

Research on the Development of Inclusive Finance in Hong Kong: A Fintech Perspective

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Abstract

The concept of inclusive finance encompasses the dissemination of accessible, efficient, and affordable financial services to every segment and stratum of society, fostering the broader reach and intensification of financial services. As the global economy evolves, inclusive finance has emerged as a critical component within the financial frameworks of numerous nations. Nevertheless, conventional financial systems exhibit certain constraints when catering to micro, small, and medium enterprises, as well as individuals with lower incomes, leaving unresolved issues of service universality and disparities in financial access. Financial technology, or FinTech, involves a collection of technologies and business models that leverage technological innovation to create new financial products, enhance service delivery, and streamline financial operations, thereby improving overall efficiency. The advent of FinTech presents both new avenues and challenges for the integration of financial services.

Hong Kong, a prominent international financial hub, boasts a sophisticated, resilient, and highly liberalized financial architecture. The surge in FinTech innovation within Hong Kong has introduced fresh avenues for the advancement of inclusive financial services. Despite this, the progression of inclusive finance in Hong Kong encounters certain obstacles, including the persistence of financial exclusion and the need for enhanced financial literacy. This study evaluates the current state of inclusive financial development in Hong Kong, scrutinizes the deployment of FinTech within the context of inclusive finance, and offers pertinent policy suggestions to bolster the growth of inclusive financial services in the region.

The insights derived from this research facilitate a deeper comprehension of the landscape and challenges of inclusive finance in Hong Kong, investigate the role and integration of FinTech in this domain, and provide valuable guidance and proposals for the further development of inclusive financial services in Hong Kong. Furthermore, the findings of this paper hold relevance and potential implications for the advancement of inclusive financial systems in other jurisdictions.

Keywords: financial inclusion, FinTech, policy recommendations

1. Introduction

The notion of financial inclusion is a topic that garners extensive attention in both academic and policy-making spheres. As delineated by the Consultative Group to Assist the Poor (CGAP, 2011), financial inclusion is characterized as a state wherein all individuals who can benefit from such services have access to a spectrum of robust financial offerings. These services should be delivered at prices that are affordable, through convenient channels, and with due respect for the dignity and rights of the consumers. This conceptualization underscores the necessity of ensuring that financial services are within reach, affordable, and suitable for every individual, irrespective of their social or economic standing.

Hong Kong, a key player in the global financial arena, has notably advanced in the realm of financial inclusion. The Hong Kong Monetary Authority (HKMA) has taken proactive steps to promote financial inclusion, striving to make financial services obtainable by the broader population, which includes those with lower incomes and small and medium-sized enterprises (SMEs). Nonetheless, certain obstacles persist. For instance, the high prevalence of banking services has not eradicated the issue of financial exclusion entirely, as certain demographic groups, such as those with limited financial means and the elderly, remain either unbanked or

underserved (Durner et al., 2015). Moreover, there is a pressing need to enhance the financial literacy of the public to empower individuals to make educated financial choices and to safeguard them against fraudulent activities (Engels et al., 2021).

The advent of financial technology (FinTech) promises to be a game-changer for financial inclusion. FinTech encompasses a diverse array of technological breakthroughs aimed at transforming traditional financial services. These innovations are designed to make financial products more accessible and affordable to the broader population. Mobile banking, peer-to-peer lending, and crowdfunding are among the FinTech solutions that have emerged prominently in recent times (Agarwal et al., 2020). Such technologies hold the potential to extend financial services to the unbanked and underserved populations by offering them convenient and cost-effective means to engage with financial services.

Nonetheless, the influence of FinTech on financial inclusion is not without its obstacles. While FinTech has the capacity to broaden the reach of financial services, it also gives rise to concerns surrounding cyber security, data protection, and the regulatory structures that oversee these novel technologies (Allen et al., 2021). Furthermore, there is a risk that FinTech could amplify the peril of financial exclusion for certain demographics, such as the elderly or those in remote regions with restricted internet connectivity (Tok et al., 2022).

The global journey toward financial inclusion offers instructive lessons for Hong Kong. For instance, Kenya has effectively harnessed mobile banking to deliver fundamental financial services to individuals via their mobile devices, thus fostering financial inclusion (Suri et al., 2023). In India, the implementation of biometric systems has streamlined the direct disbursement of government benefits to intended recipients, furthering financial inclusion efforts (Sethy et al., 2016).

