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UNIVERSITY OF TORONTO

ESCAPING THE MIDDLE INCOME TRAP: FINTECH REGULATORY REFORM IN VIETNAM

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Introduction

Vietnam is a "development success story," remarkably transitioning to a vibrant, innovative lower middle-income (LIMC) country in a mere few decades (World Bank, 2023). While recent economic performance has been impressive, the nation faces slowing GDP growth in 2023 and increasing concern about the middle-income trap (Eckardt & Ngoan, 2019). In order to achieve the national objective of reaching high-income status by 2045, Vietnam will need to modernize rapidly and sustain strong economic growth for the next 25 years (Eckardt & Ngoan, 2019). Financial inclusion is one of the most salient strategic areas for propelling economic development, which has been shown to boost economic growth through increased consumption and fiscal space (IMF, 2016). With a large portion of the Vietnamese population remaining unbanked and part of the informal economy, there is a clear need for increased access to financial services, such as banking, credit, insurance and investments (Nathan et al., 2022). The burgeoning financial technology, “fintech” sector, holds immense opportunity for boosting financial inclusion and, in turn, economic growth in Vietnam. However, key barriers remain to harness fintech’s full potential, as institutions have struggled to keep pace with industry growth and strike a balance between regulation and consumer protection (Ha & Nguyen, 2023). In particular, the current regulatory framework imposes excessive barriers that hamper innovation in some areas while lacking vital consumer protections in others. In order to address these challenges, this paper argues for the implementation of a regulatory sandbox as a tool for controlled regulatory reform in Vietnam.

The paper begins by discussing the regulatory challenges within Vietnam's fintech sector, focusing on two critical areas: digital payments and peer-to-peer (P2P) lending. It explores how overregulation in digital payments has yielded market entry barriers, stifling innovation and financial inclusion, while the lack of regulation in the P2P lending space leads to consumer protection issues and conflicts with Vietnamese cultural values. This analysis sets the foundation for understanding the urgent need for regulatory reform in Vietnam's fintech landscape, leading to the policy objective, which emphasizes the need to strike a balance between encouraging innovation and protecting consumers, investors, and the broader financial system. The subsequent proposed solution section advocates for a regulatory sandbox approach as a strategic response to the identified challenges. To justify the proposed solution, it is compared against the status quo as the policy alternative. An analytical framework follows, offering a structured evaluation of the status quo across various dimensions such as administrative and fiscal capacities, political feasibility, innovation potential, and impact on financial inclusion. The paper then moves into a detailed

discussion, demonstrating the suitability of the proposed policy across these same dimensions. The implementation section acknowledges the limitations of the policy approach and identifies areas for refinement. The paper culminates in a conclusion, summarizing the key findings and reinforcing the argument for fintech regulation reform as a pathway for Vietnam to navigate and ultimately escape the middle-income trap.

Problem Overview

The rapid evolution of the fintech industry, in tandem with the multi-sectoral scope spanning financial, data security and digital privacy risks, makes fintech regulation a complex challenge for governments (Knight, 2016). As the Vietnamese government has adopted a piecemeal approach in introducing independent regulations that comprise the current regulatory framework, it has imposed excessive restrictions in areas that hamper innovation while lacking consumer protection in others. These issues are especially pronounced in Vietnam's two largest sub-sectors of the fintech industry: digital payments and P2P lending (Nguyen, 2023). The following section will describe how overregulation in digital payments creates entry barriers for new fintech firms and hampers financial inclusion. Afterwards, it will describe how a lack of regulation in P2P lending harms consumers, conflicts with Vietnamese cultural values, and similarly impedes financial inclusion. These examples illustrate the need for a new approach to innovation that can successfully strike a balance between fostering innovation and protecting consumers.

a. Digital Payments

In the realm of digital payments, overregulation presents significant obstacles to market entry and financial inclusion. The main regulation on the largest segment of Vietnam's fintech industry, digital payments, is Decree No. 101/2012/ND-CP on Non-Cash Payments (Thu Vien Phap Luat, 2012). It mandates intermediary payment service (IPS) providers to obtain a business license from the State Bank of Vietnam, ensure a minimum of 50 billion VND in charter capital, and comply with specific human resource criteria (Thu Vien Phap Luat, 2012). Additionally, the decree restricts foreign companies from obtaining licenses, requiring IPS firms to be based in Vietnam (YKVN, 2023). This significantly stifles the growth potential of Vietnam's digital payments sector, imposing onerous entry barriers for fintech firms as they face a rigorous licensing procedure with the State Bank of Vietnam (YKVN, 2023). In an effort to bypass the expensive and time-consuming licensing process, 76 percent of Vietnamese fintech utilize partnerships with banks as a market entry strategy (Ministry of Finance, 2022). While this strategy can offer a regulatory loophole, it entrenches

the control of traditional financial institutions, blocking more radical innovations from emerging startups (Jenweeranon, 2023). Furthermore, the Government passed a sub-regulation to Decree No. 101 titled Circular No. 39/2014/TT-NHNN Guiding The Intermediary Payment Services (Thu Vien Phap Luat, 2014). This regulation mandated that e-wallet accounts be connected to valid bank accounts (Thu Vien Phap Luat, 2014). In effect, this requirement has excluded most Vietnamese from the benefits of e-wallets, given that only 31 percent of adults have bank accounts (Jenweeranon, 2023). These developments have led experts, including Jenweeranon (2023), to deem the current regulatory framework as "unreasonable" (p. 523). They argue that the stringent regulation surrounding e-wallets could explain why Vietnam is "still behind some other [ASEAN] countries in transforming into a cashless society" (Jenweeranon, 2023, p. 522; UNSGSA, 2019). When a significant segment of the population is underserved, fintech firms miss the opportunity to develop and test new technologies and business models catering to these potential users, driving economic growth (Jenweeranon, 2023).

