundation for more inclusive economic participation. Chinese FinTech firms have been at the forefront of this shift. In the Philippines, Ant Group collaborated with GCash (the largest mobile payment platform in the Philippines)to launch GLoan, an unsecured loan product that allows borrowers to quickly obtain funds without additional documents or collateral, providing convenient financing channels for micro and small enterprises and individual merchants. This low-threshold, convenient financial service not only improves regional financial inclusion but also promotes economic cooperation and social integration under the Belt and Road initiative.

2.Digital Identity as a Cornerstone of Secure and Inclusive Finance

The expansion of cross-border finance under the Belt and Road Initiative has exposed persistent vulnerabilities in many participating countries, including financial fraud, identity theft, and regulatory fragmentation. These risks not only undermine transactional trust, but also complicate the institutional foundations for broader regional financial cooperation. To address these challenges, Chinese FinTech companies are advancing digital identity verification systems—especially e-KYC protocols—as foundational tools for building secure, inclusive, and interoperable financial ecosystems.

A notable example is the 2018 collaboration between Chinese technology company Megvii and banks in Thailand and Malaysia to jointly promote a Face++-based authentication system (MAS, 2023). These systems enable users to open financial accounts and conduct cross-border payments remotely through biometric technology, and have been integrated with Alipay, Lenovo, and China CITIC Bank, ensuring seamless identity authentication across borders.

3.Advancing Social Responsibility and Inclusive Development through FinTech

The expansion of Chinese FinTech firms across Belt and Road regions increasingly requires a dual commitment: to provide technologically advanced financial solutions, and to act as responsible stakeholders that contribute to social trust and sustainable local development. In this context, corporate social responsibility (CSR) is not peripheral but integral to FinTech's legitimacy and long-term impact—particularly in economically underserved areas. Recent initiatives underscore this evolution. For example, Ant Financial established a sustainable development strategic partnership with the International Finance Corporation, a member of the World Bank Group, jointly launching the "10x1000 Tech for Inclusion" program. This initiative focuses on inclusive finance and environmental sustainability, committing to train 10,000 technology experts in emerging economies over the next decade. In its first project in Indonesia, Ant Financial not only provides technical training but also emphasizes responsible financial practices and the development of green finance solutions. These trained professionals will become core drivers of sustainable economic growth in local communities, helping vulnerable groups access fair financial services while ensuring financial innovations align with environmental protection principles. Through this approach, Ant Financial demonstrates how to organically integrate corporate development with social responsibility, creating long-term, sustainable social value for countries along the Belt and Road Initiative.

III. FinTech as a Catalyst for Belt and Road Cooperation in Southeast Asia

Southeast Asia stands at the forefront of global FinTech expansion and serves as a strategic hub for digital cooperation under BRI. With its youthful population, widespread mobile internet adoption, a sizeable underbanked demographic, and policy-driven momentum for financial digitalization, the region has become fertile ground for FinTech innovation and inclusive economic transformation. Leveraging capital, technology, and market experience, Chinese enterprises are accelerating their expansion in Southeast Asia. Driven by the BRI framework, they are playing an increasingly important role in areas such as investment and financing, trade and logistics, digital economy integration, and inclusive finance.

(I) Mobilizing FinTech to Unlock Capital for the Belt and Road Initiative in Southeast Asia

As a key pillar of the Belt and Road Initiative (BRI), Southeast Asia faces soaring demand for investment in infrastructure, energy, and transport integration. Yet, underdeveloped financial ecosystems—marked by limited access to traditional banking, high financing costs, and long investment return cycles—continue to constrain project delivery and financial sustainability. Chinese FinTech enterprises are actively participating in BRI-related investment in Southeast Asia. By leveraging tools such as digital payments, supply chain finance, blockchain-based financing, and digital RMB settlement, these companies are improving capital liquidity and investment-financing efficiency, offering innovative financial solutions to the region's development needs.

1.Unlocking Investment Flows via Digital Payment Infrastructure

Digital payment infrastructure has become a foundational enabler of Belt and Road Initiative (BRI) financial cooperation. Chinese platforms such as Alipay and WeChat Pay are driving the rollout of frictionless, high-efficiency cross-border payment solutions across Southeast Asia, streamlining transactional processes and lowering entry barriers to investment.

Recent years have seen deeper integration between China's digital finance networks and Southeast Asian payment ecosystems. For example, Guangxi Beibu Gulf Bank, relying on the China-ASEAN Cross-border Trade and Financial Interconnectivity Platform ("Trade Finance Connect" platform), has cooperated with VietinBank to carry out pilot cross-border e-commerce settlement, realizing the "three-way matching" of cross-border e-commerce transaction, logistics, and customs data. Cross-border receipts can be completed on the same day ("T+0"), greatly improving settlement efficiency. This not only reduces cross-border transaction costs but also improves the capital flow efficiency of "Belt and Road" projects. On-the-ground, contractors working on Southeast Asian infrastructure projects can now disburse payments to suppliers and laborers via mobile channels, mitigating delays typically caused by traditional banking settlement lags.

Equally important, enhanced digital payment systems are expanding financial inclusion across the region. In countries like Indonesia and the Philippines — where banking penetration remains limited—mobile wallets backed by Chinese firms like Alipay are allowing unbanked populations and micro-enterprises to access investment opportunities and participate in value chains supported by BRI capital flows. Through mobile

payment + digital wallet solutions provided by Chinese enterprises, starting in 2015, Alipay began to jointly build "local Alipay" with local partners in Indonesia, the Philippines, Thailand, Malaysia, and other places through "strategic investment + technology sharing." In 2020, Ant launched Alipay+, upgrading from "building wallets" to "connecting wallets," while also connecting global business scenarios to promote the participation of small and micro enterprises in "Belt and Road" investment projects.

2.Enhancing BRI Investment Sustainability through FinTech-Enabled Supply Chain Finance

The delivery of BRI infrastructure in Southeast Asia hinges on highly fragmented supply chains, spanning construction inputs, equipment manufacturing, and transnational logistics. Conventional banking systems—burdened by slow processing and limited visibility—have proven inadequate in meeting the liquidity needs of such complex ecosystems. In response, Chinese FinTech firms are pioneering integrated solutions that combine supply chain finance with blockchain technology, unlocking new efficiencies in capital flow and cost management.

For example, OneConnect Financial Technology Co Ltd, the fintech arm of Ping An Insurance (Group) Company of China, has partnered with UBX, a subsidiary of Union Bank in the Philippines, to build the country's first blockchain-enabled technology platform. This platform offers services including AI analysis, remote review, and anti-fraud scrutiny to meet local enterprises' digital-age needs such as multi-channel loan application processing, credit evaluation, loan appropriation, and customer identity verification.

3.Employing Green FinTech to Advance Sustainable Investment

As the Belt and Road Initiative (BRI) evolves, its investment portfolio is shifting from traditional infrastructure and trade to encompass sustainable, low-carbon development. Southeast Asia has emerged as a key region for green transformation, with active investment in renewable energy, smart mobility, and clean infrastructure. In this context, financial technology is offering novel, tech-driven financing tools to catalyze and de-risk green investment. For example, China Qingshan Industry has invested in and built a 2GW clean energy base in Indonesia, including integrated industrial parks such as Morowali Industrial Park and Weda Bay Industrial Park. This project not only promoted the development of renewable energy in Indonesia but also broadened green financing channels through green finance models, utilizing financial toolkits provided by the Export-Import Bank of China and the China Export & Credit Insurance Corporation. Moreover, the Export-Import Bank of China, the China Development Bank, and 9 other financial institutions jointly issued an initiative on promoting green finance under the 'Belt and Road', calling for strengthening international cooperation and effectively leveraging the "source of living water" role of green finance to continuously increase support for the energy green and low-carbon transformation fields in countries jointly building the Belt and Road.