In China, the swift growth of FinTech has been instrumental in advancing financial inclusion. Platforms like Alipay and WeChat Pay, which are leading mobile payment solutions, have enabled millions of individuals and commercial entities to engage with the formal financial sector (Demirguc-Kunt et al., 2018). These platforms provide an array of financial services, including payments, wealth management, and microfinance, catering to the varied financial requirements of users.

Financial inclusion is a critical component of a contemporary, inclusive financial framework. Hong Kong has made strides in this domain, yet there remains scope for enhancement. By leveraging both local and international insights, Hong Kong can enact suitable policies to further advance financial inclusion, ensuring that all residents have access to top-tier, affordable financial services.

2. An Analysis of the Current State of Inclusive Finance Development in Hong Kong

2.1 Overview of the Financial System in Hong Kong

In recent times, there has been an escalating global focus on the advancement of financial inclusion as a strategy to alleviate poverty, stimulate economic expansion, and enhance the general welfare of individuals and communities. The concept of inclusive finance, also termed financial inclusion, encompasses the delivery of financial products and services that are cost-effective, accessible, and suitable for individuals and small enterprises that are typically marginalized by conventional financial establishments (Isukul et al., 2021). This demographic includes those with low incomes, women, rural residents, and micro-entrepreneurs, among other groups. The objective of inclusive finance is to empower these underrepresented sectors by equipping them with the essential instruments and opportunities to govern their finances, invest in income-producing ventures, and develop resilience against economic disruptions.

Hong Kong, a prominent player in the international financial sphere, has achieved considerable milestones in fostering financial inclusion. The city boasts a sophisticated financial infrastructure, a robust regulatory system, and a populace with a high degree of financial literacy. Nonetheless, akin to numerous other advanced economies, Hong Kong confronts challenges in ensuring that all of its inhabitants and small commercial entities have access to financial services that are both affordable and appropriate (Naradda Gamage et al., 2020). This is especially pertinent for those with low incomes, migrant laborers, and micro-entrepreneurs, who may encounter obstacles in availing themselves of traditional banking and financial amenities.

The significance of inclusive finance in Hong Kong is paramount. By championing financial inclusion, the city can contribute to the reduction of wealth disparity, nurture social unity, and advance sustainable economic progress. Inclusive finance also holds a pivotal role in the empowerment of women, who are frequently precluded from participating in financial decision-making processes (Tanima et al., 2020). By granting women access to financial services, they can achieve greater economic autonomy, invest in their personal development and well-being, and enrich the collective prosperity of their families and localities.

Inclusive finance similarly bears a profound impact on the vitality of small-scale enterprises, notably micro-entrepreneurs and small and medium-sized enterprises (SMEs). The availability of credit, savings, and insurance offerings can assist these ventures in managing their financial flows, capitalizing on expansion opportunities, and cushioning against potential risks (Ekwueme et al., 2020). This, in turn, can pave the way for job generation, heightened productivity, and economic diversification.

2.2 State of the Market for Inclusive Finance in Hong Kong

2.2.1 Market Players

Hong Kong's landscape of inclusive finance is populated by a diverse array of institutions, encompassing commercial banks, microfinance entities, non-profit organizations, and FinTech newcomers. Commercial banks, which hold a commanding position within the financial sector, have progressively directed their attention towards inclusive finance endeavors (Haralayya et al., 2022). This shift is driven by the need to adhere to regulatory mandates and to exploit emerging market segments. Microfinance institutions are dedicated to supplying modest loans and related financial services to those with low incomes and micro-entrepreneurs (Hasan et al., 2022). Non-profit organizations frequently operate as intermediaries, harnessing their community connections to advance financial inclusivity (Bals et al., 2023). FinTech startups are leveraging technology to furnish innovative and accessible financial services, frequently targeting the unbanked and underbanked populations.

2.2.2 Regulatory Environment

The regulatory framework is instrumental in advancing the cause of inclusive finance. In Hong Kong, the Monetary Authority has exhibited a supportive stance towards inclusive finance initiatives, enacting policies that foster financial inclusion and ensuring that the regulatory structure is amenable to innovation. For instance, the regulators have relaxed certain compliance burdens for FinTech participants and sandbox initiatives, enabling them to pilot new inclusive finance products and services without the full weight of regulatory obligations. The government has also collaborated with private sector entities to initiate financial inclusion programs designed to enhance access to financial services for marginalized communities.

