



Research Document Working Paper

Developing a Fintech Policy A case of the TTSEC

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Developing a Fintech Policy: A case of the Trinidad and Tobago Securities and Exchange Commission

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Abstract

The regulation of people, activities and processes is being replaced by automation and algorithms. As Financial Technology (“Fintech”) alter the attributes of financial services and market structures, financial regulation must adapt to remain effective. Among other things, Fintech product/service providers are streamlining business processes, which allows customers the opportunity to fulfil their financial wants and needs through non-traditional, user-friendly online channels. This includes a wide range of business activities from the accessing of investment advice to taking out a loan. Most regulators would still be relying on dated legislation which did not contemplate the incorporation of Fintech into financial sector regulation. Therefore, there is a growing need to establish modern policies and frameworks to bolster the regulatory approach to Fintech products/services.

Fintech policy development is new to emerging economies, such as the Caribbean countries. This paper looks at the Trinidad and Tobago Securities and Exchange Commission’s (“the Commission’s”) approach to the development of a Fintech policy that will foster the development of the securities industry and build investor confidence in Trinidad and Tobago. The paper will review how the Commission incorporates the recommendations put forward by the International Monetary Fund (“IMF”) and the World Bank regarding Fintech framework development for countries. Additionally, based on the Commission’s experience the paper also outlines key issues that policy makers should be aware of regarding Fintech policy development.

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1. Introduction

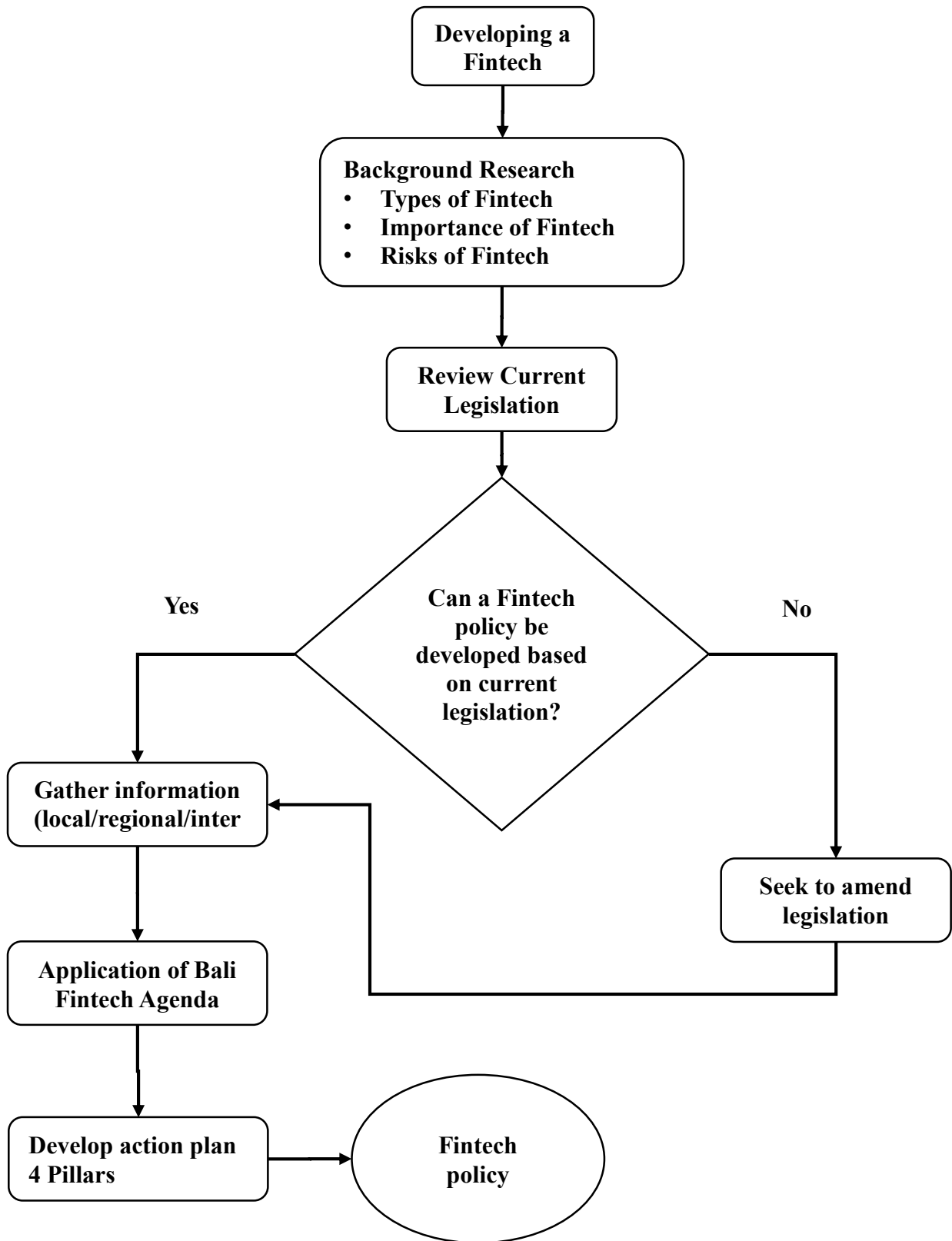
This paper looks at the Commission's approach to the development of a Fintech policy that will further foster the development of the securities industry and build investor confidence. A policy will normally establish the mission, vision and objectives of an organisation. The Commission's Fintech policy is intended to guide the Commission's approach to regulating Fintechs and facilitate the implementation of regulatory tools which will improve regulatory and supervisory oversight of the Fintech sector within the securities industry.