b. Peer-to-Peer Lending

Contrary to digital payments, no specific government decree or legal framework regulates P2P lending. The absence of regulatory boundaries on P2P lending platforms has generated significant regulatory ambiguity (Knight, 2016). This degree of uncertainty has dampened investor confidence, negatively impacting fintech startups that require significant venture capital to develop and scale their technologies (Magnuson, 2018). In addition to regulatory uncertainty, the lack of consumer protections has led to predatory practices that are poorly aligned with Vietnam's collectivist, socialist culture (Nguyen, 2023b). For instance, P2P lending platforms have been able to enter the Vietnamese market and charge excessively high interest rates. These platforms distinguish themselves from traditional banks by offering quick and easy loans with minimal requirements, such as no need for collateral or commission fees (Jenweeranon, 2023). A 2020 article from Vietnam News found that over 60,000 people across 63 provinces and cities in Vietnam became indebted due to cutthroat interest rates of 1,095 percent per year from a P2P application headed by Chinese nationals (Vietnam News, 2020). The ability of this firm to enter the Vietnamese marketplace and charge such exorbitant interest rates was a direct result of the lack of regulation surrounding P2P lending (Jenweeranon, 2023). As highlighted by Jenweeranon (2023), this scenario not only generates "negative results for the public but also […] can impede the development of digital lending business in general as people can lose their trust in such business models" (p. 522). Bad experiences can tarnish the industry's reputation, making potential customers wary

of using digital lending services. The State Bank of Vietnam has recognized these challenges and cautioned financial institutions about partnering with P2P lenders in Official Letter No. 5228/NHNN-CSTT (Jenweeranon, 2023). Despite acknowledging the shortcomings of the current regulatory landscape, the government has failed to take substantive action in exploring regulatory options to promote investment and protect consumers (Jenweeranon, 2023).

Policy Objective: Regulatory Reform

The problem overview has underscored the need for regulatory reform as the status quo is hindering the development of a robust, inclusive, and safe fintech ecosystem. In designing an appropriate regulatory framework, institutions are grappling with a balancing act of harnessing the benefits of fintech innovations while minimizing risks to consumers, investors and the broader financial system (Bromberg et al., 2018). Drawing on Rodrik et al. (2019)'s theory in *Growth Diagnostics*, Vietnam must reform the regulations that are acting as binding constraints on the fintech industry's performance. The government failures are signalled by low appropriability, where the social benefits of an innovation are not adequately harnessed (Rodrik et al., 2019). As argued by Ahern (2019), "an ill-fitting regulatory framework of uncertain application to FinTech applications causes frustration when juxtaposed alongside FinTech's potential, not just for consumers, but also the wider economic benefits for countries where FinTech is nurtured and scaling up is facilitated" (p 350). With gaps remaining in financial inclusion and Vietnam lagging behind ASEAN peers in fintech development, there is an inadequate balance between risk management and regulatory stringency (Young et al., 2023). In turn, the overarching policy objective shaping the proposed solution is the following: How to reform the regulatory landscape to minimize barriers to market entry, promote investment, and protect consumers?

Proposed Solution: A Regulatory Sandbox

A regulatory sandbox represents the ideal policy solution to achieve these policy objectives. This describes an innovative framework that allows startups and other businesses to test new financial products and services in a controlled environment under the supervision of a regulatory authority (Jenik & Duff, 2020). The concept was first developed and implemented at scale by the United Kingdom's Financial Conduct Authority (FCA) (Jenweeranon, 2023). Over 60 jurisdictions globally, spanning developing and developed countries, have adopted regulatory sandboxes (Jenik & Duff, 2020). Regulatory sandboxes are widely argued to be a helpful driver in innovation, as they permit companies to

experiment with novel ideas without immediately complying with the usual regulatory requirements (Jeník & Duff, 2020). However, the regulatory sandbox is also beneficial because regulators maintain substantial control and supervision over fintech operations (Brown & Piroska, 2022).

The typical process of a regulatory sandbox modelled after the FCA's approach involves three key stages. First, firms submit an application to enter the sandbox, and the regulatory authorities evaluate their eligibility based on key criteria (Hapsari et al., 2019). For example, Australia's regulatory sandbox allows select fintech companies to receive licensing exemptions, as all firms must receive a special financial services license from the Australian Securities and Investment Commission (Baker & McKenzie, 2018). In order to be eligible for the licensing exemption, companies must have no more than 100 retail clients, client exposure of no more than AU$5 million, comply with consumer protection requirements, have adequate compensation requirements, and both internal and external dispute resolution procedures in place (Baker & McKenzie, 2018). Second, firms and the regulatory authority agree on a testing approach and conduct the trial and monitoring phase for a maximum period of one year (Hapsari et al., 2019). Finally, the regulatory authority reviews the reliability, risks and commercial viability of the firm's product, business model or service offering and decides whether to allow it to enter the market permanently by providing a permanent financial services license or other authorization (Hapsari et al., 2019). The table below outlines a potential design for the Vietnamese regulatory sandbox.