2.3 Inclusive Financial Products and Services in Hong Kong

2.3.1 Banking Services

Hong Kong's commercial banks have taken the lead in crafting inclusive banking solutions. They provide simplified banking accounts with reduced minimum balance thresholds and streamlined paperwork, facilitating access for those with modest incomes and unestablished credit backgrounds. These accounts typically come with amenities such as debit cards, online and mobile banking platforms, and ATM accessibility. Furthermore, banks have introduced remittance services characterized by competitive fees and expedited transaction speeds, catering to the needs of migrant workers and their dependents.

2.3.2 Credit Facilities

The availability of credit is pivotal for individuals and small enterprises looking to manage their financial flows and capitalize on income-generating prospects. Inclusive financial entities within Hong Kong have developed a suite of credit options designed to meet the unique needs of underserved markets. This encompasses small personal loans, microloans, and microfinance services with accommodating repayment terms and reduced interest rates. Certain institutions have also pioneered credit evaluation and lending methods that leverage alternative data points, such as mobile phone usage and social media engagement, to gauge the creditworthiness of individuals lacking conventional credit records.

2.3.3 Savings and Investment

Fostering a culture of savings and investment among those with lower incomes is an integral component of inclusive finance. Financial institutions in Hong Kong have introduced savings products that boast competitive interest rates and adaptable deposit terms. Additionally, they offer investment avenues like microsavings plans and modest-denomination insurance policies, enabling individuals to regularly set aside and invest modest sums. These offerings not only assist in building personal savings but also promote financial prudence and long-range financial strategies.

2.3.4 Insurance

Inclusive insurance products are vital in offering financial safeguarding to the less privileged. Insurance providers in Hong Kong have developed budget-friendly and straightforward insurance policies, including life, health, and accident cover, tailored to the needs of low-income households. These policies provide a financial

safety net against unexpected events and help to buffer the effects of economic hardships.

2.3.5 Financial Education

The importance of financial education cannot be overstated; it empowers individuals to make savvy financial choices and to utilize financial tools effectively. In Hong Kong, a coalition of organizations—comprising financial institutions, non-profits, and governmental bodies—has embarked on financial literacy initiatives targeted at various societal strata. These initiatives encompass fundamental financial principles, budgeting, saving, investing, and debt management, aiming to equip individuals with the skills necessary for responsible financial stewardship and enhanced financial health.

2.3.6 Fintech Solutions

Hong Kong's Fintech startups are harnessing technology to craft cutting-edge and accessible financial services for the underserved. Their offerings include mobile banking applications, peer-to-peer lending platforms, digital wallets, and cryptocurrency-based services. Fintech innovations are streamlining financial transactions, lowering costs, and providing convenient and secure pathways to financial services—especially beneficial for those in remote areas or without access to traditional banking facilities.

2.4 Milestones and Obstacles in Hong Kong's Inclusive Finance Development

2.4.1 Milestones

1) Increased access to banking offerings

A significant milestone in Hong Kong's inclusive finance journey is the expanded access to fundamental banking services. Conventional banks have broadened their product suites to cater to the needs of individuals with lower incomes and those with sparse or non-existent credit backgrounds. This expansion includes streamlined account opening processes, reduced minimum balance requirements, and the availability of mobile banking tools. Consequently, a greater portion of the population now has the ability to utilize bank accounts, debit cards, and other essential banking services.

2) Growth of microfinance and fintech

Hong Kong has experienced the blossoming of microfinance institutions and Fintech startups that are dedicated to serving the traditionally underserved sectors. These entities offer small-scale loans, savings products, and other financial services that are custom-fit for low-income individuals and micro-entrepreneurs. Fintech solutions, in particular, have been instrumental in bolstering financial inclusion by leveraging technology to provide innovative and accessible financial services.

3) Enhanced financial literacy

The push for financial education and literacy has gathered steam in Hong Kong. A coalition of entities, including financial institutions, non-profit organizations, and governmental bodies, is actively engaged in implementing financial literacy programs that target various demographic groups. These initiatives aim to empower individuals with the necessary knowledge and skills to make educated financial choices, manage their finances prudently, and enhance their financial well-being.

4) Supportive regulatory climate

Hong Kong's regulatory climate has proven to be conducive to inclusive finance endeavors. The Monetary Authority has enacted policies that foster financial inclusion, relaxed certain regulatory burdens for Fintech participants and sandbox initiatives, and collaborated with private sector entities to launch programs that advance financial inclusion. This enabling regulatory structure has fostered innovation and allowed financial institutions to develop and deploy inclusive financial products and services.