As the regulator of the securities industry, the Commission has the responsibility to monitor the industry, to understand its potential for development and to encourage innovation to foster that development. Internationally, innovative products, referred to as Financial technology or "Fintech" are becoming more prominent, from robo-advisers to crowd funding platforms, technological developments are altering the financial services industry. These changes are creating both opportunities and challenges for entrepreneurs, consumers and regulators. "Financial technology" refers to technology enabled financial solutions. It is often seen today as the new marriage of financial services and information technology. (Douglas W. Arner 2015, pg. 2).

The advent of Fintech requires the Commission to understand how best to apply current rules, principles and practices to innovative financial technologies and non-traditional business models. However, like most regulators the Commission is relying on dated legislation therefore there is an urgent need to establish modern policies and frameworks that are applicable to Fintech products/services. The Commission notes that Fintech product/services may magnify existing risks and expose new financial risks within the securities industry. Therefore, it is imperative that the Commission keeps abreast of technological changes and improve its infrastructure and capacity to regulate Fintech providers to mitigate associated risks and achieve its legislative mandates.

Figure 1 below summarises the Commission's approach to establishing a Fintech policy. Based on the Commission's experience this paper will review the importance of Fintech to the securities industry, the risks associated with Fintech, the types of Fintech and the implications related to the Commission's legislative authority. The paper will also describe the Commission's approach to information gathering from local, regional and international sources along with its ability to comply with the Bali Fintech agenda.

Figure 1



Importance of Fintech

Fintech developments encourage financial inclusion which means that individuals and businesses have access to useful and affordable financial products and services that meet their needs (transactions, payments, savings, credit, and insurance), and are delivered in a responsible and sustainable way (International Monetary Fund & World Bank Group 2018, pg. 12).

Fintech can improve the securities industry of Trinidad and Tobago by providing alternative means to match investors, lenders and borrowers. Fintech product/services can provide a more level playing field and reduce information asymmetry in the securities industry, which will result in retail investors having greater participation in the industry. With the utilisation of innovative solutions, financial and investment advice will be available to the wider community and not only be restricted to high net worth and sophisticated investors.

Developing countries can benefit from the use of Fintech through the creation of alternative sources of capital which can assist in developing businesses and the economy. Diversified funding options will assist small business since Fintech providers can create tailored products/services related to an organisation's size. Fintech solutions can assist small businesses by providing them with better cash flows, improved working capital management and more stable or secure funding. Fintech solutions can also provide cost effective ways to assist businesses in managing payments, customer relationships, invoicing and inventory management.

In developed countries where most types of financial services are readily available, one of the main benefits of Fintech includes the reduction of costs associated with maintaining 'bricks & mortar' branches. Organisations in developed countries also utilise Fintech products/services to obtain or retain competitive advantages by improving efficiency and enhancing customers' experiences.

Just as the internet empowered people around the globe by providing access to information, Fintech is reducing information asymmetry in the marketplace by increasing transparency and improving customer convenience. Overall Fintech can enhance the efficiency of finance and will contribute to economic development.

Risks of Fintech

The emergence of innovative technologies has led to the development of new risks to the financial sector. Regulators must be aware of these risks and ensure registrants/licensees have appropriate policies and procedures in place to mitigate them. Some of the risks identified by the (International Organization of Securities Commissions 2017) are as follows:

- Operational risk - this risk type is strongly correlated with other risks and results from inadequate or failed internal processes, people, and systems, or from external events. The following can occur due to insufficient policies, procedures and risk mitigation strategies at a Fintech provider:
 - Technology Failure – this includes transaction delays due to the poor (or lack of) internet bandwidth, or due to agents’ devices not working which might result in wrong data entry, error in systems’ maintenance, execution failures, delivery failures, and process management failures.
 - Human Error – this includes issues such as incorrect data entry and incorrect selections by clients on graphical interfaces. Most errors made by clients may be due to poor process design.
- Market risk – some Fintech products such as cryptocurrencies are subject to high amounts of speculation therefore rates of exchange may fluctuate quite significantly. This has been seen in the variation of Bitcoin prices, where price/market value has decrease by more than 50%.
- Legal risk – regulators may choose to restrict or regulate the use of certain Fintech product/services. This will mean that Fintech providers must now ensure compliance with all regulatory requirements or face penalties.
- Cybersecurity Risk - due to the architecture of technological devices and their susceptibility to malware, unencrypted confidential and personal information, data can be compromised or leaked. Fintech products/services render financial holdings vulnerable to theft through hacking activities.
- Money Laundering (“ML”) Risks – Fintech providers will have to review their business processes, operations, transactions types and customer activities to ensure that appropriate controls are in place to mitigate ML risks.