(II) Harnessing FinTech to Strengthen Trade and Logistics Connectivity in Southeast Asia

Chinese financial technology firms are playing an increasingly central role in digitizing Southeast Asia's trade and logistics infrastructure, employing innovations in cross-border payments, supply chain financing, and AI-driven platforms to advance the BRI's goal of trade connectivity. Amid the region's booming cross-border e-commerce and growing international trade volumes, China's tech-enabled financial tools are becoming indispensable to improving payment efficiency, logistics financing, and the overall resilience of the digital trade ecosystem.

1.Enhancing Cross-Border Payment Connectivity

Chinese FinTech firms are actively advancing the regional integration of cross-border payment systems in Southeast Asia, aiming to streamline trade settlement processes under the BRI framework. The Cross-Border Interbank Payment System (CIPS), spearheaded by the People's Bank of China, has partnered with financial institutions across ASEAN to offer secure and efficient settlement services for cross-border commerce. In parallel, Alipay has integrated with platforms such as Singapore's PayNow and Thailand's PromptPay, facilitating seamless intra-regional payments. WeChat Pay has also expanded its presence through collaborations with local banks in Thailand, Malaysia, and Indonesia, providing accessible digital payment solutions for both consumers and merchants. Collectively, these efforts not only improve the financial infrastructure supporting BRI trade, but also lower transaction costs and enhance economic connectivity among participating economies.

2.Strengthening BRI Logistics Through Digital Supply Chain Finance

Chinese FinTech enterprises are increasingly leveraging digital supply chain finance tools to drive the transformation of trade and logistics networks in Southeast Asia under the Belt and Road Initiative. FinTech companies such as OneConnect are using big data and blockchain technologies to provide intelligent financial services to the Southeast Asian market, promoting the digital transformation of local financial institutions. Lazada, the Alibaba-owned e-commerce leader in Southeast Asia, with technical support from Alibaba, is using AI for supply chain optimization, predicting which goods will be popular in a certain period to allocate inventory in advance, ensuring consumers receive goods in a timely manner. These digital financial solutions are providing more efficient financial support for logistics companies in Southeast Asia, improving the level of trade facilitation.

3.Artificial Intelligence and Big Data Empowering Cross-Border E-Commerce

Cross-border e-commerce has emerged as a key growth engine for Belt and Road trade, and Chinese firms are leveraging artificial intelligence and big data analytics to unlock new potential in Southeast Asia's digital economy. Alibaba Cloud's AI large language model Qwen(Tongyi Qianwen) has added an audio understanding model Qwen-Audio and its conversational fine-tuning version Qwen-Audio-Chat, which are suitable for the multilingual and multicultural technical scenarios in Southeast Asia, promoting breakthroughs in AI technology in the region's finance, education, and e-commerce fields. Alibaba's intelligent customer service robot technology has been introduced to Lazada, launching the AI-driven virtual shopping assistant AI Lazzie, providing consumers with personalized product recommendations, intelligent review summaries, virtual try-on, and other functions. These features significantly improve user experience and shopping efficiency. Huawei Cloud released a new version of Huawei Cloud Stack 8.3 at the 2024 Singapore Summit, providing end-to-end digital and intelligent services for various industries in Southeast Asia. Collectively, these artificial intelligence technologies not only optimize the operational efficiency of e-commerce platforms but also enhance the overall security and sustainable development capabilities of Belt and Road trade.

(III) Employing FinTech to Accelerate Digital Economy Integration in Southeast Asia

Chinese FinTech enterprises have emerged as pivotal actors in shaping Southeast Asia's digital economic landscape. By advancing digital banking services, strengthening electronic identity verification systems (KYC), and investing in foundational FinTech infrastructure, these firms are deepening cross-border collaboration under the Belt and Road Initiative. Amid a rapid wave of digital transformation

across Southeast Asia, Chinese firms—empowered by cutting-edge technology, operational expertise, and financial strength—are playing an increasingly strategic role in expanding financial inclusion and accelerating regional economic integration.

1.The Rise of Digital Banking in Southeast Asia

Digital banking is rapidly emerging as a cornerstone of Southeast Asia's financial landscape, offering scalable and cost-effective solutions to populations underserved by traditional banks. With a significant share of the region's population still unbanked, digital financial services have proven vital in advancing financial inclusion. Chinese FinTech firms are playing a catalytic role in this transformation through strategic investments and partnerships in countries such as Indonesia, the Philippines, and Thailand. Notably, Ant Group's investment in Indonesia's Akulaku Digital Bank has enabled the latter to expand its mobile payment and digital lending offerings by leveraging Alipay's advanced risk management technologies. In addition, in July 2023, Tencent Cloud announced a partnership with Indonesia's largest digital banking platform, Allo Bank, to provide its TDSQL database management system, helping Allo Bank efficiently manage large amounts of data and meet the daily financial needs of Indonesians. These initiatives underscore how Chinese FinTech players are fostering the development of more inclusive, accessible, and tech-enabled financial ecosystems across Southeast Asia.

2.The Adoption of Digital Identity and KYC Frameworks in Southeast Asia

As the digital economy expands under the Belt and Road Initiative, building secure and trustworthy transaction frameworks has become a cornerstone of regional cooperation. In this context, electronic Know-Your-Customer (e-KYC) systems are gaining widespread adoption across Southeast Asia, offering enhanced transparency and risk mitigation for digital financial transactions. Chinese technology firms, particularly those with strengths in blockchain and identity verification, are actively supporting regional governments and institutions in developing robust digital identity infrastructures. For example, ZOLOZ RealID has been providing digital identity verification services to the financial industry, electronic payment, and FinTech companies in Southeast Asia in recent years. RealID has independently developed several technologies, including ID document recognition technology targeting the Southeast Asian market, OCR technology for Southeast Asian minority languages, an anti-money laundering intelligent AML-Screening recognition system, a personal and corporate reputation evaluation analysis system based on NLP technology, and digital signature services. These efforts highlight how FinTech-driven identity innovation is shaping the future of financial inclusion and cybersecurity in Southeast Asia.

3.Advancing Regional Economic Integration through FinTech

Financial technology is serving as a key enabler in advancing regional economic integration across Southeast Asia, particularly under the Regional Comprehensive Economic Partnership (RCEP) framework. As member states intensify digital financial cooperation to streamline cross-border trade and investment, China and ASEAN economies have deepened collaboration to enhance interoperability in financial infrastructure.

For example, the Export-Import Bank of China has consistently regarded RCEP member countries as important areas for business expansion, supporting a large number of projects involving economic and trade cooperation, infrastructure construction, people's livelihood, and green development, achieving good results. Additionally, Ant Group's strategic partnerships with Southeast Asia's digital economy platforms are accelerating the convergence of cross-border e-commerce, supply chain finance, and digital payments. These collaborations are helping to accelerate the development of the digital economy in Southeast Asia while deepening the cooperative relationship between China and

Southeast Asian countries under the Belt and Road framework.

These FinTech cooperations not only drive the rapid development of the digital economy in Southeast Asia but also serve as concrete mechanisms to deepen China-ASEAN cooperation under the Belt and Road Initiative, fostering a more connected and resilient regional financial ecosystem.

(IV) Leveraging FinTech to Advance Inclusive Finance in Southeast Asia

Southeast Asia represents one of the world's most promising frontiers for financial inclusion. Yet, widespread gaps in traditional banking infrastructure have left many individuals and small- and medium-sized enterprises (SMEs) underserved or entirely excluded from formal financial systems. FinTech has emerged as a critical enabler in bridging these gaps. Chinese FinTech firms—drawing on robust expertise in mobile payments, digital lending, and central bank digital currency (CBDC) applications—have accelerated their regional footprint, offering scalable solutions tailored to local needs.