Table 1: Vietnam – Regulatory Sandbox Design Elements

Design Element	Design Choices
Eligibility Defines who can participate in the sandbox. Clear criteria to ensure fair access for all market participants.	● Open to incumbents and newcomers to foster innovation and competition. ● Special focus on local start-ups to boost domestic innovation.
Governance Outlines the sandbox's operational structure, roles, and responsibilities, and key processes.	● Centralized oversight committee to streamline regulation. ● Collaboration with local tech parks and universities (ex., National Innovation Center in Hoa Lac high tech park)
Timing Details on the duration of different phases in the sandbox process.	● Rolling admission with semi-annual reviews ● Testing periods of 6 to 24 months to accommodate rapid innovation cycles

Test restrictions Constraints on the sandbox's scope, scale, and conduct to prevent harm.	● Limit the number of transactions for new entrants ● Special consumer protection rules (ex., interest rate caps for P2P lending)
Exit Criteria for transitioning out of the sandbox, including how to scale successful tests.	● Clear benchmarks for success (ex., customer satisfaction, system reliability, compliance adherence, fraud/risk metrics) ● Support for integration into the wider market (i.e. sandbox graduate is granted a license) ● Feedback loop to inform policy

Source: Table adapted from UNSGSA (2018)

Policy Alternative: The Status Quo Regulatory Approach

The prevailing policy alternative is the status quo which comprises a conventional approach to regulatory reform. The supervision and updating of the fintech regulatory landscape is delegated to the Fintech Steering Committee established by the State Bank of Vietnam in 2017 (Ha & Nguyen, 2022). The members of this Committee are representatives from the State Bank of Vietnam and the National Payment Corporation of Vietnam, a partially state-owned intermediary payment service provider (IPS) (International Trade Administration, 2020). Specifically, the Committee is led by the Deputy Governor and Deputy Director of Payments at the State Bank of Vietnam and supported by a Working Group comprised of specialists from the State Bank of Vietnam and the National Payment Corporation of Vietnam (Bhunia, 2017). The Committee is currently responsible for researching an appropriate legal framework to complete the fintech ecosystem (Das, 2021). It has focused on researching fintech in five key areas: e-payment, digital customer identification (e-KYC), P2P lending, Open API, and blockchain applications (Dang, 2020). To bolster these efforts, the Committee has opened direct communication channels with fintech firms for effective problem-solving (Dang, 2020). Although there are benefits to this approach, the following sections will demonstrate why the regulatory sandbox represents a superior policy option.

Evaluating the Status Quo: Existing Regulatory Approach

A clear analytical framework is critical to evaluate the proposed solution against the status quo. The analytical dimensions in which the policy options will be weighed are (i) administrative capacity, (ii) fiscal capacity, (iii) political feasibility, (iv) innovative potential and (v) financial inclusion. Administrative capacity refers to the human resource capabilities of the regulatory authorities; fiscal capacity encompasses the costs of implementation;

political feasibility is concerned with the adherence to the government's broader policy initiatives and political culture; innovation potential considers the policy's capacity to facilitate innovation through collaboration with industry and investors; and finally, financial inclusion considers the capacity to improve access to financial services across the Vietnamese population. The following section will analyze the status quo regulatory approach along these analytical dimensions.

a. Administrative Capacity

The assignment of regulatory reform responsibilities to the State Bank of Vietnam's Steering Committee reflects a typical strategy employed by developing economies grappling with limited resources and capacity (UNSGSA, 2018; Jenweeranon, 2023). The benefit of this approach is that the team can draw on its existing knowledge of broader market risks and regulations (Bains & Wu, 2023). As the Committee is responsible for submitting an annual action plan and overall strategy for fintech development in Vietnam, the current workload is not overly burdensome (Bhunia, 2017). While utilizing existing staff for fintech initiatives can be resource-efficient, there is a risk that the team members do not possess specialized fintech knowledge and could become overburdened by other competing responsibilities (Bains & Wu, 2023). Furthermore, given the speed of advancements in the fintech industry, current regulatory authorities likely lack the administrative capacity to keep pace with crafting timely reforms and providing effective support to fintech players (UNSGSA, 2018; Ahern, 2019). This phenomenon is particularly evident in emerging fintech areas like P2P lending, where government regulators require extended periods to understand new technologies, resulting in regulatory delays that harm consumers (Jenweeranon, 2023).

b. Fiscal Capacity

The status quo is relatively cost-effective for the Vietnamese government (Bains & Wu, 2023). The fiscal capacity associated with the status quo has involved the costs of establishing, staffing and training the Committee (Bhunia, 2017). Currently, the degree of training provided to the Fintech Committee members is unclear; however, research suggests that specialized training on fintech markets and consulting with specialists can be costly (Bains & Wu, 2023). Nevertheless, funds directed to bolstering the capacity of existing regulatory authorities can be less costly than hiring additional human resources or establishing new regulatory reform processes (Bains & Wu, 2023). Furthermore, the licensing process can be somewhat costly in approving every individual fintech firm; however, the State Bank of Vietnam collects revenues on licensing and compliance fees (Ha & Nguyen, 2023). Therefore, the fiscal capacity of the status quo appears manageable for the time being.