2.4.2 Obstacles

1) Elevated costs of servicing low-income clients

The challenge of serving the low-income sector is compounded by the high expenses related to outreach, customer acquisition, and ongoing service provision. Financial institutions often struggle to offer cost-effective services without compromising their profitability, a dilemma that is particularly pronounced when serving geographically isolated or economically challenged areas.

2) Financial literacy gaps

Despite advancements, financial literacy continues to be a considerable challenge in Hong Kong. A significant portion of the population, especially those from low-income households, lacks the financial acumen and skills

required to engage with the financial system proficiently. This deficit impedes their ability to access and utilize financial products and services, thereby constraining the impact of inclusive finance initiatives.

3) Market dominance of traditional banks

The market prominence of traditional banks presents a challenge to the growth and innovation of inclusive finance. Although these banks have augmented their inclusive finance offerings, the constrained reach of microfinance institutions and Fintech startups hampers market competition and diversity. This limitation can restrict the provision of customized and innovative financial solutions for the underserved segments.

4) Supervisory model

Although the regulatory environment is largely accommodating, supervisory barriers and compliance costs can impede the advancement of inclusive finance. Financial institutions and Fintech startups must navigate intricate regulatory demands, particularly in areas such as customer identification and anti-money laundering protocols. These requirements can inflate the costs and complexities associated with offering inclusive financial products and services.

3. Cutting-Edge FinTech Solutions for Enhancing Financial Inclusion in Hong Kong

3.1 Overview of Financial Technology

Financial technology (FinTech) encompasses a suite of technologies and business models that leverage technological advancements to revolutionize financial products, enhance financial services, and boost financial efficiency. The FinTech domain encompasses a broad spectrum of innovations, including artificial intelligence, blockchain, cloud computing, big data analytics, mobile payments, network security, and more. The proliferation of FinTech holds profound implications for financial inclusion, as it has the potential to extend convenient, efficient, and affordable financial services to a wider population, thereby accelerating the growth of inclusive finance.

3.1.1 Policy Framework

The Hong Kong government has demonstrated a proactive approach towards the FinTech sector, acknowledging its potential to catalyze economic expansion and advance financial inclusion. In 2016, the government established the FinTech Steering Committee to coordinate and accelerate the industry's growth. Moreover, regulatory sandboxes have been introduced by the Securities and Futures Commission (SFC) and the Hong Kong Monetary Authority (HKMA), providing FinTech firms a controlled environment to experiment with and test new products and services.

3.1.2 Market Size

The FinTech industry in Hong Kong has experienced exponential growth in recent years. According to a report by InvestHK, the industry employed over 6,000 individuals and attracted more than HK\$11 billion in investment in 2019. The number of FinTech companies in Hong Kong has surged, with over 600 companies operating across various sectors, including payments, wealth management, and regtech.

3.1.3 Key Participants

Hong Kong's FinTech ecosystem is a melting pot of diverse market participants, ranging from startups to established financial institutions, and technology giants. Prominent FinTech startups in Hong Kong include WeLab, a leading online lending platform, and TNG FinTech Group, a provider of digital wallets. Traditional banks such as HSBC and Standard Chartered have also embraced FinTech, launching their own digital banking subsidiaries, HSBC's Mox and Standard Chartered's Mox, respectively.

3.1.4 Innovation

Hong Kong has emerged as a hub for FinTech innovation, with a variety of initiatives and programs driving the development of new technologies. The Hong Kong Science and Technology Parks Corporation (HKSTP) has launched the FinTech Virtual Lab to support the research and development of FinTech solutions. Additionally, the government has provided funding and support for various FinTech initiatives, such as the FinTech Innovation Lab Asia-Pacific, which facilitates connections between FinTech startups and major financial institutions.

3.2 A Case Study of FinTech Application in Financial Inclusion in Hong Kong

3.2.1 Mobile Payment

Mobile payments have emerged as a cornerstone of FinTech's role in advancing financial inclusion in Hong Kong (Hu et al., 2022). The mobile payments market has experienced a surge in growth, giving rise to several

prominent players such as Alipay, WeChat Pay, and Octopus. These platforms offer residents and small and medium-sized enterprises (SMEs) a novel payment method that significantly reduces transaction costs and enhances efficiency. For instance, Alipay has introduced a spectrum of mobile payment services in Hong Kong, including online payments, offline code-scanning transactions, and money transfers. These services not only provide convenience to residents but also offer low-cost payment solutions for SMEs and individual entrepreneurs, thereby fostering the growth of inclusive finance.