2. Types of Fintech in the Securities Industry

Most Fintech product/service providers interact with their clients through platforms that are accessible via internet browsers and mobile applications. These platforms are designed and operated based on emerging innovations/technologies. The leading technologies, supporting the provision of Fintech services, are distributed ledger technologies (“DTL”), big data analytics, cloud-computing, machine learning and application programme interfaces (“APIs”). While these technologies are widely used, they remain relatively unknown to the general public.

- DLT is an information technology model that stores information in registries owned by every computer linked to a specific network, on which they are located. Such data is shared, replicated, validated and synchronized across each computer on the network. DLTs are decentralized, and this differentiates this technology from traditional databases and information storage procedures. Therefore, no central party can directly control or manipulate the network (Association De Supervisores Bancarios De Las Americas (ASBA) 2017, pg. 10). Blockchain is a popular DLT in the financial system and is used by cryptocurrencies, most notably Bitcoin
- Big data analytics includes data analysis activities that collate information on purchasing histories, interactions within social networks and web-page visits. The analysis is normally done on large networks or cloud computing services. The data being analysed is either structured or unstructured. Big data analytics can be used by financial institutions to analyse purchasing habits, or by regulators to analyse thousands of transactions when monitoring for ML activities.
- Cloud computing is an information technology model that consists of the provision and use of on-demand computing configurable resources (e.g., servers, storage, applications, and more.) via an internet network, as opposed to a physical connection to a server. Cloud computing services enable users to store information, processes, and data in servers that may be accessed through any computer with internet connection (Association De Supervisores Bancarios De Las Americas (ASBA) 2017, pg. 7).
- Machine learning refers to infrastructure with the capacity to learn using data-analysis algorithms (Association De Supervisores Bancarios De Las Americas (ASBA) 2017).

In the securities industry, Fintech providers use machine-learning methods to create robo-advisors² to provide investment advice to clients.

- APIs are a set of routines, protocols, and computing resources which aim to create efficient methods of communication that allows the interaction with other systems (Association De Supervisores Bancarios De Las Americas (ASBA) 2017, pg. 6). APIs result in easy-use graphical interface for clients thus increasing convenience.

These technologies have been used to create a number of products and services within the securities industry. The following are some Fintech products/services that may become more prominent in Trinidad and Tobago:

- a) Alternative Financing Platforms – these are aimed at bringing together firms and individuals, looking for capital, and others that have money to lend, invest or donate. This includes Peer to Peer (“P2P”) lending, which is a business model that allows investors, alone or with others, to provide financing to borrowers. The novelty of this business model is that financing may be obtained from many different lenders/ investors ranging from individuals to institutional investors (International Organization of Securities Commissions 2017, pg. 11).
- b) Retail Trading and Investment Platforms - online investment and trading platforms have evolved significantly, pressuring traditional brokerage houses and asset management firms to provide customers with access to products and services across multiple distribution channels. This has also led to an increasingly cost-competitive environment, prompting the use of technology to automate processes and increase product breadth and depth (International Organization of Securities Commissions 2017, pg. 23).
- c) Automated Advice Tools - comparison Websites typically incorporate a "cost-per-click" model which may amount to giving investment advice on a fee basis. Financial aggregator platforms allow individuals to link accounts across multiple financial institutions and may also mine the associated data with a view to providing investment advice based on the mined data. The social trading and investing and social media sentiment platforms typically offer a social approach to trading and investing where

² Robo-advisors provide largely automated portfolio management advice, strategies and services for investors (International Organization of Securities Commissions 2017, pg. 25).

individuals invest, and trade based on the advice of a leader who may or may not be a licensed financial professional.

After understanding the importance, risks and types of Fintech in the securities industry the Commission sought to review its legislative authority regarding the regulation of Fintech product/services.

3. Legislative Authority

The two most prevalent tools utilised by regulators of Fintechs are the Innovation Hub and Regulatory Sandbox. The emergence of Fintech, in the securities industry, has brought about novel risks that are not covered by traditional laws, which therefore require new means of risk mitigation. In fulfilling its legislative mandate, the Commission must therefore embark on a means of discovering and understanding these risks in order to apply applicable mitigation measures.

Internationally, securities regulators have implemented specific regulatory tools to understanding these emerging risks. The Commission's Fintech Policy will identify these tools to be used when conducting regulatory supervisory activities of Fintech providers. In considering the development of its Fintech policy, the Commission had to carefully examine the scope of its current legislative authority to establish regulate the Fintech sector of the securities industry.

A Fintech company/product/service may be subject to the Commission's supervision once the activity performed is a regulated activity under the Securities Act 2012 ("SA 2012"). Based on the current legislation, no amendments are required for the implementation of regulatory tools by the Commission. The Commission is empowered by its overarching objective to "provide protection to investors from unfair, improper or fraudulent practices; foster fair and efficient securities markets and confidence in the securities industry in Trinidad and Tobago"; as well as the functions set out at sections 6(c) and (j) and the powers at sections 7(b), (m) and (n) to create and utilise appropriate regulatory tools for the identification of risks posed by Fintechs. The following extracts from the SA 2012: refer:

- **Long title of the Securities Act Chap. 83:02 (the "Act"):** An Act to provide protection to investors from unfair, improper or fraudulent practices; foster fair and efficient securities markets and confidence in the securities industry in Trinidad and Tobago; to reduce

systemic risk, to repeal and replace the Securities Industry Act, Chap. 83:02 and for other related matters.