c. Political Feasibility

The status quo currently aligns with Vietnam's political culture, which has resisted large-scale regulatory changes to the financial sector. Financial regulation has been relatively conservative post-Asian financial crisis across the Asia and Pacific region, as the crisis underscored the fact that “allowing financial liberalization to run ahead of financial regulation is an invitation to disaster” (Rodrik, 2000, p. 4). In turn, regulators have sought to protect the largely state-run banking sector, as four state-owned banks account for nearly half of the banking sector’s total assets and credit market share (Tran-Thi & Vu-Tranh, 2020). The lines between the interests of the banking, regulatory and political actors are further blurred as the State Bank of Vietnam is a ministry-level body that “is always subservient to the prevailing political agenda” (Tran-Thi & Vu-Tranh, 2020, p. 305). Consequently, the government is the supreme authority over fintech regulations in Vietnam as it must approve any regulatory change proposed by the State Bank of Vietnam (Tran-Thi & Vu-Tranh, 2020). This centralized decision-making process has translated into notoriously slow regulatory reform processes, compounded by the general sense of risk aversion due to risks associated with the emerging fintech sector (Magunson, 2018). Therefore, the status quo of embedding the responsibility for regulatory reform in existing supervisory structures aligns well with the political culture, as the “role of supervision tends to be well understood across a regulatory authority needing little extra buy-in to leverage additional or specialist support” (Bains & Wu, 2023, p. 14).

d. Innovation Potential

The current approach to fintech regulation is hampering the innovation potential of the fintech industry. The impact of regulatory uncertainty on fintech innovation in Vietnam can be explained by Breznitz & Murphee (2011)’s theory of structured uncertainty in *The Run of the Red Queen*. While this theory refers to China’s institutional hierarchy, it bears significant similarities to Vietnam as both single-party communist market-oriented economies with high degrees of autonomy in local government policy implementation (Tran-Thi & Vu-Tranh, 2020; Shultz & Le, 1993). Structured uncertainty describes a sense of regulatory uncertainty due to ambiguity surrounding the interpretation of regulations (Breznitz & Murphee, 2011). This uncertainty can stifle radical innovation by generating a sense of risk aversion among high-technology firms (Breznitz & Murphee, 2011). In turn, many firms will use partnerships with state entities as a protection strategy, which limits their innovation potential (Breznitz & Murphee, 2011). This phenomenon can be observed in Vietnam’s status quo, as current regulatory barriers force many fintech firms to partner with banks as an entry

strategy (Rory, 2018). Furthermore, the licensing process poses traditional barriers to entry, as it can cost startups thousands of dollars in licensing fees, legal fees and compliance costs (Gleason, 2021). Therefore, the status quo is ineffective in maximizing the innovation potential of the fintech industry in Vietnam.

e. Financial Inclusion

While the growth of fintech has boosted financial inclusion in Vietnam, there have been diminishing returns due to the current status quo's regulatory shortcomings. The regulatory barriers to fintech innovation, coupled with poor consumer protections in industries such as P2P lending, have led to stagnating improvements in financial inclusion and fintech adoption in Vietnam (Huong & Linh, 2021). Notably, a study conducted by Truong et al. (2023) studied the impact of fintech on promoting traditional financial inclusion and digital financial inclusion in Vietnam from 2018 to 2020. The study found that financial inclusion had not significantly improved over the two-year period as cash remains the dominant means of transaction, and the average household reports low access to all formal financial services (Truong et al., 2023, p. 56). In providing recommendations to address this problem, the study stressed the importance of establishing a clear legal framework to regulate fintech, particularly for high-risk industries to consumers, such as P2P lending (Truong et al., 2023). The authors argued that a "complete legal framework is a prerequisite to encourage the activities of Fintech companies and financial intermediaries as well as ensure the legitimate rights and interests of service users" (Truong et al., 2023, p. 70). Therefore, the status quo is inadequate to promote the level of financial inclusion needed to propel the modern Vietnamese economy forward.

Evaluating the Regulatory Sandbox: Comparative Analysis

The current approach to fintech regulation in Vietnam, while administratively convenient and fiscally manageable, is ultimately inefficient in fostering innovation and driving financial inclusion. Establishing a regulatory sandbox offers an effective approach to remedy these shortcomings. The following section will analyze and justify the effectiveness of these analytical dimensions in the context of a regulatory sandbox.

a. Administrative Capacity

A regulatory sandbox is the more appropriate policy option than the status quo when considering the administrative capacity required to undertake the regulatory reform process. A prevailing argument against establishing a regulatory sandbox in developing economies is that they lack the administrative capacity necessary to operate a sandbox. Indeed, a sandbox

will not function effectively if regulators are "unprepared for the level of effort and resources required to process sandbox applications and develop testing plans" (UNSGSA, 2018, p. 32). That said, regulatory sandboxes are designed to better allocate administrative capacity towards regulatory reform processes than traditional arrangements (Bain & Wu, 2023). This is because undertaking regulatory reform through the status quo requires a much longer time horizon to study market trends, draft new regulations or amend existing ones, and garner the evidence needed to implement regulatory changes (Bain & Wu, 2023). On the other hand, regulatory sandboxes allocate administrative capacity toward the supervision of live testing, which directly informs the regulatory reform process (Bain & Wu, 2023). From this perspective, regulatory sandboxes offer a unique learning tool to directly collect in-depth data on market risk and consumer protections that otherwise would require extensive resource allocation toward industry research (UNSGSA, 2018). Furthermore, allocating the existing administrative capacity towards this learning process can serve as a form of training for regulators on better understanding of the fintech industry, as regulators can "use the sandbox to actively learn about new technologies and products and how regulation needs to adapt and respond" (Ahen, 2019, p. 378). Therefore, for fintech regulators administratively burdened with high information asymmetries, sandboxes offer a more efficient allocation of administrative capacity by alleviating transaction costs between industry, regulators and capital sources (Cornelli et al., 2020).