3.2.2 Online Lending

Online lending platforms, powered by technologies like big data and artificial intelligence (AI), have revolutionized access to credit for micro and small enterprises (MSEs) and individuals. These platforms enable rapid credit assessment and risk pricing, creating a new financing channel for MSEs and individuals. WeLab, a Hong Kong-based FinTech company, is a prime example with its online lending platform, WeLend. WeLend leverages big data and AI to assess borrower creditworthiness and offers a streamlined loan approval process. This not only improves efficiency but also reduces loan costs, contributing to the development of inclusive finance.

3.2.3 Blockchain

Blockchain technology, known for its decentralized, secure, and transparent nature, is being utilized to create new trust mechanisms and service models for financial inclusion in Hong Kong. bitFlyer, a Hong Kong-based FinTech enterprise, has launched a digital currency trading platform using blockchain technology. This platform ensures transaction security and transparency, providing investors with a novel way to trade digital currencies. bitFlyer's service not only enhances transaction efficiency but also reduces costs, further promoting financial inclusion.

3.2.4 InsurTech

InsurTech startups in Hong Kong have developed innovative insurance products and platforms, making insurance more accessible to individuals. Bowtie, Hong Kong's first virtual insurance company, offers online insurance products, simplifying the process of obtaining coverage. InsurTech companies also use data and technology to personalize insurance policies and offer more affordable options for those previously uninsured.

3.2.5 AI and Big Data

AI and big data analytics have been instrumental in enhancing the accessibility and affordability of financial services in Hong Kong. AI-powered chatbots and robo-advisors provide financial advice and assistance, making it easier for individuals to make informed financial decisions. Big data analytics is used to assess the creditworthiness of individuals with limited or no formal credit history, opening up access to credit and other financial services.

3.3 *The Future of FinTech in Hong Kong's Financial Inclusion*

3.3.1 Digital Banking

The future of FinTech in Hong Kong is poised to be shaped significantly by the rise of digital banking. As the convenience, accessibility, and cost-efficiency of online and mobile banking platforms continue to attract both individuals and businesses, the demand for traditional brick-and-mortar banking is expected to decline. The introduction of virtual banking licenses in Hong Kong has already ushered in a new era of digital banking, with institutions like ZA Bank and WeLab Bank emerging to offer more accessible and customer-centric financial services.

3.3.2 Open Banking

Open banking is anticipated to significantly impact inclusive finance in Hong Kong. This paradigm shift involves allowing third-party financial service providers to access and utilize customer data from traditional banks, provided that customers give their consent. This opens the door to the development of new and innovative financial services that can be tailored to the specific needs of individuals and small businesses. The Open API framework introduced by the Hong Kong Monetary Authority (HKMA) is expected to further promote open banking and drive innovation in the financial services industry.

3.3.3 Blockchain and Cryptocurrency

Blockchain technology and cryptocurrency have the potential to transform financial services by offering a secure, transparent, and efficient way to record and verify transactions. The Hong Kong government has shown support for the development of blockchain and cryptocurrency, with initiatives like the Hong Kong Blockchain

Association and the establishment of regulatory sandboxes for cryptocurrency exchanges. As this technology matures, it is expected that blockchain and cryptocurrency will play an increasingly vital role in advancing financial inclusion in Hong Kong.

3.3.4 InsurTech and HealthTech

InsurTech and HealthTech are two areas where FinTech is expected to have a substantial impact on inclusive finance in Hong Kong. InsurTech startups are creating innovative insurance products and platforms that simplify access to insurance coverage, making it more accessible to individuals. HealthTech startups are using technology to improve the delivery and affordability of healthcare services. As these industries continue to expand, they are likely to contribute to promoting financial inclusion by making insurance and healthcare more accessible and affordable for individuals and small businesses.

3.3.5 AI and Machine Learning

Artificial intelligence (AI) and machine learning are expected to play an increasingly significant role in the financial services industry in the coming years. These technologies can automate processes, improve decision-making, and personalize financial services. In Hong Kong, AI and machine learning are already being utilized by financial institutions to enhance customer service, detect fraud, and assess creditworthiness. As these technologies continue to advance, it is anticipated that AI and machine learning will be used even more extensively in the financial services industry, thereby promoting financial inclusion by making services more accessible and efficient.