- **Section 6(c) of the Act:** register, authorise or regulate, in accordance with this Act, self-regulatory organisations, broker-dealers, registered representatives, underwriters, issuers and investment advisers, and control and supervise their activities with a view to maintaining proper standards of conduct and professionalism in the securities industry.
- **Section 6(j) of the Act:** create and promote such conditions in the securities industry as may seem to it necessary, advisable or appropriate to ensure the orderly growth, regulation and development of the securities industry and to further the purposes of this Act.
- **Section 7(b) of the Act:** treat with such matters as may be referred to it by any person from time to time.
- **Section 7(m) of the Act:** undertake such other activities as are necessary or expedient for giving full effect to this Act.
- **Section 7(n) of the Act:** do all things, and take all actions, which may be necessary, expedient, incidental or conducive to the discharge of any of its functions and the exercise of its powers under this Act.

Fintechs that cannot be covered by the Act may be under the jurisdiction of another regulator or may remain unregulated, in which case, legislative amendment will be required to mitigate regulatory arbitrage and reduce potential systemic risks.

4. Information Gathering

Information gathering was essential to the Commission’s Fintech Policy development. The Commission believed that the significant amount of research on the subject eliminated the need to “re-invent the wheel”, it chose, instead, to collaborate with jurisdictions which have established regulations and tools for the purposes of Fintech regulatory oversight. Information gathering took place at three (3) levels, local, regional and international.

Local - Meetings were held with the Trinidad and Tobago International Finance Corporation (“TTIFC”), the Financial Intelligence Unit of Trinidad and Tobago (“FIUTT”) and the Central Bank of Trinidad and Tobago (“CBTT”). These meetings provided information on the strategic plans of regulators as it relates to Fintech; and also provided the foundation to begin the process of creating joint regulatory tools since Fintech products/services straddle across different industries. It was observed that most local regulators were in an information gathering and policy formation stage as it relates to Fintech.

The Commission decided to meet with its registrants to better understand their expectations regarding Fintech regulations. Therefore, discussions were held with the Mutual Fund Association of Trinidad and Tobago (“MFATT”) and the Securities Dealers Association of Trinidad and Tobago (“SDATT”) as they represent a significant portion of the Commission’s registrants. These meetings revealed that most have adopted a “wait and see” approach regarding Fintech. While the Commission’s registrants welcomed the idea of Fintech regulations, most were at a stage of attempting to understand and educate themselves on innovative technologies. It was also noted that registrants saw a greater need/demand for Fintech products related to payments systems rather than securities-related products. Payment systems are under the purview of the CBTT.

As a first step in the preparation for constructive regulation of Fintechs, the Commission issued a brief public statement advising the public on the potential advantages of Fintechs to the securities industry. The statement explained that while Fintechs facilitate many opportunities for the sector they may, simultaneously, pose risks to the investor. The statement also advised that the Commission was available for discussions with Fintech companies. The response to the public statement provided insight into the number of potential Fintech providers in the country, and provided further justification for Fintech regulations.

Regional - The Commission currently chairs the Caribbean Group of Securities Regulators (“CGSR”) Fintech Committee, which is currently comprised of ten (10) countries throughout the region. The committee assists in advancing the region’s approach to Fintech regulation within the financial and securities sector. The Commission visited both Barbados and Bermuda in an attempt to better understand their regulatory approaches to Fintech. The Information gleaned from these collaborative efforts were used in the Commission’s Fintech policy.

International - The Commission held discussions with the Ontario Securities Commission (“OSC”) to gain a better understanding of the operations and legislative framework governing its innovation hub named Launchpad. The OSC’s innovation hub engages with Fintech businesses, assists them in navigating the requirements and strives to keep regulation in step with digital innovation. The Commission used this information in drafting its innovation hub framework.

In 2018, the Hong Kong Exchanges and Clearing Limited noted that most of the Fintech applications were deployed in the banking, internet finance and digital currencies industries rather than the securities industry. It is generally believed that blockchain and Artificial