b. Fiscal Capacity

The benefits of a regulatory sandbox suggest that it is a better investment of fiscal resources to unleash economic growth over the long term. A regulatory sandbox is undeniably resource-intensive, as the cost of implementation usually ranges from US$25,000 to over US$1 million in human resources (Appaya & Jenik, 2019). These costs underscore the opportunity cost of establishing and maintaining a regulatory sandbox, as the funds could be used to bolster the capacity of the status quo through additional training for the Steering Committee. However, a regulatory sandbox offers an interactive learning tool for regulators, which is likely to be a more sustainable use of funds over the long term compared to training the existing supervisory arrangement to undertake large-scale regulatory reform, given the rapid pace of change in the fintech industry (Bain & Wu, 2023). Furthermore, by facilitating greater coordination between industry and government, the transaction costs of government consultation are significantly lessened. The fiscal feasibility is justified given the new financing arrangement of US$5 million provided by the Asian Development Bank and Swiss government in May 2023 (Ha, 2023). This financing was provided to support the State Bank

of Vietnam in "strengthening the regulatory framework for digital finance, building the capacity of government and other industry stakeholders, and assisting financial institutions in developing digital banking" (Ha, 2023). Therefore, the fiscal capacity of the Vietnamese government can accommodate a regulatory sandbox.

c. Political Feasibility

The intensity of monitoring and supervision involved in a regulatory sandbox highlights the political feasibility of the policy approach. As noted above, the degree of coordination between industry and government lends well to the centralized regulatory approach in Vietnam. Through close observation of the new innovations launched in the sandbox, authorities can design appropriate regulations to minimize harm to consumers and instability to the broader financial system (Hapsari et al., 2019). Indonesia's regulatory sandbox offers a prime example of the degree of regulatory control. During the testing period, the Bank of Indonesia plays a close role in mentoring companies through legal and technical assistance, which helps shape the firm's standards of service (Hapsari et al., 2019). After a trial period of a maximum of one year, the Bank of Indonesia is then responsible for classifying a business's commercial viability as "successful" or "unsuccessful" (Hapsari et al., 2019). Successful companies can offer their products to the wider market, whereas unsuccessful companies are prohibited from marketing their products, services, technology or business models (Hapsari et al., 2019). Therefore, through this process, the regulatory authorities can retain stronger monitoring and control over fintech companies than in the status quo.

d. Innovation Potential

There is widespread evidence that a regulatory sandbox will correct binding constraints on the innovation potential of the fintech industry. The establishment of a regulatory sandbox serves as a positive signal to investors, as it is considered an "innovation facilitator", showcasing a government's commitment to supporting the industry over the long term (Jenik & Duff, 2020, p. 2). By reducing regulatory uncertainty and streamlining the authorization process for market entry, regulatory sandboxes have been shown to help firms raise capital by facilitating product testing before commercialization (UNSGSA, 2018). This is incredibly powerful as one of the key barriers to entry faced by fintech firms is raising capital, given the impacts of regulatory uncertainty and emerging innovations on investors' confidence (Cornelli et al., 2020). A study on the impacts of the FCA's regulatory sandbox found that firms saw a 15 percent increase in capital raised following their entry into the sandbox, equivalent to US$700,000 over two years (Cornelli et al., 2020). Another empirical

study by Goo & Heo (2020) on the impact of regulatory sandboxes on venture investment across nine countries (UK, Singapore, Hong Kong, Australia, India, Canada, Malaysia, The Netherlands and Japan) found that the average investment increased by 86 percent after implementing regulatory sandboxes. These trends hold significant potential for Vietnam, as one of Malaysia's regulatory sandbox graduates raised US$4.4 million after the testing period (Alam, 2021). In addition to increased financing, the Cornelli et al. (2020) study found that fintech firms that enter sandboxes experience increased patenting and better survival rates, "with 75 per cent of the firms still in operation compared to 60 per cent that did not enter the sandbox" (Cornelli et al., 2020, p. 4). Therefore, improvements in the capital availability and survival rates of fintech firms will propel the industry forward (Magunson, 2018).

e. Financial Inclusion

A regulatory sandbox also holds significant promise in driving financial inclusion. Notably, Bahrain and Malaysia named financial inclusion as the overarching strategic objective of their regulatory sandboxes (Jenik & Lauer, 2017). According to Jenik & Laur (2017), the heightened competition permitted by regulatory sandboxes encourages financial institutions to focus more on underserved and undervalued market segments (Jenik & Laur, 2017). Furthermore, regulatory sandboxes can help reduce the cost and complexity of meeting regulatory requirements by creating a space where new approaches to compliance can be tested, such as digital identity verification technologies (Jenik & Laur, 2017). These innovations are critical for financial inclusion as they allow institutions to serve a broader base of customers, including those who may not have traditional forms of ID or credit history (Jenik & Laur, 2017). The ability to customize a regulatory sandbox to a country's specific needs would also empower Vietnam to ensure its sandbox increases financial inclusion. For instance, Vietnam can establish eligibility criteria that require participating innovations to address the needs of financially excluded and underserved customers (Jenik & Laur, 2017). Additionally, innovators in the sandbox could be obliged to include financially excluded and underserved customers in their testing samples and establish a preferential regime for innovators whose solutions are particularly pertinent to financial inclusion (Jenik & Laur, 2017). Therefore, a sandbox holds significant potential to address Vietnam's low financial inclusion rates.