1.Unlocking SME Growth through Mobile Payments and Blockchain-based Digital Lending

Chinese FinTech firms are advancing inclusive finance in Southeast Asia by deploying mobile payment infrastructure integrated with digital lending solutions. These innovations enable micro and small enterprises (MSEs) to access unsecured loans, helping them scale operations despite lacking formal credit histories. For example, FinVolution Group began its overseas expansion in 2018, choosing Indonesia as its first destination. In December 2019, it obtained a financial lending institution license based on technology and information issued by the Indonesian Financial Services Authority (OJK), holding a leading market share in Indonesia's cash loan market. In 2022, FinVolution Group launched the "100 Million Yuan Interest-Free Loan" project, issuing coupons and other benefits to approximately 1.6 million micro and small users. During this period, FinVolution Group's app launched a "Micro and Small Enterprise Service Zone," providing a series of digital operation tools, including vehicle valuation and certification, real estate valuation, merchant QR code application, social security payment, and enterprise group insurance.

Beyond payments and loans, Chinese firms such as JD Technology are also leveraging blockchain-powered supply chain finance to improve credit access for SMEs in Thailand and Vietnam. These blockchain-powered platforms enhance transactional transparency, enabling banks to base lending decisions on verifiable trade records. This not only lowers default risk but also improves capital allocation across regional trade networks—supporting the sustainability of Belt and Road-related commercial ecosystems.

2.Southeast Asia's Local FinTechs Forging Strategic Partnerships for Financial Inclusion

Amid the rapid evolution of financial technology, Southeast Asia's indigenous FinTech firms have increasingly sought strategic partnerships with Chinese counterparts to jointly advance inclusive financial ecosystems aligned with the Belt and Road Initiative. One prominent example is ShopeePay, a mobile wallet service under Singapore's Sea Group, which has established cross-border payment interoperability with Alipay. This integration enables seamless transactions for Chinese tourists and local merchants across Southeast Asia.

Ant Group identified internationalization as one of its core strategies as early as 2016, and began to lay out its FinTech overseas expansion in Southeast Asia. In 2016, Ant Group partnered with Thai payment company Ascend Money. In 2017, it invested in GCash,

the largest e-wallet in the Philippines. It acquired Singaporean payment service helloPay. In Indonesia, it formed a joint venture with Emtek to create DANA, focusing on online payments, offline store payments, mobile top-ups, bill payments, and installment payments. These partnerships not only expand financial access for underserved populations but also consolidate the digital financial infrastructure critical to BRI's long-term development objectives in the region.

3.Digital Currency Facilitating Regional Monetary Stability in Southeast Asia

Within the framework of the Belt and Road Initiative, Southeast Asian nations are confronting challenges such as exchange rate volatility and high costs associated with cross-border payments. The digital yuan (e-CNY) issued by China is regarded as a significant tool to address these challenges, contributing to enhanced regional financial stability. According to a 2023 announcement by the Monetary Authority of Singapore, China and Singapore will deepen their collaboration on the cross-border digital yuan pilot program. Notably, as early as 2020, the Monetary Authority of Singapore signed a Memorandum of Understanding (MoU) on digital finance cooperation with the People's Bank of China's Digital Currency Research Institute. At present, the People's Bank of China, the Monetary Authority of Singapore, and the People's Bank of China Digital Currency Research Institute are launching a pilot project that will enable travelers from both nations to use the digital yuan for tourism-related payments in Singapore and China, thereby improving convenience for travelers during their overseas shopping. Furthermore, in the context of the ongoing trend of "de-dollarization," the internationalization of the RMB is gaining momentum. Several ASEAN countries have entered into local currency settlement agreements (LCS) with China to promote the use of the RMB in regional trade and financial transactions. For instance, Bank Negara Malaysia established a bilateral local currency swap agreement with the People's Bank of China in 2009, and officially launched RMB settlement services in 2012. In 2021, Bank Negara Malaysia and the People's Bank of China extended their currency swap agreement, further solidifying central bank cooperation, stabilizing market confidence, mitigating exchange rate risks, and preserving regional financial market stability. Additionally, in 2022, Malaysia's Ministry of International Trade and Industry announced that the Regional Comprehensive Economic Partnership (RCEP) had officially come into effect in Malaysia. This agreement will enable Malaysia to forge closer trade ties with all member countries, including China, fostering greater integration of regional industrial, supply, and value chains. As the BRI progresses, the use of the RMB in Southeast Asian financial markets is expected to expand further, providing crucial support for regional financial stability and the development of inclusive finance.

IV. Challenges and Risks in the Implementation of the Belt and Road Initiative (A Case Study of Southeast Asia)

This section examines the key obstacles and emerging risks that confront Chinese FinTech actors in their efforts to support the Belt and Road Initiative (BRI), with a specific focus on Southeast Asia as a critical case. Drawing on regional dynamics and empirical observations, the report identifies six core categories of risk that merit analytical and strategic attention:

(1) fragmented regulatory regimes and policy misalignments across host countries,

(2) limitations in digital infrastructure and persistent technological vulnerabilities,

(3) intensifying market competition and structural constraints within local FinTech ecosystems,

(4) mounting geopolitical rivalries that shape the reception of Chinese digital platforms,

(5) heightened concerns over financial security and the volatility of cross-border payment systems, and

(6) socio-cultural frictions and the trust deficits that challenge institutional embedding and user adoption.

(I) Regulatory Fragmentation and Policy Misalignments

As Chinese FinTech firms expand into Southeast Asia, they encounter a fragmented and increasingly complex regulatory environment. Marked disparities in national financial oversight—particularly in cross-border payments, data protection, and anti-money laundering (AML) policies—have emerged as significant barriers to seamless financial cooperation within the Belt and Road Initiative (BRI). In addition to this structural misalignment, the dynamic nature of regulatory reforms across the region creates further uncertainty. To remain compliant, Chinese enterprises must engage in continual recalibration of their operational strategies to align with shifting local legal and policy landscapes, thereby increasing both administrative burdens and strategic risk.

1.Fragmented Regulatory Landscapes and the Challenge of FinTech Policy Harmonization in Southeast Asia

The regulatory landscape for financial technology across Southeast Asia is marked by pronounced divergence, posing a major obstacle to cohesive regional integration under the Belt and Road Initiative. Singapore, widely seen as the region's FinTech hub, has embraced a liberal and innovation-driven regulatory framework. Its "Regulatory Sandbox," administered by the Monetary Authority of Singapore (MAS), enables FinTech startups—including China's Ant Group and Tencent Financial Technology—to test digital payment services within a supervised environment, thus facilitating market entry for foreign firms.

In contrast, countries such as Indonesia and Vietnam maintain more restrictive stances toward foreign FinTech actors. Indonesia's central bank, Bank Indonesia, mandates that all payment service providers establish joint ventures with majority domestic ownership (minimum 51%), thereby curbing foreign firms' market dominance. This regulatory constraint has slowed the expansion of Chinese players such as Tencent, Alibaba and Ant Group. Vietnam, on the other hand, remains in the nascent stages of FinTech regulation, where the absence of a coherent policy framework introduces considerable uncertainty for foreign market participants.

Compounding these national divergences is due to the lack of a regional mechanism to coordinate FinTech regulatory standards. Countries often pursue conflicting objectives—Singapore pushes for cross-border digital finance harmonization, while Indonesia emphasizes the protection of local payment infrastructures. These regulatory

discrepancies force Chinese enterprises to navigate complex and inconsistent compliance environments across jurisdictions, undermining efforts toward financial integration under the BRI and inflating operational and compliance costs.

2.Data Sovereignty and the Rising Compliance Burden in Southeast Asia

Amid growing concerns over digital security, Southeast Asian governments are increasingly enforcing data privacy regulations—yet divergent legal frameworks across the region complicate cross-border FinTech operations. While some countries have drawn inspiration from the EU's General Data Protection Regulation (GDPR), others have pursued distinct regulatory paths. Notably, Indonesia enacted its landmark Personal Data Protection Law (PDP Law) in 2022. The law mandates stricter controls on cross-border data transfers and requires FinTech firms to store user data domestically—posing significant compliance challenges for Chinese platforms like Alipay and WeChat Pay. Similarly, Thailand's Personal Data Protection Act (PDPA) imposes robust obligations on corporate data handlers, compelling Chinese firms to undertake substantial operational adjustments. These emerging regimes not only elevate regulatory complexity but also reshape the digital terrain for BRI-linked FinTech engagement in the region.