3.4 Ways to Utilize Fintech in Financial Inclusion

3.4.1 Cloud Computing

Lowered Operational Expenditures: The implementation of cloud computing within financial institutions has led to a significant reduction in the cost of providing services. This cost-effectiveness is of paramount importance in the context of inclusive finance, as it serves to decrease the fixed costs associated with service provision. By leveraging cloud-based solutions, financial institutions are able to offer their services at a more economical rate, thereby extending their reach to the underserved and marginal segments of the market. This affordability is a critical factor in promoting financial inclusion, ensuring that individuals and businesses at the fringes of the economy can access the financial tools and services they need to participate in the broader economic landscape (Feyen et al., 2023). As a result, cloud computing not only enhances the operational efficiency of financial institutions but also plays a pivotal role in democratizing access to financial services, contributing to a more equitable and inclusive financial ecosystem.

Enhanced Accessibility: The adoption of cloud computing has revolutionized the provision of financial services by enabling remote access to banking and financial products. This technological advancement is particularly transformative for individuals residing in geographically distant or isolated regions, who may otherwise face significant barriers to accessing traditional banking services. By leveraging cloud-based platforms, financial institutions can extend their service delivery beyond the confines of physical branches, reaching customers in even the most far-flung areas (Agarwal et al., 2021). This expanded accessibility is not only convenient for customers, but it also serves to bridge the financial services gap that often exists between urban and rural populations. As a result, cloud computing acts as a catalyst for financial inclusion, ensuring that a broader spectrum of the population can engage with and benefit from essential financial services, regardless of their physical location. This broader reach contributes to a more comprehensive and equitable financial services landscape, where distance is no longer a barrier to participation in the modern economy.

3.4.2 Blockchain

Strengthened Security Infrastructure: Blockchain technology has emerged as a groundbreaking solution that provides a secure and transparent framework for recording transactions. This innovation is of paramount importance in the financial services sector, where the establishment and maintenance of trust are critical to the functioning of the economy. By leveraging the inherent immutability and cryptographic security of blockchain, financial institutions can ensure that all transactions are recorded accurately and cannot be altered retroactively (Khan et al., 2020). This heightened level of security not only mitigates the risks of fraud and manipulation but also instills confidence in the financial system among users. For marginalized groups, who may be more susceptible to financial fraud and exploitation, the use of blockchain technology in financial services can be particularly empowering. It provides them with a reliable and verifiable record of their financial activities, which can be crucial for accessing credit and other financial services (Pazarbasioglu et al., 2020). In this way, blockchain technology serves as a cornerstone for building a more inclusive and trustworthy financial ecosystem,

where the integrity of transactions is guaranteed and the rights of all participants are protected.

Simplified Cross-Border Transactions: The implementation of blockchain technology has the potential to greatly streamline the complex process of cross-border payments, thereby reducing both the costs and the time associated with such transactions. This advancement is especially advantageous for migrant workers and other financially vulnerable groups who regularly rely on international remittance services to send money to their families or communities abroad. By leveraging blockchain's decentralized and distributed ledger system, financial institutions can bypass traditional intermediaries, such as banks, which often incur high fees and delays (Chen et al., 2020). This direct peer-to-peer transaction capability not only decreases the financial burden on remitters but also accelerates the speed at which funds are received by beneficiaries. For individuals who depend on timely remittances for their daily livelihoods, this efficiency can be life-changing. Moreover, the enhanced transparency and security provided by blockchain technology can provide peace of mind to remitters, ensuring that their hard-earned money reaches its intended destination safely and securely. Overall, the integration of blockchain into cross-border payment systems holds the promise of a more affordable, efficient, and inclusive global financial landscape, where the movement of money across borders is as seamless as it is within them.

3.4.3 Big Data

Advanced Credit Evaluation: The application of big data analytics has significantly enhanced the ability of financial institutions to assess the creditworthiness of individuals who lack conventional credit histories. This analytical proficiency is pivotal in expanding financial access, as it empowers these institutions to extend loans and other financial services to a broader segment of the population. By analyzing a diverse array of data sources, including but not limited to transaction records, social media behavior, and utility payment histories, financial institutions can construct a more comprehensive and nuanced profile of an individual's financial behavior and reliability (Lyons et al., 2021). This innovative approach to credit assessment allows for a more equitable lending landscape, where individuals are not solely judged on their past credit interactions but on a broader spectrum of financial activities and behaviors. As a result, individuals who have previously been excluded from formal financial services due to a lack of credit history can now gain access to the financial tools they need to invest, save, and manage risks. This not only promotes financial inclusion but also contributes to a more robust and diversified economy, where the potential for entrepreneurial activity and economic growth is unlocked for a wider audience.