Implementation of the Regulatory Sandbox

Moving forward, it remains imperative to acknowledge the inherent limitations of this policy proposal. The main limitation to implementing the regulatory sandbox is political

resistance, given that the status quo is known for its reluctance to embrace change in favour of preserving the market power of large incumbent financial institutions (Anagnostopoulos, 2018; Tran-Thi & Vu-Tranh, 2020). While the regulatory sandbox aims to amplify the innovation potential of the fintech sector by reducing barriers to entry, new firms have the potential to significantly disrupt the predominantly state-owned banking sector, posing risks to the stability of the financial sector and the commercial interests of the Vietnamese government (Anagnostopoulos, 2018). For example, before implementing their regulatory sandbox, the Bank of Indonesia projected that fintech companies could cannibalize between 29 and 35 percent of traditional financial institutions' revenues if they did not keep pace with technological innovations (Oswald, 2017). Therefore, this section proposes two implementation strategies to address this limitation: (i) gradual policy implementation through institutional layering and (ii) continuous performance measurement through ongoing monitoring and evaluation of the sandbox's impacts.

a. Gradual Policy Implementation Through Institutional Layering

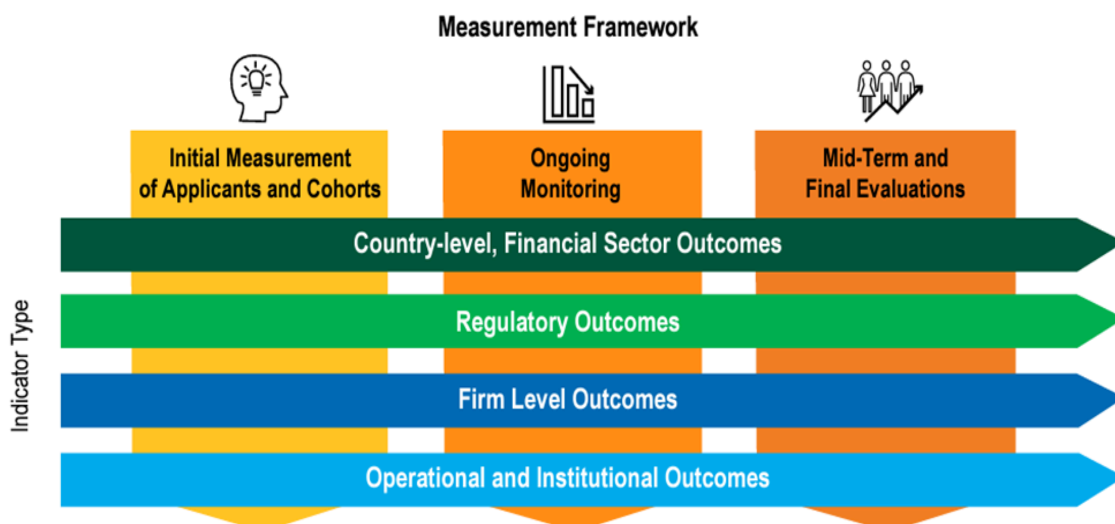
Gradual policy implementation can help mitigate the risks of the regulatory sandbox in a political environment characterized by resistance to large-scale change (Heijden, 2011). Drawing on institutional layering theory, Vietnam is advised to follow policy layering whereby "new policy goals are added to, or layered onto, existing policy commitments without removing others" (Carey et al., 2019). Within the context of the regulatory sandbox, this approach would entail the existing Steering Committee being responsible for overseeing the implementation of the regulatory sandbox. In leveraging the Committee's existing mandate and relationships with the traditional banking sector, the regulatory sandbox can be implemented gradually to provide incumbents sufficient time to adapt their strategies in response to the renewed focus on innovation (Capano, 2019). To make this shift more politically palatable, the Government of Vietnam could even consider offering established banks special privileges when entering the regulatory sandbox. This preferential treatment might include expedited entry processes, tailored regulatory guidance, or specific incentives, ensuring a smoother transition and fostering a more receptive attitude towards innovative changes. By taking this approach, Vietnam can effectively balance against opposition from the traditional banking sector, which is currently benefiting from the status quo.

b. Continuous Performance Measurement Through Monitoring & Evaluation

In addition to the gradual policy implementation, an ongoing emphasis on stringent monitoring and evaluation will be critical to mitigate any risks associated with the sandbox's performance. Drawing on the World Bank's approach (depicted in Figure 1) from a global

analysis of regulatory sandboxes, Vietnam is advised to evaluate the progress of the sandbox in three phases of implementation: (i) the initial measurement of applicants and cohorts, (ii) ongoing monitoring and evaluation, and (iii) mid-term and final evaluation (Appaya et al., 2020). Throughout each of these key phases, the regulatory authorities can design appropriate performance measures at the country-, regulatory-, firm- and operational-level (Appaya et al., 2020). At the country level, the measurement framework should align with its overarching policy objectives by focusing on national indicators such as the levels of financial inclusion, the ease of doing business, and the availability of products and services for the unbanked (Appaya et al., 2020). On the regulatory level, monitoring the sandbox can be used to test assumptions underpinning regulations, focusing on factors such as default rates, investor loss rates, and cybersecurity incident rates (Appaya et al., 2020). At the firm level, the framework should incorporate both quantitative and qualitative measures to assess outcomes (Appaya et al., 2020). Quantitative metrics can encompass the number of consumers, transaction values, customer satisfaction scores, an innovation index, and market share growth (Appaya et al., 2020). Meanwhile, qualitative assessments can include interviews with incumbents and new entrants to the market (Appaya et al., 2020). Finally, at the operational or institutional level, the evaluation should center on the continued suitability of the sandbox (Appaya et al., 2020). This includes tracking metrics such as the number of applicants, the acceptance rate into the sandbox, the average processing time for applications, the duration of test phases and market exits, and the number of successful and unsuccessful sandbox tests. Therefore, a multi-level measurement approach will enable regulators to thoroughly identify challenges and confirm the regulatory sandbox's progress toward the aforementioned policy objectives.