3.AML Compliance and Regulatory Constraints on Cross-Border Capital Mobility

Stringent anti-money laundering (AML) and know-your-customer (KYC) compliance regimes present formidable barriers for Chinese FinTech enterprises expanding into Southeast Asia. Heightened concerns over illicit financial flows and systemic vulnerabilities have prompted regional regulators to tighten scrutiny of digital financial transactions. Institutions such as the Bank of Thailand (BOT) and the Monetary Authority of Singapore (MAS) have ramped up enforcement of cross-border payment regulations, mandating rigorous KYC protocols to ensure user verification and to deter money laundering and fraud.

In the context of BRI financial cooperation, Chinese FinTech actors are increasingly compelled to collaborate with host governments and financial institutions to align with diverse national AML standards. Ant Group's e-wallet operations in markets such as the Philippines and Malaysia exemplify this trend, as they are subject to stringent requirements including real-time transaction surveillance, identity authentication, and customer risk profiling. While such measures are essential to safeguarding financial integrity, they also raise operational costs and inadvertently restrict access to services among unbanked or underbanked populations, posing a dilemma for inclusive financial development under the BRI umbrella.

(II) Technological Constraints and Digital Infrastructure Vulnerabilities

Beyond navigating heterogeneous regulatory frameworks, Chinese FinTech firms operating in Southeast Asia under the Belt and Road Initiative (BRI) face a series of structural challenges related to technological deployment and digital infrastructure deficits. While regional economies have made strides in advancing their digital sectors, deep-seated inequalities in internet access, escalating cybersecurity threats, and regulatory uncertainty surrounding the legal status of emerging technologies—such as blockchain—continue to hinder operational scalability. These systemic shortcomings not only impede the expansion strategies of Chinese FinTech actors but also complicate broader BRI-driven financial integration and cooperation across the region.

1.Fragmented Digital Infrastructure as a Constraint on FinTech Expansion in Southeast Asia

The uneven development of digital infrastructure across Southeast Asia poses a critical barrier to the region's FinTech growth, particularly in underserved rural and remote areas where limited internet access and substandard mobile connectivity undermine the scalability of financial innovation. According to World Bank statistics (2023), stark disparities persist in national internet penetration rates—while countries like Singapore and Malaysia boast over 90% coverage, others such as Myanmar and Laos remain below 50%. This digital divide significantly curtails the reach of mobile payment systems, digital banking, and supply chain financing solutions.

The Philippines exemplifies this infrastructural dilemma. Despite recent surges in mobile payment adoption, the country continues to grapple with underdeveloped connectivity. Statista (2023) reports that while smartphone ownership stands at roughly 68%, the median mobile internet download speed is only about 35.56 Mbps. Such constraints hamper the broad deployment of Chinese digital payment platforms like Alipay and WeChat Pay and also undermine the operational efficiency of partnerships between local players (e.g., GCash, PayMaya) and Chinese firms. In this context, the diffusion of cross-border payment tools and inclusive financial services remains limited, requiring firms to invest in telecom partnerships and improve terminal interoperability to bridge infrastructural gaps.

2.Cybersecurity Vulnerabilities and the Challenge of Digital Trust in Southeast Asia

The rapid expansion of Chinese FinTech enterprises into Southeast Asia has heightened concerns over cybersecurity, an increasingly critical frontier in cross-border digital finance. The region has witnessed a surge in cyberattacks and data breaches in recent years, undermining trust in digital systems and exposing vulnerabilities in financial technology infrastructure. Kaspersky (2023) identifies Southeast Asia as one of the most targeted regions globally, with risks ranging from payment system intrusions and data leaks to fraudulent transactions and identity theft.

The 2022 GrabPay security breach exemplifies these challenges. Hackers exploited system vulnerabilities to siphon off user funds and launder money through fraudulent transfers, revealing serious gaps in authentication protocols and anti-fraud mechanisms across the region's digital payment landscape. For Chinese FinTech giants such as Alipay and WeChat Pay, cybersecurity lapses not only threaten operational integrity and brand reputation but also invite intensified regulatory scrutiny from host governments. To address these risks, Chinese firms must proactively collaborate with regional cybersecurity authorities and government regulators to enhance biometric authentication, e-KYC frameworks, and transaction risk controls—critical steps toward rebuilding digital trust in an increasingly interconnected financial ecosystem.

3.Divergent Regulatory Recognition of Blockchain and Smart Contracts in Southeast Asia

While blockchain technology is widely acknowledged for its potential to improve transparency and transactional efficiency in FinTech, the legal and regulatory landscapes across Southeast Asia remain fragmented, posing significant barriers to its deployment. Regulatory divergence has resulted in uneven adoption of blockchain applications, particularly those involving smart contracts and digital payments. For example, the Bank of Thailand has taken a progressive approach, actively piloting central bank digital currency (CBDC) initiatives and collaborating with the Hong Kong Monetary Authority on blockchain-enabled cross-border payment systems. In contrast, Indonesia has adopted a more cautious stance. In 2023, Bank Indonesia issued new regulations banning the use of cryptocurrencies as payment instruments and tightened oversight of blockchain-related financial applications.

For Chinese FinTech companies, these regulatory inconsistencies create a complex operational environment. These companies have received regulatory approval in Philippines yet face significant implementation barriers in Indonesia due to restrictions on crypto-related technologies. In response, Chinese firms must craft country-specific compliance strategies, prioritizing engagement with jurisdictions that exhibit regulatory openness—such as Thailand—while simultaneously advocating for greater regional policy coordination to enable cross-border interoperability and recognition of blockchain-based financial innovations.

(III) Market Competition and Constraints of the FinTech Ecosystem

Beyond regulatory and infrastructural hurdles, Chinese FinTech firms operating in Southeast Asia under the "Belt and Road" framework increasingly confront fierce competition from both agile local startups and well-established Western financial conglomerates. The region's FinTech ecosystem remains highly fragmented across national boundaries, presenting substantial barriers to seamless market entry. This fragmentation not only complicates operational scaling for Chinese firms but also contributes to an unpredictable and volatile competitive environment, heightening the strategic uncertainty of cross-border financial innovation.

1.Dominance of Local FinTech Players in Southeast Asia

Southeast Asia's FinTech landscape is increasingly shaped by the rise of local champions, who—by capitalizing on deep market familiarity, adaptive business models, and strong governmental backing—have secured dominant positions across key financial sectors. Notable examples include Grab Financial, Sea Group (ShopeePay), as well as Gojek Pay. These firms have developed integrated FinTech ecosystems spanning payments, lending, and insurance and are actively expanding regionally through strategic partnerships and acquisitions, thereby entrenching formidable market barriers against foreign entrants.

Local firms hold structural advantages in several dimensions:

- Policy Favoritism: Governments in countries like Indonesia and Malaysia have instituted regulatory frameworks that favor domestic providers, limiting direct operational access for foreign FinTech firms.
- Consumer Entrenchment: Platforms such as Grab Financial and Gojek Pay have embedded financial services within daily-use apps—ride-hailing, food delivery, and e-commerce—ensuring high user engagement and retention.
- Cultural Embeddedness: Local firms demonstrate superior capacity to navigate the region's cultural heterogeneity. For instance, Gojek Pay's partnerships with domestic banks enable it to serve unbanked populations via tailored digital wallet solutions, rapidly scaling its footprint.