Tailored Financial Solutions: The utilization of big data analytics by financial institutions enables a deeper comprehension of customer needs and preferences, facilitating the provision of highly personalized financial products and services. Through the examination of extensive datasets, which may include customer transactional behavior, demographic information, and online interactions, institutions can identify patterns and trends that inform the design of bespoke financial offerings (Mukhtarov et al., 2023). This data-driven approach allows for the creation of services that are uniquely tailored to the individual requirements of customers, ensuring that each person receives financial solutions that align with their specific circumstances and aspirations. By moving beyond one-size-fits-all products, financial institutions can enhance customer satisfaction and loyalty, as well as effectively address the diverse financial challenges faced by different segments of the population (Aloulou et al., 2023). This level of personalization not only improves the consumer experience but also promotes financial literacy and empowerment, as individuals are more likely to engage with services that are intuitive and relevant to their lives. Ultimately, the integration of big data analytics in the development of financial products and services represents a significant step towards a more customer-centric financial industry, where customization and individual attention are at the forefront of service delivery.

3.4.4 Artificial Intelligence

Round-the-Clock AI-Driven Customer Support: The integration of artificial intelligence into customer service operations has revolutionized the accessibility of financial support, offering a seamless 24/7 service through the deployment of chatbots and virtual assistants. These AI-driven interfaces are adept at responding to customer inquiries and providing assistance, thereby catering to the needs of individuals whose work schedules do not accommodate traditional business hours. By leveraging natural language processing and machine learning algorithms, these virtual agents can understand and address a wide range of customer questions with accuracy and efficiency, ensuring that banking services are accessible at any time, day or night (ElSaadawy et al., 2022). This constant availability is particularly beneficial for customers who require after-hours support or those who prefer to manage their finances outside of conventional working hours. The convenience and responsiveness of AI-driven customer service not only enhance the overall customer experience but also contribute to a more inclusive financial ecosystem, where individuals with varying schedules and lifestyles can access the support

they need, when they need it. This commitment to accessibility and customer care through innovative technology reflects the evolving landscape of financial services, where the integration of AI continues to raise the bar for customer support and satisfaction.

Sophisticated Risk Analysis and Mitigation: The application of artificial intelligence within financial institutions has introduced a new era of risk management, capable of analyzing vast quantities of data to pinpoint and address potential risks with a level of precision previously unattainable. This capability is of paramount importance in safeguarding vulnerable groups from engaging with financial products that could be detrimental to their financial health. AI systems can process and interpret enormous datasets, identifying patterns and anomalies that may indicate emerging risks, allowing institutions to take proactive measures to mitigate these threats (Sarker et al., 2022). By employing predictive analytics and scenario modeling, AI can forecast potential market shifts and customer behaviors, enabling financial institutions to make informed decisions that prioritize the protection of their clients' interests. For individuals with limited financial resilience, such as low-income families or the elderly, this enhanced risk management is particularly critical, as it helps to ensure that they are not exposed to predatory or inappropriate financial products (Truby et al., 2020). In this way, AI not only strengthens the integrity of the financial system but also plays a vital role in promoting financial fairness and consumer protection, contributing to a more secure and ethical financial environment for all stakeholders.

4. Strategic Policy Initiatives in Financial Technology for Advancing Inclusive Financial Growth in Hong Kong

4.1 RegTech

To ensure the successful integration of regulatory technology (RegTech) into Hong Kong's financial inclusion framework, the government should establish a clear and comprehensive regulatory framework. This framework should provide clear guidance on the use of technology in regulatory compliance, addressing key issues such as data privacy, cybersecurity, and the use of AI in decision-making. Collaboration with industry stakeholders is crucial for the development of standards and best practices for RegTech solutions (Teichmann et al., 2023). Additionally, the government should enhance existing regulatory sandboxes to create a safe and controlled environment for financial institutions and RegTech firms to test and experiment with new compliance solutions. This approach will accelerate the development and deployment of RegTech solutions in the market, paving the way for greater financial inclusion.

4.2 Talent

The growth of FinTech for financial inclusion in Hong Kong hinges on the availability of skilled technical talent. The SAR government must prioritize the cultivation and attraction of FinTech talent to support the needs of FinTech enterprises. To accomplish this, several strategic approaches can be employed: firstly, intensifying the training programs for fintech specialists to elevate their expertise and proficiency; secondly, proactively enticing top international fintech talent to foster innovation and the deployment of cutting-edge solutions in the sector; and lastly, establishing collaborations with academic institutions and research organizations to nurture a new cadre of skilled professionals in the fintech domain.