Figure 1: Regulatory Sandbox Performance Measurement Framework



Source: (Appaya et al., 2020)

Conclusion

To conclude, this policy paper has underscored the pressing need for regulatory reform in Vietnam's fintech sector, particularly in digital payments and P2P lending. Current regulations are overly restrictive in some areas while insufficient in others, negatively impacting firms, investors and consumers. The proposed regulatory sandbox offers a practical solution, balancing the need for innovation with consumer protections. This approach provides a clear advantage over the status quo, setting the stage for a more inclusive and dynamic fintech environment in Vietnam. By adopting a regulatory sandbox approach, Vietnam can unleash the full potential of its fintech sector, catalyzing innovation and financial inclusion, which are pivotal for the nation's journey toward achieving high-income status by 2045.

References

Alam, N. (2021). *Digital banking is key to financial inclusion in Malaysia*. East Asia Forum. https://www.eastasiaforum.org/2021/09/10/digital-banking-is-key-to-financial-inclusion-in-malaysia/

Ahern, D. (2019). Regulators Nurturing Fintech Innovation: Global Evolution of the Regulatory Sandbox as Opportunity-Based Regulation. *Indian Journal of Law & Technology*, *15*(2), 345. https://repository.nls.ac.in/cgi/viewcontent.cgi?article=1017&context=ijlt

Anagnostopoulos, I. (2018). Fintech and regtech: Impact on regulators and banks. Journal of Economics and Business, 100, 7-25.

Appaya, S., & Jenik, I. (2019). *Running a Sandbox May Cost Over $1M, Survey Shows*. Consultative Group to Assist the Poor, the World Bank. https://www.cgap.org/blog/running-sandbox-may-cost-over-1m-survey-shows#:~:text=Regulatory%20Sandboxes%3A%20What%20Have%20We%20Learned%20So%20Far%3F

Appaya, M. S., Gradstein, H. L., & Haji Kanz, M. (2020). Global Experiences from Regulatory Sandboxes. World Bank. https://documents.shihang.org/zh/publication/documents-reports/documentdetail/912001605241080935/global-experiences-from-regulatory-sandboxes

Bains, P., & Wu, C. (2023). Institutional Arrangements for Fintech Regulation: Supervisory Monitoring. International Monetary Fund. https://doi.org/10.5089/9798400245664.063.A001

Baker & McKenzie. (2018). *International Guide to Regulatory Fintech Sandboxes*. https://www.bakermckenzie.com/en/-/media/files/insight/publications/2018/12/guide_intlguideregulatorysandboxes_dec2018.pdf

Bhunia, P. (2017). *Vietnam central bank establishes Steering Committee on FinTech*. Open Gov Asia. https://opengovasia.com/vietnam-central-bank-establishes-steering-committee-on-fintech/

Bromberg, L., Godwin, A., Ramsay, I. (2018). Cross-border cooperation in financial regulation: Crossing the Fintech Bridge. *Capital Markets Law Journal*, *13*(1), 59–84. https://doi.org/10.1093/cmlj/kmx041

Brown, E., & Piroska, D. (2022). Governing Fintech and Fintech as Governance: The Regulatory Sandbox, Riskwashing, and Disruptive Social Classification. *New Political Economy*, *27*(1), 19–32. https://doi.org/10.1080/13563467.2021.1910645

Carey, G., Kay, A., & Nevile, A. (2019). Institutional Legacies and "Sticky Layers": What Happens in Cases of Transformative Policy Change. *Administrative & Society*, *51*(3) 491–509. https://doi.org/10.1177/0095399717704682

Capano, G. (2019). Reconceptualizing layering—From mode of institutional change to mode of institutional design: Types and outputs. Public Administration, 97(3), 590-604.

Das, S. (2021). Vietnam's Central Bank Establishes FinTech Steering Committee. CCN. https://www.ccn.com/vietnams-central-bank-establishes-fintech-steering-committee/

Gleason, P. (2021). *Regulatory Sandboxes Give States An Edge Attracting Innovation and Investment*. Forbes. https://www.forbes.com/sites/patrickgleason/2021/12/31/regulatory-sandboxes-give-states-an-edge-attracting-innovation-and-investment/?sh=244210557003

Goo, J. J., & Heo, J. Y. (2020). The impact of the regulatory sandbox on the fintech industry, with a discussion on the relation between regulatory sandboxes and open innovation. Journal of Open Innovation: Technology, Market, and Complexity, 6(2), 43. https://doi.org/10.3390/joitmc6020043

Ha, N. (2023). *ADB, Switzerland cofinance US$5 million to improve access to finance for SMEs in Vietnam*. Hanoi Times. https://hanoitimes.vn/adb-switzerland-cofinance-us5-million-to-improve-access-to-finance-for-smes-in-vietnam-323621.html

Ha, M. S., & Nguyen, T. L. (2022). Chapter 9: Digital Transformation in Banking: A Case from Vietnam. In T. Phan & D. Damian (Eds.), *Smart Cities in Asia: Regulations, Problems, and Development*. https://doi.org/10.1007/978-981-19-1701-1_9

Hapsari, R. A., Maroni, M., Satria, I., & Ariyani, N. D. (2019). The Existence of Regulatory Sandbox to Encourage the Growth of Financial Technology in Indonesia. *Fiat Justisia: Jurnal Illmu Hukum*, *13*(3), 271–288. https://doi.org/10.25041/fiatjustisia.v13no3.1739