2.Competition from Global FinTech Giants

Alongside burgeoning local players, established Western FinTech firms continue to exert considerable influence in Southeast Asia's digital finance landscape, particularly in payments, banking, and cross-border financial services. Key actors include:

- Visa and Mastercard, which have long commanded the region's credit card payment networks, now collaborate extensively with national banks to expand into digital payments.
- PayPal and Stripe, whose robust infrastructure and credibility in B2B and cross-border transactions, make them preferred platforms for regional e-commerce businesses.

These firms benefit from substantial capital reserves, advanced technological frameworks, and globally trusted brands, creating formidable barriers for new

entrants. PayPal, in particular, maintains a dominant position in the region's cross-border payments market. Many local merchants continue to rely on its services, often at the expense of emerging local or Chinese FinTech alternatives, highlighting the entrenchment of global incumbents in key financial verticals.

3.Market Fragmentation and Structural Complexity in Southeast Asia

Southeast Asia's FinTech landscape is marked by considerable fragmentation, with disparate financial infrastructures, consumer behaviors, and regulatory regimes across countries. This heterogeneity undermines the viability of one-size-fits-all business models and complicates regional expansion strategies. For instance:

- Singapore and Malaysia feature mature banking sectors and widespread credit card usage, with consumers favoring domestic digital payment tools such as PayNow and Boost Wallet.
- Indonesia and the Philippines, in contrast, have low banking penetration, with over half of their populations unbanked. As a result, mobile wallets like Gojek Pay and GCash dominate the payment ecosystem.
- Thailand and Vietnam possess relatively advanced financial systems but have seen rapid growth in mobile payments, spurred by government support for digital banking platforms like Krungthai Bank and Timo Bank.

This fragmented ecosystem necessitates country-specific market strategies, significantly increasing both the cost and complexity of scaling operations. Moreover, divergent levels of digital financial infrastructure development across the region heighten uncertainties in implementing cross-border payments and blockchain-based financial services, posing further challenges for international FinTech firms operating under the Belt and Road framework.

(IV) Geopolitical Challenges and Strategic Competition

FinTech cooperation under China's Belt and Road Initiative faces mounting geopolitical headwinds in Southeast Asia. The rapid expansion of Chinese FinTech firms in the region has prompted strategic responses from major powers such as the United States and Japan, which are increasingly asserting their presence through policy instruments, institutional partnerships, and the diffusion of competing technological standards. Complicating this landscape is the heterogeneity of political and economic trajectories across ASEAN member states. This diversity not only intensifies market and regulatory challenges for Chinese firms but also introduces persistent geopolitical uncertainty, shaping the strategic calculus of China's regional digital finance engagement.

1.Strategic Intervention by the U.S. and Japan in Southeast Asia's FinTech Ecosystem

The United States has significantly deepened its strategic footprint in Southeast Asia's digital finance sector, leveraging platforms such as the Indo-Pacific Economic Framework (IPEF) and the U.S. International Development Finance Corporation (DFC) to advance its financial and economic influence. Backed by Washington's policy apparatus, firms like Visa and Mastercard have expanded their regional presence, while cross-border regulatory coordination initiatives have sought to export U.S.-aligned financial governance standards. These developments have introduced higher market entry thresholds for Chinese FinTech companies in key areas such as data compliance, capital mobility, and settlement infrastructure.

Japan, meanwhile, has adopted a distinct yet equally assertive strategy. Through state-backed initiatives and investments by corporate giants such as SoftBank and Mitsubishi UFJ Financial Group (MUFG), Japan has become a key benefactor of Southeast

Asia's indigenous FinTech ecosystem, with investments targeting regional leaders like Gojek and Grab. Furthermore, regulatory cooperation between Japan's Financial Services Agency (FSA) and the Monetary Authority of Singapore (MAS) is promoting the uptake of Japanese FinTech standards across the region—posing new challenges for Chinese firms seeking technological interoperability and regulatory alignment in increasingly complex local environments.

2.ASEAN's Strategic Hedging Between China and the United States in the FinTech Arena

ASEAN member states exhibit varied stances toward FinTech cooperation under the Belt and Road Initiative (BRI), reflecting broader efforts to navigate the strategic rivalry between China and the United States in the regional financial order. While some countries embrace Chinese digital finance initiatives, others seek a more calibrated posture to safeguard autonomy and diversify partnerships.

- Singapore, as a leading regional financial hub, has integrated Chinese FinTech firms into its ecosystem while simultaneously reinforcing its domestic digital infrastructure. In 2020, the Monetary Authority of Singapore (MAS) and the People's Bank of China signed a "Memorandum of Understanding on Digital Finance Cooperation" (MOU), which is the starting point for cooperation between the two sides in the field of digital RMB. Yet Singapore has also maintained strong regulatory alignment with the United States and the European Union, reflecting its strategic imperative to avoid overdependence on any single partner.
- Indonesia, Southeast Asia's largest economy, has adopted a more protectionist stance. In 2021, Bank Indonesia enacted regulations mandating that foreign ownership of "front-end payment companies" should not exceed 49% — an institutional mechanism that effectively curtails the independent operations of Chinese FinTech firms in the country.
- Malaysia has taken a more open and pragmatic approach. Its government has welcomed BRI-related FinTech collaboration, exemplified by Ant Group's partnership with TNG Digital. TNG Digital has emerged as one of the country's largest e-payment platforms and a driver of nationwide digital financial inclusion.

Meanwhile, Thailand and Vietnam embody a form of strategic ambivalence. Keen to harness Chinese investment and technological expertise for domestic FinTech development, they also exercise caution in aligning with either geopolitical pole. These states have leaned toward regulatory neutrality and multilateralism, crafting financial governance frameworks that accommodate diverse international stakeholders.

3.Fragmentation and the Limits of Multilateral FinTech Governance in Southeast Asia

Southeast Asia's FinTech regulatory landscape remains highly fragmented, marked by considerable divergence in national policies. This regulatory heterogeneity has posed significant challenges for Chinese FinTech firms attempting to scale regionally. In contrast, Western actors such as the United States, the European Union, and Japan have taken a more coordinated approach to shaping the region's financial governance architecture. Notable examples include:

- The EU's increasing regulatory footprint in Southeast Asia indirectly through legislation by promoting GDPR adoption and alignment in data privacy regimes;
- Japan's targeted collaboration with ASEAN member states on FinTech standardization, particularly in areas such as payment security and AML compliance.

Chinese FinTech expansion, by comparison, has primarily relied on bilateral cooperation rather than region-wide frameworks. This asymmetric approach limits the long-term institutional resilience of China's digital finance engagement. To address this, Chinese firms and regulatory actors must deepen their participation in ASEAN-led regional mechanisms to ensure regulatory alignment, operational continuity, and sustainable policy coordination across the region.

(V) Financial Security and the Risks of Cross-Border Payments

Chinese FinTech firms engaged in cross-border financial cooperation under the Belt and Road Initiative are increasingly exposed to a range of financial security challenges in Southeast Asia. These include systemic financial vulnerabilities, heightened exchange rate volatility, and the persistent risk of illicit financial flows. Such factors not only pose a threat to the region's financial stability but also place greater regulatory and compliance burdens on Chinese enterprises seeking long-term operational footholds in the region.

1.Systemic Vulnerabilities in Southeast Asia's Financial Architecture

The uneven development of financial systems across Southeast Asian nations exposes certain economies to heightened systemic vulnerabilities, particularly in the face of external shocks. The rapid proliferation of digital banks and mobile payment platforms has introduced new forms of risk, including the potential for "digital bank runs." In the Philippines, for example, the surge in users of platforms like GCash (with over 100 million global users) and Maya (with over 50 million users) has raised regulatory concerns over liquidity management in the event of mass withdrawals, especially amid an evolving regulatory landscape. Simultaneously, the growing use of digital currencies poses additional challenges to regional financial stability. China's cross-border e-CNY pilot programs with Southeast Asian partners aim to enhance trade settlement efficiency. Yet, without robust oversight mechanisms, widespread adoption of the digital renminbi may disrupt local monetary policy autonomy. For example, Indonesia is conducting digital RMB payment pilots with China but remains cautious in assessing the project's impact on the stability of local currency exchange rates to prevent market volatility from large capital inflows or outflows.