4.3 Cooperation

The government should encourage knowledge sharing and dialogue between FinTech companies and financial institutions through forums, seminars, and innovation labs. This will help build trust and understanding between the two sectors, fostering a culture of cooperation. Additionally, incentives such as tax incentives, grants, and subsidies should be provided to overcome the initial costs and barriers to cooperation, making collaboration more appealing. Facilitating access to capital for those willing to collaborate is also important. This can be achieved by setting up venture capital funds, offering loan guarantees, or partnering with private investors.

4.4 Financial Literacy

It is imperative for governments to collaborate with educational entities, financial establishments, and charitable organizations to design and execute comprehensive financial literacy initiatives tailored for individuals across all age brackets. These initiatives should encompass essential topics such as personal financial administration, budgeting practices, savings strategies, investment principles, and the proficient utilization of digital financial tools. The government ought to establish a centralized, online hub that provides the general public with straightforward and impartial access to financial knowledge, resources, and instruments. This hub should function as an all-inclusive financial educational platform, assisting individuals in enhancing their financial acumen and facilitating well-advised financial choices. The government must also reinforce the regulation of financial institutions to guarantee adherence to consumer safeguard regulations. It should mandate financial

institutions to supply consumers with unambiguous and exhaustive information concerning their products and services, including the disclosure of costs, terms, potential risks, and benefits. This empowers individuals to make enlightened financial decisions. Governments should also set up and advocate for effective and accessible mechanisms for resolving financial disputes. This involves the creation of an autonomous financial ombudsman system to manage complaints and conflicts arising between financial institutions and consumers, thereby ensuring that citizens have a course of action in the event of a disagreement.

4.5 Infrastructure

Governments are encouraged to foster and allocate resources towards the advancement of cutting-edge financial technologies, which can enhance the efficiency and accessibility of financial services. Innovations such as blockchain, artificial intelligence, and cloud computing can bolster security, lower costs, and broaden the availability of financial services (Kunduru et al., 2023). Efforts should be made to establish an inclusive and accessible payment system that caters to all individuals, including those who are unbanked or underbanked. This objective can be achieved by promoting the integration of digital payment solutions, such as mobile payment platforms and electronic wallets, while ensuring their compatibility across diverse systems. The establishment of a robust, centralized credit information system is crucial for evaluating the creditworthiness of individuals and small enterprises (Wang et al., 2023). Governments should back the development of such a system, which aids financial institutions in making informed lending judgments and mitigating default risks. As financial services continue to digitize, robust identity verification protocols and cybersecurity measures are vital to shield personal financial data and combat fraud (Kafi et al., 2023). Governments should advocate for the implementation of sophisticated authentication technologies and cybersecurity protocols by financial institutions. Hong Kong, as a prominent global financial hub, should strive to develop a financial infrastructure that facilitates cross-border transactions and collaboration. This includes initiatives like the development of a regional payment system and the alignment of regulatory frameworks with other jurisdictions.

5. Conclusion

This study examines the progress of financial inclusivity in Hong Kong and explores the role of financial technology in advancing this agenda. The analysis yields several key insights:

Initially, Hong Kong has made strides in financial inclusivity, though challenges persist. The accessibility of financial services is generally high, with the majority of the population enjoying convenient access to fundamental financial services. Nonetheless, there are pockets of financial exclusion, where certain demographic groups struggle to obtain basic financial services. Moreover, there is a need to enhance financial literacy levels, as some individuals lack the necessary knowledge and understanding to navigate financial matters effectively, leaving them susceptible to fraudulent activities.

Secondly, financial technology has significantly contributed to the advancement of financial inclusivity in Hong Kong. Innovations such as mobile payments, online lending platforms, and blockchain technology have introduced new payment and financing options for residents and small to medium-sized enterprises, leading to reduced transaction costs and improved efficiency. However, the growth of fintech also brings along risks and challenges, including those related to financial risk management and consumer safeguarding.

In conclusion, the paper offers a set of policy suggestions to foster the further growth of inclusive finance in Hong Kong. The Special Administrative Region government should refine fintech regulatory frameworks, invest in the development and recruitment of fintech talent, encourage fintech innovation and application, strengthen risk management and consumer protection within the fintech sector, and prioritize the establishment of a robust fintech infrastructure.

Overall, the expansion of fintech presents both opportunities and challenges for financial inclusivity. To facilitate the continued progress of inclusive finance, the SAR government should implement targeted policy measures to advance the healthy growth and broad implementation of fintech. Additionally, the findings of this paper may serve as a valuable reference and source of inspiration for the development of inclusive financial systems in other nations and regions.

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