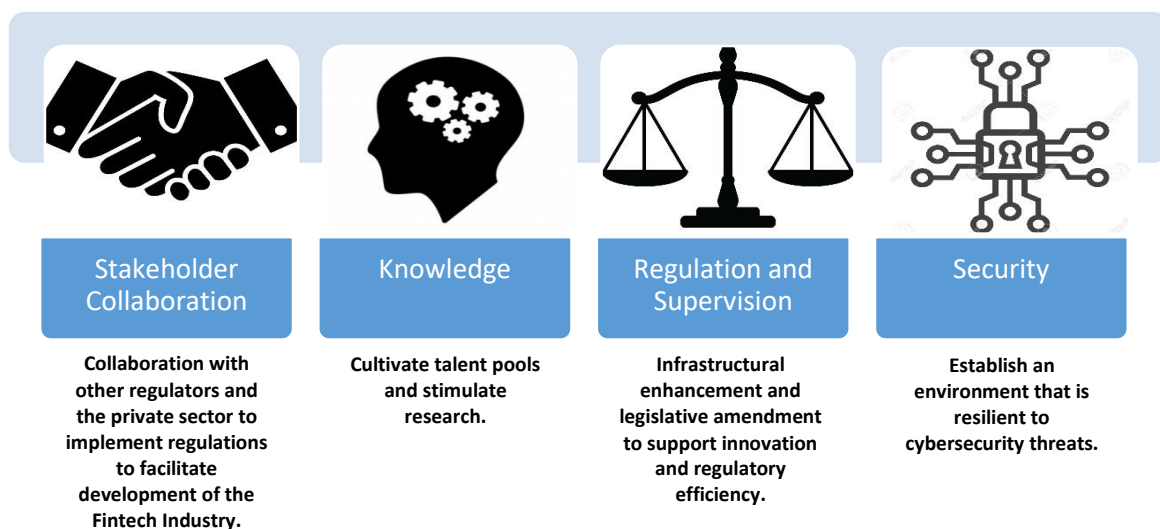
Intelligence (“AI”) technologies such as intelligent investment advisor (robo-advisor) would be the most applicable in the securities industry.

The Commission also gathered research from the United States Securities and Exchange Commission (“USSEC”) and the Financial Services Authority (“FSA”) of the United Kingdom, along with many other jurisdictions regarding the varying regulatory approaches to Fintech.

5. Policy Development

The Commission’s Fintech policy will be built on four (4) strategic pillars. The aim is to create a holistic long-term approach to harness the benefits of Fintech, whilst ensuring investor protection, fairness, efficiency and confidence in the securities market of Trinidad and Tobago. A summary of the 4 pillars can be seen in figure 2 below.

Figure 2



Stakeholder Collaboration - The Commission conducted an analysis of stakeholders based on interest and relevance. This assisted in determining a number of primary and secondary stakeholders. The Commission’s collaboration with stakeholders is of paramount importance to the implementation and success of the Fintechs in the securities industry. It is vital that financial institutions, within the securities industry, become innovative to remain relevant and expand to new opportunities.

Knowledge - A key priority in cultivating a technologically-innovative securities industry is attracting, developing and retaining talent in the areas of finance and technology. The

Commission understands that both the regulator and regulated persons compete extensively with each other to secure talent from a seemingly limited pool of candidates. The Commission wishes to cultivate talent pools and stimulate research in the areas of Fintech and other support services, such as AML/CFT, which form an essential part of regulatory compliance.

Regulation and Supervision - The Commission aims to adopt regulatory and supervisory initiatives to support innovation and improve regulatory efficiency. These initiatives will be supported by various regulatory tools and legislation. The category of regulation and supervision is composed of the following:

Infrastructure - Infrastructure relating to regulatory supervision includes an innovation hub and a regulatory sandbox. These regulatory tools will be supported by frameworks issued by the Commission.

INNOVATION HUB

These provide a dedicated point of contact for firms to raise enquiries with competent authorities on Fintech-related issues and to seek non-binding guidance on the conformity of innovative financial products, financial services or business models with licensing or registration requirements and regulatory and supervisory expectations (ESMA 2018, pg. 5).

REGULATORY SANDBOX

These provide a scheme to enable firms to test, pursuant to a specific testing plan agreed and monitored by a dedicated function of the competent authority, innovative financial products, financial services or business models (ESMA 2018, pg. 5).

Legislation - The current legislative framework regulating Fintechs is limited within the confines of the SA 2012. A Fintech company purporting to provide Fintech services may be subject to the Commission's supervision once the activity performed is a regulated activity under the Act.

Security - The Commission aims to establish an environment that is resilient to cybersecurity threats. In order to mitigate the possibilities of unintended consequences and threats associated with these technologies; it is paramount that Fintech providers implement robust and comprehensive cybersecurity risk-management systems. These must include risk-mitigation techniques and recovery plans in case of cyber incidents. The Commission intends to issue cybersecurity guidelines, for the securities industry, setting out procedures and mandatory reporting structures to immediately notify the Commission in cases of cybersecurity breaches.

The implementation of each pillar brings with it its own set of strengths, weaknesses, opportunities and threats. The strengths and opportunities associated with the implementation of these four strategic pillars greatly outweigh the weaknesses and threats. A brief outline of this SWOT analysis is summarized in figure 3 below.