2.Risks in Cross-Border Payments and Exchange Rate Volatility

While the internationalization of the Renminbi (RMB) is central to China's Belt and Road Initiative, achieving stable cross-border payments remains a significant challenge for Chinese FinTech enterprises operating in Southeast Asia. Regulatory fragmentation persists across the region, with divergent approaches to RMB-based settlements.

In Singapore, the Monetary Authority of Singapore (MAS) has adopted a supportive stance, encouraging local banks to partner with Chinese institutions in piloting digital RMB settlements. Thailand has engaged in similar bilateral trials, though questions remain about the interoperability of RMB-based systems with existing domestic infrastructure. By contrast, Indonesia continues to impose stricter controls, reflecting a more cautious approach to RMB adoption within its borders.

Currency volatility further compounds the risks. Southeast Asian currencies, such as the Indonesian rupiah and Vietnamese dong, exhibit considerable fluctuations against the US dollar. In contrast, RMB usage in cross-border payments remains nascent in the region. A sudden surge in RMB-denominated transactions could introduce instability into local foreign exchange markets. This concern was evident in 2023, when the Bank of Thailand expressed reservations during a bilateral pilot program involving digital RMB-baht settlement, citing the

potential for large-scale capital flows to disrupt domestic currency stability.

3.Illicit Financial Risks in Southeast Asia's Digital Finance Landscape

The proliferation of digital finance platforms in Southeast Asia has heightened concerns over the potential misuse of FinTech systems for illicit financial activities, including money laundering and terrorist financing. Given that regulatory frameworks in many countries remain underdeveloped, peer-to-peer (P2P) lending networks and cross-border payment channels have, at times, been co-opted by criminal actors.

In Indonesia, a wave of credit defaults within the P2P lending sector prompted regulators to tighten oversight in 2023. New guidelines mandated enhanced Know Your Customer (KYC) procedures and placed restrictions on the cross-border movement of capital, reflecting a broader effort to mitigate financial contagion risks.

Similarly, in the Philippines, the central bank (BSP) has intensified regulatory scrutiny of digital banks and e-wallet platforms amid rising instances of digital financial crime. Prominent platforms such as GCash and PayMaya have since upgraded their anti-money laundering (AML) and counter-terrorist financing (CFT) protocols to align with global compliance standards.

As digital finance ecosystems across Belt and Road countries continue to expand, Chinese FinTech companies must implement more robust compliance frameworks in their Southeast Asian operations. Strengthened oversight is critical to minimizing systemic risk, safeguarding cross-border payment security, and ensuring that the RMB's internationalization does not destabilize the region's financial landscape.

(VI) Socio-Cultural Barriers and the Trust Deficit in FinTech Localization

Beyond regulatory, technological, and market competition dynamics, Chinese FinTech firms entering Southeast Asia confront a distinct set of socio-cultural hurdles. Deep-seated differences in financial norms, religious practices, digital identity frameworks, and expectations surrounding corporate social responsibility shape user behavior and influence trust in foreign digital finance providers. Building legitimacy in such a diverse environment demands more than compliance—it requires cultural sensitivity, tailored user engagement strategies, and sustained investment in trust-building. For Chinese FinTech actors operating under the Belt and Road Initiative, navigating these socio-cultural complexities is central to long-term acceptance and sustainable market integration.

1.Financial Inclusion and the Imperative of Cultural Sensitivity

The advancement of FinTech in Southeast Asia hinges not only on technological penetration but also on navigating deeply rooted financial and cultural norms. In many countries—particularly Indonesia, the Philippines, and Myanmar—cash-based transactions remain the default, with rural populations exhibiting persistent skepticism toward digital payment systems. Moreover, the prevalence of Muslim-majority populations in countries such as Indonesia and Malaysia introduces specific regulatory and ethical expectations under Sharia Law, which prohibits interest-based lending and speculative financial products. These cultural and religious considerations compel Chinese FinTech firms to localize their product design.

2.Digital Identity Authentication and the Politics of Public Trust

As digital finance expands across Southeast Asia, electronic Know Your Customer (e-KYC) systems have

emerged as a cornerstone of FinTech infrastructure. Yet, the social acceptance of digital identity technologies varies markedly across the region, shaped by divergent state capacities, privacy norms, and levels of institutional trust.

- Singapore offers a case of enthusiastic adoption, with the government spearheading the implementation of a national digital identity platform, SingPass. The country's robust regulatory framework and high digital literacy have facilitated the seamless integration of Alipay and WeChat Pay into its payment ecosystem.
- Myanmar, by contrast, reveals a more cautious stance. Widespread public skepticism toward the collection of biometric data—such as facial recognition and fingerprint scans—reflects deeper concerns about surveillance and state overreach. In response, Ant Group and Tencent have had to tread carefully, aligning their e-KYC rollouts with more transparent data governance frameworks and community engagement initiatives.

In countries like Indonesia, legal frameworks have also posed structural constraints. The enactment of a new data protection law in 2022 introduced stricter requirements for cross-border data transfers and personal privacy safeguards, complicating the operations of Chinese FinTech platforms and prompting firms to recalibrate their data localization and compliance strategies.

3.Embedding Responsibility of CSR and Sustainable Development

The diffusion of Chinese FinTech across Belt and Road economies hinges not only on regulatory compliance and technological fit, but also on the cultivation of trust through corporate social responsibility (CSR) and alignment with sustainable development goals (SDGs). Establishing a reputation for "Responsible FinTech" has become vital for securing durable partnerships and mitigating societal resistance.

- In Thailand, WeBank (under Tencent)'s "Digital Inclusive Finance Program" offers free digital payments training for micro-entrepreneurs, empowering them to process transactions through WeChat Pay and local banking systems. This initiative reflects Tencent's commitment to grassroots financial empowerment and digital literacy.
- In Indonesia, Ant Group Digital Technology has collaborated with the national government on the "Pre-employment Card" program to ensure accurate scholarship distribution. It utilized ZOLOZ security technology services to allow beneficiaries to complete registration and authentication within 2 minutes, avoiding manual review costs and fraud risks. From 2020 to 2023, this initiative served 17 million beneficiaries, helping to promote education equity in Indonesia.

Taken together, these cases underscore the imperative for Chinese FinTech firms to localize responsibly—by adapting to Islamic finance principles, advancing secure and transparent e-KYC systems, and embedding CSR into core strategy. Only by aligning innovation with local norms and inclusive growth can they build a sustainable and socially rooted presence in Southeast Asia's Belt and Road markets.

V. Policy Recommendations (from the Southeast Asian Experience)

(I) Recommendations for Chinese Government

To realize the integrative vision of the Belt and Road Initiative, the Chinese government must take a more proactive role in advancing FinTech development across Southeast Asia. This includes fostering stronger cross-border regulatory coordination, accelerating digital infrastructure investments, and deepening bilateral and multilateral cooperation mechanisms. Given the region's regulatory fragmentation, persistent frictions in cross-border payments, and uneven levels of technological readiness, a tailored, country-specific approach is essential for enhancing the effectiveness and sustainability of China's FinTech engagement under the BRI framework.