Heijden, J. (2011). Institutional Layering: A Review of the Use of the Concept. *Politics (Manchester, England)*, *31*(1), 9–18. https://doi.org/10.1111/j.1467-9256.2010.01397.x

Huong, P. H. C., & Linh, L. T. N. (2021). The Effect of Financial Inclusion and Financial Technology on Monetary Policy Effectiveness: The Case of Vietnam. *Tap Chi Koha Hoc Kin Te*, *9*(4). https://vjol.info.vn/index.php/due/article/view/67274

International Monetary Fund. (2016). *Financial Inclusion: Bridging Economic Opportunities and Outcomes*. https://www.imf.org/en/News/Articles/2016/09/20/sp092016-Financial-Inclusion-Bridging-Economic-Opportunities-and-Outcomes

International Trade Administration. (2020). *Market Intelligence: VIETNAM FINTECH*. https://www.trade.gov/market-intelligence/vietnam-fintech

Jenik, I., & Duff, S. (2020). *How to Build a Regulatory Sandbox: A Practical Guide for Policy Makers*. Consultative Group to Assist the Poor, World Bank. https://documents1.worldbank.org/curated/en/126281625136122935/pdf/How-to-Build-a-Regulatory-Sandbox-A-Practical-Guide-for-Policy-Makers.pdf

Jenik, I., & Lauer, K. (2017). Regulatory sandboxes and financial inclusion. CGAP. https://www.cgap.org/sites/default/files/researches/documents/Working-Paper-Regulatory-Sandboxes-Oct-2017.pdf

Knight, B. (2016). FinTech: Who Regulates It and Why It Matters. Milken Institute Centre for Financial Markets. https://milkeninstitute.org/sites/default/files/reports-pdf/FinTech-Who-Regulates-It-and-Why-It-Matters2.pdf

Magnuson, William. (2018). Regulating fintech. *Vanderbilt Law Review, 71(4),* 1167-1226. https://scholarship.law.vanderbilt.edu/vlr/vol71/iss4/2/

Nathan, R. J., Setiawan, B., & Quynh, M. N. (2022). Fintech and Financial Health in Vietnam during the COVID-19 Pandemic: In-Depth Descriptive Analysis. *Journal of Risk and Financial Management*, *15*(3), 125. https://doi.org/10.3390/jrfm15030125

Nguyen, M. (2023). *Fintech in Vietnam - Statistics and Facts*. Statista. https://www.statista.com/topics/7840/fintech-in-vietnam/#topicOverview

Nguyen, N. T. (2021). Building a culture of trust in Vietnam today: A philosophical perspective. *XLinguae*, *14*(3), 151–163. https://doi.org/10.18355/XL.2021.14.03.14

Oswald, P. S. (2017). *Development of Regulatory Sandbox in Indonesia*. Master's Thesis, Tilburg University. https://arno.uvt.nl/show.cgi?fid=143976

Pongsudhirak, T. (2019). *Central bank autonomy must be upheld*. Bangkok Post. https://www.bangkokpost.com/opinion/opinion/1730979/central-bank-autonomy-must-be-upheld

Puschmann, T. (2017). Fintech. *Business & Information Systems Engineering: The International Journal of Wirtschaftsinformatik*, 59(1), 69–76. https://doi.org/10.1007/s12599-017-0464-6

Rodrik, D. (2000). Institutions for high-quality growth: What they are and how to acquire them. *Studies in Comparative International Development*, *35*(3), 3–31. https://doi.org/10.1007/BF02699764

Rodrik, D., Hausmann, R., & Velasco, A. (2019). Growth Diagnostics. In *One Economics, Many Recipes* (pp. 56–84). Princeton University Press. https://doi.org/10.1515/9781400829354-004

Rory, V. L. (2018). Making Innovation More Competitive: The Case of Fintech. *UCLA Law Review*, *65*(1), 232–279.

Taylor, M. Z. (2016). *The Politics of Innovation: Why Some Countries Are Better Than Others At Science And Technology*. Oxford University Press.

Tran-Thi, G., & Vu-Thanh, T. (2020). Vietnam: The Dilemma of Bringing Global Financial Standards to a Socialist Market Economy. In Jones, E (Ed.), *The Political Economy of Bank Regulation in Developing Countries: Risk and Reputation*. Oxford University Press. https://doi.org/10.1093/oso/9780198841999.003.0013

Truong, T. H. L., Le, T. N. Q., Le, T. T., Phan, H. M. (2023). Fintech Driven Financial Inclusion: The Case of Vietnamese Households. *Journal of Organizational Behavior Research*, *8*(1), 52–73. https://doi.org/10.51847/G6YEGAGRQK

UNSGSA. (2019). *Early Lessons on Regulatory Innovations to Enable Inclusive FinTech: Innovation Offices, Regulatory Sandboxes, and Regtech*. https://www.unsgsa.org/publications/early-lessons-regulatory-innovations-enable-inclusive-fintech-innovation-offices-regulatory-sandboxes-and-regtech

Vietnam News. (2020). Five people arrested in HCM City loan shark apps bust worth $4.2 million. Vietnam News. https://vietnamnews.vn/society/715595/five-people-arrested-in-hcm-city-loan-shark-apps-bust-worth-42-million.html

World Bank. (2023). *The World Bank in Vietnam: Overview*. https://www.worldbank.org/en/country/vietnam/overview

Young, J., Wong, W., & Taiyabi, S. (2023). *FinTech in ASEAN 2022: Finance, reimagined.* https://www.thisweekinfintech.com/content/files/download/185564.pdf