Figure 3

| Pillars | SWOT analysis | | | |
|-----------------------------------|--|--|---|--|
| | Strength | Weakness | Opportunity | Threats |
| Stakeholder Collaboration | <ul style="list-style-type: none"> • MoUs among regulators are already established • Communication with registrants is generally good | <ul style="list-style-type: none"> • MoUs may need updating • No agreements with private sector • Lack of human resources at Commission | <ul style="list-style-type: none"> • Joint development of financial sector • Proactive risk mitigation • Reducing regulatory arbitrage | <ul style="list-style-type: none"> • Disagreements among stakeholders • Disregard for regulation |
| Knowledge | <ul style="list-style-type: none"> • Dedicated research division • Willingness of private sector to share knowledge | <ul style="list-style-type: none"> • Limited human resources • Budgetary constraints | <ul style="list-style-type: none"> • Market guidance • Tailored oversight | <ul style="list-style-type: none"> • Potential staff turnover • Increased costs |
| Regulation and Supervision | <ul style="list-style-type: none"> • Existing legislation supports infrastructural development • Tools inexpensive to establish | <ul style="list-style-type: none"> • Legislation does not provide for supervision outside traditional models • Human resource constraints | <ul style="list-style-type: none"> • Development of industry • Protection of investors • Encourage economic growth • Mitigating systemic risk | <ul style="list-style-type: none"> • Regulation may be seen as burdensome |
| Security | <ul style="list-style-type: none"> • Can draw from international guidelines • Existing legislation facilitates creation of new regulations | <ul style="list-style-type: none"> • Limited human resources • Limited staff competency for supervision • Budgetary constraints | <ul style="list-style-type: none"> • Increased market confidence • Mitigating systemic risk • Collaboration for uniform regulation | <ul style="list-style-type: none"> • Cyber threats may evolve faster than regulators can keep up |

6. The Bali Fintech Agenda

The IMF Policy Paper – The Bali Fintech Agenda dated October 11, 2018 identified key considerations for policymakers regarding implementation of Fintech policies. The IMF policy paper essentially provided a blueprint for successfully harnessing Fintech opportunities, by providing a framework for countries to assess their policy options and adapt them to their own circumstances. The following are the twelve (12) considerations along with a brief description on how the Commission will assist the local securities industry in complying with the requirements.

I. Embrace the promise of Fintech

Fintech has the potential to significantly influence and enhance the provision of financial services within the securities industry. There is the possibility of new business models, new service providers and new products. Overall these developments will lead to greater opportunities and increased financial inclusion, and therefore strengthen the securities industry of Trinidad and Tobago.

The Commission acknowledges that there are rapid advancements in Fintech along with its potential social and economic impact. Consequently, it has undertaken several initiatives to capture the wide-ranging benefits associated with Fintech. These include the establishment of policies and frameworks to guide Fintech products and services in the Trinidad and Tobago Securities Market.

Through a public statement the Commission is also inviting current and possible Fintech providers to approach the regulator. This will allow the Commission to understand the products and services so that the appropriate parameters, are established, if necessary. These will ensure customers and Fintech providers are appropriately protected. According to section 6(j) of the SA 2012, the Commission has a mandate to ensure the orderly growth, regulation and development of the securities industry.

II. Enable new technologies to enhance financial service provision

Trinidad and Tobago is positioned as a financial centre in the region with a well-established financial sector including various types of financial institutions. The following infrastructural elements are already firmly established:

- Financial services legislation;
- Telecommunications;
- Broadband internet; and
- Mobile data services.

Most of the Commission's registrants have indicated their desire to automate several business processes such as client application processes. Internal processes, for most registrants, have already been automated. This includes the retention of client records and transactions.

It is expected that most registrants will move to automated collection and processing of data. which will reduce costs, improve efficiency and strengthen AML/CFT compliance. This type of electronic automation may include the use of a data custodian.

The Commission acknowledges that, to build trust and encourage innovation, it is important that the Government leads in the implementation and use of Fintech. The digitization of government services is an important step towards digitization of the economy, this would include the following:

- Development of digital ID mechanisms;

- Digital payment system for government services (taxes, fees, VAT, social services, etc.);
- Establishment of governance and cybersecurity/privacy frameworks; and
- Implementation of robust data protection systems.

The Commission encourages the continued development of financial infrastructure that will facilitate the Fintech industry in Trinidad and Tobago.

III. Reinforce competition and commitment to open, free, and contestable markets

The Commission has a legislative mandate to foster a fair and efficient securities industry and to build investor confidence in that industry. Encouraging the development of Fintech products/services and providing the proper regulatory framework will ensure there is a level playing field and promote innovation. The use of Fintech can lower barriers to entry and act as a driver for competition. It is also expected that registrants will benefit from lower operational and compliance costs.

The future of AML/CFT compliance may lie in the use of Fintech as it continues to erode the boundaries that currently exist among financial products and services. Customers will demand more simplified business processes and the providers of these services will have a competitive edge in the securities industry. The Commission has observed that there is a demand for Crowd Funding or peer-to-peer³ lending within the local securities industry. This may allow existing and new companies to obtain cheaper capital and ultimately lead to increased economic activity. Existing registrants may have to adjust their roles or business models to compete and remain relevant with new market entrants.