1.Advancing Digital Financial Infrastructure Interconnectivity along the Belt and Road

The burgeoning FinTech landscape in Southeast Asia presents significant opportunities for collaboration in cross-border payments, digital lending, and supply chain finance. Yet, fragmented payment systems and disjointed clearing mechanisms across the region continue to drive up transaction costs. To address these structural inefficiencies, the Chinese government should prioritize the construction of interoperable digital financial infrastructure and promote broader use of the Renminbi in regional settlement frameworks. Recommended initiatives include:

- Deepening CIPS integration: Encourage Southeast Asian countries to link their payment infrastructures with China's Cross-Border Interbank Payment System (CIPS), thereby enhancing transaction speed and reducing dependence on the SWIFT network. Building on existing digital RMB pilots—such as those between China and Singapore—bilateral initiatives could be expanded to encompass trade, tourism, and consumer retail sectors. Beyond digital RMB, exploration could be conducted into building new tokenized cross-border payment infrastructure including tokenized deposits and RMB stablecoins, and cooperating with market institutions to promote innovative applications in cross-border consumption and trade scenarios.
- Mainstreaming blockchain for cross-border clearing: Deploy blockchain and smart contract technologies to streamline clearing processes, increase settlement transparency, and improve liquidity management. Regional cooperation between China and ASEAN on blockchain-based payment infrastructure would serve as a cost-efficient alternative to conventional systems.
- Launching digital finance pilot zones: Back Chinese firms in establishing regulatory sandboxes or pilot programs in countries like Singapore and Malaysia to test digital RMB-based cross-border payment tools and assess FinTech product viability under diverse regulatory regimes.

2.Enhancing Regulatory Harmonization and Cross-Border Payment Infrastructure through FinTech Standardization

Divergent regulatory frameworks across Southeast Asian countries—particularly in areas such as cross-border payments, data privacy, and anti-money laundering (AML)—pose significant obstacles to FinTech expansion under the Belt and Road Initiative. To mitigate these challenges, the Chinese government should spearhead efforts to promote regulatory convergence and infrastructure

interoperability at the regional level. Key recommendations include:

- Aligning FinTech regulatory frameworks across China and ASEAN: Leverage bilateral and multilateral platforms to foster regulatory alignment in digital banking, electronic payments, and data governance. Establishing joint regulatory sandbox environments would allow FinTech firms to test emerging technologies within supervised parameters, thereby lowering market entry risks.
- Advancing China–ASEAN payment system interoperability: Building on the successful model of collaboration between China and Singapore's Monetary Authority (MAS), efforts should be made to integrate Chinese platforms such as Alipay and WeChat Pay with Southeast Asian payment networks. One approach would be to support the development of a unified QR code standard across ASEAN, enabling seamless cross-border payments using local e-wallets at Chinese point-of-sale systems.
- Establishing a regional framework for cross-border data flows: In light of rising data localization requirements across ASEAN, China should advocate for a regional mechanism to govern secure and compliant cross-border data processing. Such a framework would facilitate cost-effective operations for financial institutions and reduce the friction associated with fragmented data regimes.

3.Institutionalizing Regulatory Dialogue with Southeast Asian Governments to Reduce Policy Uncertainty

Geopolitical tensions and shifting regulatory environments pose persistent risks for Chinese FinTech enterprises expanding into Southeast Asia. Abrupt policy shifts—such as sudden tightening of regulations, restrictions on market access, or heightened scrutiny of foreign investment—can significantly disrupt operations. To mitigate such risks, the Chinese government should consider the following strategies:

- Launch a China–ASEAN Digital Finance Dialogue Platform: Establish a formal, recurring forum that brings together regulatory authorities, central banks, and industry stakeholders from both China and ASEAN member states to deliberate on cross-border regulatory harmonization. This institutionalized dialogue would foster mutual understanding and create more predictable operating environments for Chinese FinTech firms.
- Enhance bilateral regulatory cooperation with key strategic markets: For pivotal Belt and Road economies such as Indonesia, Thailand, and Vietnam, China should develop tailored regulatory communication channels that facilitate ongoing dialogue with local authorities. This would support the legal operation of platforms like Alipay and WeChat Pay and help preempt unilateral policy restrictions that could hinder market access.
- Develop a digital finance regulatory risk early-warning system: By harnessing AI and big data analytics, China can systematically monitor regulatory trends and policy shifts across Belt and Road partner countries. This system would provide strategic foresight and actionable intelligence for both policymakers and FinTech enterprises.

To ensure the resilience of China's FinTech presence in Southeast Asia, it is essential that the government deepens regulatory cooperation, supports infrastructure interconnectivity, and advances payment standardization. A proactive approach to policy risk management will be key to sustaining financial integration under the Belt and Road Initiative.

(II) Recommendations for Chinese FinTech Firms

To succeed in Southeast Asia's increasingly competitive and regulatory-diverse landscape, Chinese FinTech companies must adopt a multidimensional approach centered on localization, data governance, technological innovation, and financial inclusion. These strategies are critical to enhancing competitive advantage, deepening market integration, and ensuring long-term growth. As regional regulations and consumer preferences diverge across ASEAN member states, firms must pursue context-specific market entry and compliance strategies—while aligning their operational models with the broader goals of the Belt and Road Initiative.

1.Deepening Localization to Enhance User-Centric Service Design

Given the heterogeneity in payment systems, consumer behavior, and regulatory regimes across Southeast Asia, Chinese FinTech firms must localize their products and operations to meet country-specific demands. Strategic integration with local payment platforms—such as GoPay (Indonesia), GrabPay (Singapore), and Boost (Malaysia)—can expand market reach and improve user onboarding.

In predominantly Muslim markets such as Indonesia and Malaysia, firms should develop Shariah-compliant financial instruments, including interest-free loans and profit-sharing schemes, to align with Islamic finance norms and cultural sensitivities. Furthermore, optimizing user experience is a critical determinant of competitive positioning. The success of platforms like ShopeePay underscores the value of localized customer support, multilingual interfaces, and culturally attuned promotional campaigns (e.g., the 11.11 shopping festival) in fostering user loyalty and driving market penetration.

2.Enhancing Regulatory Compliance and Building Robust Cross-Border Data Governance

As ASEAN member states increasingly enforce stringent data protection regulations—such as Indonesia's 2022 Personal Data Protection Law and Thailand's PDPA—Chinese FinTech firms must proactively develop regulatory-compliant mechanisms for managing cross-border data flows. Lessons from Alipay's experience in the European Union highlight that distributed data storage architectures can effectively address localization mandates while mitigating risks associated with cross-jurisdictional data transfer.

In the context of Southeast Asia, Chinese companies should consider establishing in-region data centers to ensure compliance with national data residency requirements. Moreover, blockchain technologies offer a promising avenue for constructing trusted data-sharing infrastructures, enabling secure and verifiable cross-border transaction flows. For example, Tencent could utilize digital technologies to enhance privacy-preserving computation and decentralized storage, thereby reconciling regulatory obligations with operational demands for transparent and efficient cross-border payment systems.

3.Advancing Technological Innovation to Enhance Cross-Border Financial Services

Technological innovation remains a critical enabler of sustained competitiveness for FinTech firms. In tandem with Southeast Asia's accelerating digitalization, the deployment of advanced technologies—such as artificial intelligence (AI) and blockchain—is reshaping the contours of financial service delivery. AI-powered risk management tools offer viable pathways for addressing the chronic credit access barriers faced by micro and small enterprises (MSEs) in the region. AI-driven credit scoring models that incorporate alternative data sources, including social media activity and transactional behaviors, can yield more nuanced and accurate assessments for entities lacking formal credit histories.

Drawing from its success in reducing loan default rates through AI-based risk control systems in China,

Tencent Financial Technology is well-positioned to scale these applications to Southeast Asian markets, thereby facilitating improved credit access in countries such as Thailand and the Philippines. Concurrently, blockchain technologies provide a means to enhance the transparency and efficiency of cross-border payment ecosystems. JD Technology, for example, could pilot a blockchain-enabled smart contract settlement mechanism in Malaysia to streamline supply chain finance operations. More broadly, the application of smart contracts to cross-border trade settlement may expedite liquidity cycles and mitigate credit risks—offering scalable digital infrastructure solutions for supply chain governance across Belt and Road economies. Finally, distributed database technology can enhance high-concurrency data processing capabilities and system stability, improving the efficiency of payment and credit business processing for financial institutions and fintech companies. For example, OceanBase, a distributed database independently developed by Ant Group, has been widely adopted by domestic financial institutions in China, such as Bank of Communications, Guotai Junan Securities, and Sunshine Insurance. In recent years, OceanBase has also begun expanding overseas, for instance helping DANA, Indonesia's leading mobile payment company, with their database technology upgrades. In the future, it will further expand cooperation with financial institutions and fintech companies in countries along the Belt and Road Initiative.

4.Expanding Financial Inclusion to Broaden Access to Financial Services

The Southeast Asian region faces an acute need for inclusive financial solutions. According to World Bank estimates, over half of the population remains underserved by formal banking systems. In this context, Chinese FinTech firms can play a pivotal role by leveraging mobile payment technologies and digital credit platforms to improve access to financial services for small businesses and individuals. For instance, Ant Group could deploy microloan products in Indonesia that utilize big data-driven risk assessments to provide low-threshold financing options for local merchants.

To address the persistent financial exclusion in rural areas, Chinese companies should collaborate with Southeast Asian governments to scale up mobile payment infrastructure. In remote parts of Cambodia where mobile payment adoption remains limited, partnerships with local banks and telecom providers could facilitate the deployment of mobile wallet services, thereby enabling digital transactions among farmers and small-scale rural vendors.

Success in the Southeast Asian FinTech market demands a comprehensive strategy grounded in localization, regulatory compliance, technological advancement, and a commitment to inclusive finance. By enhancing cross-border payment networks, adapting to local user needs, and strengthening data security and privacy protections, Chinese enterprises can sustain their competitive edge within Belt and Road FinTech initiatives. Moreover, the strategic application of emerging technologies—particularly AI and blockchain—offers transformative potential for advancing financial inclusion in domains such as cross-border payments, digital lending, and supply chain finance.

(III) Recommendations for Chinese Financial Institutions

Chinese financial institutions are positioned as key enablers of capital support and innovation in the financial systems of Belt and Road Initiative (BRI) countries, particularly within the dynamic and rapidly evolving Southeast Asian market. In response to accelerating digital transformation across the region, these institutions must refine their cross-border financing strategies, strengthen risk management frameworks, foster deeper collaboration with local FinTech ecosystems, and actively promote green FinTech initiatives. These efforts are essential to safeguarding the long-term

resilience and sustainability of digital financial cooperation under the BRI framework.

1.Innovating Cross-Border Financing Mechanisms to Advance Digital Financial Projects

The sustained growth of digital finance in Southeast Asia hinges on stable and long-term capital infusion. Chinese financial institutions are well-positioned to catalyze this growth by creating dedicated Belt and Road digital finance funds aimed at supporting regional digital infrastructure development. Strategic partnerships—such as those between the Bank of China and commercial banks in the Philippines and Indonesia—could facilitate digital credit programs tailored to small and medium-sized enterprises, enabling underserved businesses to integrate into the digital financial ecosystem. For large-scale infrastructure projects, customized supply chain finance instruments can lower entry barriers for local firms, thereby fostering cross-border trade and investment. Notably, the Bank of China has piloted mobile payment and e-wallet-based digital lending services in Cambodia; scaling such models through regional partnerships would enhance financial inclusion and accessibility across Southeast Asia.

2.Advancing Risk Management to Mitigate Cross-Border Transaction Exposure

As Chinese financial institutions deepen their involvement in cross-border Belt and Road operations, they face mounting risks in credit assessment, contract enforcement, and AML compliance. Integrating smart contract technology offers a promising solution by enhancing transactional transparency and automating contractual enforcement, thereby reducing credit and fraud risks. In the context of supply chain finance, smart contracts can facilitate the seamless execution of payment, delivery, and settlement obligations across borders without the need for human intervention. For example, blockchain-based trade settlement platforms, if promoted in Southeast Asia, could significantly lower default risk. Moreover, the adoption of AI-driven risk assessment tools—leveraging region-specific data sources such as mobile payment histories and telecommunications usage—would enable financial institutions to construct refined credit scoring models, thereby improving risk forecasting and reducing the non-performing loan ratio in cross-border financial services.

3.Deepening Strategic Partnerships with Local Banks and FinTech Firms in Southeast Asia

Given the rapid growth of Southeast Asia's FinTech sector, where local players like Grab Financial and Gojek Pay have built robust user ecosystems and payment infrastructures, it is imperative that Chinese financial institutions pursue deeper collaboration with local stakeholders. Leveraging frameworks such as G2G (government-to-government), B2B (business-to-business), and PPP (public-private partnership) can facilitate more integrated financial cooperation. For instance, an expanded partnership between the Bank of China and Grab Financial Group could improve the efficiency of cross-border settlements and enhance the interoperability of payment systems across China and Southeast Asia. Additionally, Chinese institutions can co-develop data-sharing arrangements with local banks to strengthen digital lending ecosystems. Agricultural Bank of China, for example, could collaborate with Indonesian banks to introduce big data-driven risk assessment tools that streamline loan approval processes and mitigate credit default risk.

4.Advancing Green FinTech Collaboration to Foster Sustainable Development

As sustainability gains prominence on the global agenda, Southeast Asian economies are increasingly integrating green finance into their digital financial transitions. Chinese financial institutions are well-positioned to lead this transformation by

establishing green FinTech investment funds aimed at supporting renewable energy initiatives—such as wind and solar power—across the region. Emerging technologies like blockchain can further enhance project transparency and accountability. For instance, the Industrial and Commercial Bank of China (ICBC) could issue green bonds to finance long-term renewable energy projects in Indonesia and the Philippines, contributing meaningfully to the Belt and Road Initiative's sustainable trajectory.

Given that carbon markets in Southeast Asia remain nascent, financial institutions can play a catalytic role in their development. Blockchain-enabled platforms for carbon credit trading can improve traceability and liquidity, while ensuring the integrity of green transactions.

To strengthen their role in Belt and Road financial integration, Chinese financial institutions should adopt a comprehensive approach—refining cross-border financing mechanisms, deploying FinTech solutions to reduce transaction risk, building alliances with local financial actors, and championing green FinTech innovation. By embedding smart contracts and blockchain into payment and settlement infrastructure, these institutions can deepen their presence in Southeast Asia while fostering an inclusive and sustainable digital economy across Belt and Road partner countries.

Conclusion

Financial technology has emerged as a cornerstone of the Belt and Road Initiative (BRI), offering digital infrastructure to support its five key pillars: policy coordination, infrastructure connectivity, trade facilitation, financial integration, and people-to-people exchange. Through innovations such as mobile payments, cross-border supply chain finance, blockchain-based settlements, and digital lending, FinTech has significantly enhanced the efficiency of international trade and investment flows, while accelerating the growth of digital economies in Southeast Asia and other BRI partner regions. Chinese FinTech firms, leveraging their technological edge and operational expertise, have actively established a presence in Southeast Asia by forging strategic partnerships with local governments, financial institutions, and private enterprises. These collaborations have helped strengthen regional financial infrastructure and advanced the renminbi's role in international finance.

Yet, as the FinTech landscape matures, Chinese enterprises must navigate increasingly complex challenges—ranging from evolving regulatory frameworks and mounting market competition to heightened expectations around data governance and cybersecurity, as well as geopolitical challenges.

Looking forward, FinTech will remain a key engine in deepening the BRI's reach, particularly by unlocking new opportunities in digital RMB cross-border use, green FinTech partnerships, and regional payment system interoperability. As a strategic hub for BRI FinTech engagement, Southeast Asia is poised to play an even greater role in regional economic integration and digital transformation. In the context of persistent global economic stagnation, FinTech should serve as a leverage point for coordinated action among governments, businesses, and multilateral institutions to develop a more inclusive, equitable, and sustainable regional financial governance framework. This approach would deepen digital interconnectivity and financial co-governance, enabling the BRI to not only reconfigure patterns of regional connectivity but also provide robust support and sustained impetus for global economic recovery and cooperative engagement based on mutual trust.