The Commission is committed to ensuring there are applicable laws and regulations in place to leverage Fintech capacity, and to lower barriers to entry for non-traditional service providers. This will ensure there is competition and a move towards market contestability. Current Fintech providers will have to be regulated under the SA2012, and will be required to register under one of the following categories: investment adviser, broker-dealer, underwriter, self-regulatory organisation or issuer. If the business model does not fit into the current registration categories, the Commission will review the need for legislative amendment according to the prevalence of the product/service. The Commission's Fintech policy and frameworks will be developed to

³ P2P lending is a business model that in many cases allows investors, alone or with others, to provide financing to borrowers. The novelty of this business model is that financing may be obtained from many different lenders/ investors ranging from individuals to institutional investors. (International Organization of Securities Commissions 2017)

ensure fair treatment of all market participants according to activities and risks. This will ensure a level playing field regardless of the market participant, underlying technology, or method by which service is provided.

IV. Foster Fintech to promote financial inclusion and develop financial markets.

The securities market of Trinidad and Tobago has benefited from a high level of public participation in the Collective Investment Scheme (“CIS”)/mutual fund industry. With approximately TT \$50 billion of assets under management, the CIS product has performed successfully. However, the local stock exchange has not seen/experienced similar success. Out of a population of 1.3 million there are approximately 73,000 brokerage accounts, consisting of active and non-active traders along with retail and institutional clients. In 2018 approximately 45 trades occurred daily on the Trinidad and Tobago Stock Exchange (“TTSE”).

Digital financial inclusion involves the deployment of the cost-saving digital means to reach currently financially excluded and underserved populations with a range of formal financial services suited to their needs that are responsibly delivered at a cost affordable to customers and sustainable for providers (The World Bank). The Commission sees the use of Fintech as an opportunity to assist in stimulating interest and demand in the TTSE; as well as overcoming the challenges of reaching customers and providing information to the market. The consequential development of the securities industry will benefit both the TTSE and the economy. Increased market activity will improve liquidity and improve confidence in equity valuations, which can encourage more businesses to list on the TTSE when seeking capital for further growth and development.

The Commission has embarked on several projects geared towards increasing financial literacy and is fostering relationships with registrants to assist in closing the educational gaps in the securities industry. Investor Education seminars and symposiums are held periodically to educate the public about investing.

The Commission acknowledges Fintech’s benefits regarding expansion of access, reducing cost and increasing transaction convenience. Fintech products/services offer alternative means of funding to businesses, such as crowdfunding and peer-to-peer lending, which can be provided by both local and foreign institutions. The government of Trinidad and Tobago has established the International Financial Corporation (“IFC”) to promote the ease of doing business in the country, and to assist foreign companies in setting up and understanding their regulatory obligations.

The move to digitised government payments is essential to fostering Fintech to promote financial inclusion and develop financial markets. This will enhance trust and improve public confidence in Fintech products/services, as digitized payments coupled with digital IDs can reduce fraud and tax evasion. However, implementation of the aforementioned is dependent on government's initiative.

V. Monitor developments closely to deepen understanding of evolving financial systems.

It is noted that when the Commission undertook the Fintech Policy development project, information regarding Fintech products/services within the securities industry did not exist. In order to ascertain the scope of the issue and its impact on the industry, the Commission embarked upon a data gathering exercise to determine the types of Fintech products and services currently available and in use in the country. The Commission issued a public statement, via print and electronic and social media, inviting Fintech companies/providers and persons conducting, or contemplating conducting activities involving Fintech, to meet with the Commission. Based on the information received from the data gathering exercise the Commission intends to develop a framework to support effective oversight of Fintech products/services.

VI. Adapt regulatory framework and supervisory practices for orderly development and stability of the financial system.

Can the Commission Regulate Fintech Products/Services? The answer is Yes. According to the SA 2012 section 6(c), the Commission is authorised to register, authorise or regulate, in accordance with this Act, self-regulatory organisations, broker-dealers, registered representatives, underwriters, issuers and investment advisers, and control and supervise their activities with a view to maintaining proper standards of conduct and professionalism in the securities industry. Essentially Fintech products and services will be reviewed and registered under the current registrant categories as per the SA 2012. However, there may be a need to amend legislation when Fintech products/services do not fit into any of the categories provided by the SA 2012. The Commission will utilise a combined Innovation Hub and Regulatory Sandbox as the main tool to assess Fintech products and services and determine the best regulatory approach.

Innovation Hub and Regulatory Sandbox

An innovation hub generally refers to a regulator-provided knowledge centre open to regulated and unregulated entities (Michael Wechler, Leon Perlman, Nora Gurung 2018). Ideally, the hub facilitates innovation by acting as a connection point between regulators and the industry. Innovators may receive guidance, advice and assistance from hub staff, third party experts or other experienced parties regarding matters such as legal and policy issues, licensing issues and navigating a complex legal and regulatory system. The hub can also serve as an opportunity for regulators to learn more about the industry through direct interaction.

The Commission currently utilises most aspects of an innovation hub by engaging with current and potential registrants to understand their business models and to determine the best approach to regulating the business and its activities.

(Lauer 2017) stated that a regulatory sandbox is a framework set up by a financial sector regulator to allow small scale, live testing of innovations by private firms in a controlled environment (operating under a special exemption, allowance, or other limited time-bound exception) under the regulators supervision.

Essentially, the Commission will require Fintech providers to present their business models which staff will analyse for a better understanding of the product/service. Once this phase is completed, the Commission will identify the regulatory requirements and determine provider's eligibility to participate in the regulatory sandbox. The Commission will issue a separate regulatory sandbox framework providing information on the sandbox process including information on application, selection, testing and exit.

The Commission aims to ensure that its Fintech regulatory framework provides trust, confidence and a supporting environment for innovation. The framework will reduce regulatory uncertainty and support the safe entry of new products, activities and intermediaries.

VII. Safeguard the integrity of financial systems.

The Commission utilised guidance from the Financial Action Task Force ("FATF") to identify, understand and assess the Money Laundering/Terrorist Financing ("ML/TF") risks associated with Fintech. (Financial Action Task Force 2019) states that countries should consider virtual assets as "property," "proceeds," "funds", "funds or other assets," or other "corresponding value". Countries should apply the relevant measures under the FATF recommendations to

virtual assets and virtual asset service providers (“VASP”). VASPs should be required to be licensed or registered.

The Commission acknowledges the need to prevent ML/TF abuse of Fintech products such as virtual assets. Once Fintech providers have been assessed, the Commission will decide on the required registration categories and inform the Fintech providers of their specific ML/TF obligations. This will be supplemented by periodic risk- based compliance reviews to ensure Fintech providers are complying with ML/TF requirements.

Where applicable, the Commission also encourages the use of RegTech. RegTech is a contraction of the terms regulatory and technology, and it comprises the use of technology, particularly information technology, in the context of regulatory monitoring, reporting, and compliance (Douglas W. Arner, Janos Barberis & Ross P. Buckley 2017). The Commission acknowledges that there is a major opportunity for the use of RegTech to improve ML/TF compliance, however, there may be a need to amend the current legislation to allow electronic record keeping with regard to ML/TF obligations.

VIII. Modernize legal frameworks to provide an enabling legal landscape.

The overriding objective of the Securities Act 2012 (the “Act”) is “to provide protection to investors from unfair, improper or fraudulent practices; to foster fair and efficient securities markets and confidence in the securities industry in Trinidad and Tobago; and to reduce systemic risk. To fulfil this objective, section 6 of the Act sets out the Commission’s main functions. Of particular note are sections 6(b), (c) and (d) which effectively mandate the Commission to oversee and supervise the securities industry and promote investor protection through registration and regulation of self-regulatory organisations, broker-dealers, registered representatives, underwriters, issuers and investment advisers.

Specifically, the requirement of section 6(c) which mandates the commission to control and supervise the activities of the supervised entities with a view to maintaining proper standards of conduct and professionalism in the securities industry, may be applied to the application of all types of Fintech to the business processes of these registrants. For example, a registered broker-dealer may choose to adopt a Retail Trading and Investment Platform to facilitate trades on behalf of its clients, or a registered Investment Adviser may opt to use an automated advice tool because it believes the technology may assist in delivering better investment advice to its clients. In both scenarios, the commission will be obligated to learn more about the

technologies being used by its registrants how it impacts the clients and the securities industry as a whole, and what risk mitigating and disclosure tools should be applied.

Overall, the SA 2012 currently provides a sound legal framework for the securities industry of Trinidad and Tobago. All Fintech service providers will be reviewed to determine if the products or services being offered equates to a security or a security-related activity. The Commission's definition of an investment contract⁴ provides sufficient detail to determine if a product constitutes a security. Where a Fintech product or service does not fit into the SA 2012 definition of an investment contract, consideration will be given to legislative amendments. A risk-based approach will be adopted in making these amendments which will be done on a case-by-case basis. The Commission intends to provide guidance and information regarding Fintech products/services to reduce the gaps and clarify ambiguities in its regulatory approach to Fintech.

IX. Ensure the stability of domestic monetary and financial systems.

The Central Bank of Trinidad and Tobago (CBTT²) is responsible for fostering monetary and financial stability in the economy. Currently CBTT is committed to engaging with Fintech companies/providers to understand the possibilities and application to the domestic market. The CBTT has also indicated to the market, via statement dated November 15, 2018, that the Bank does not consider the establishment of a Central Bank digital currency a priority at this time but will continue to study developments in this area.

X. Develop robust financial and data infrastructure to sustain Fintech benefits.

Strong standards of operational resilience help market participants and infrastructures to withstand and rapidly recover from disruptions, thus supporting confidence in the continuity of services and preserving the "safety and soundness" and the integrity of the financial system (International Monetary Fund & World Bank Group 2018).

The issue of cybersecurity in finance highlights the necessity of further regulatory focus and development. The digital transformation of finance has made the securities industry far more vulnerable, and as the industry continues to become more digitized, there is an increasing risk

⁴ Includes any contract, transaction, plan, scheme, instrument in writing, whereby a person invests money or other property in a common enterprise, management or effort of others, as such money or other property is subject to the risks of the common enterprise.

of attack, theft, and fraud from cybercriminals. The Commission recognises that Fintech products and services are exposed to significant cybersecurity risks; and will keep the market informed apprised of the need for more robust risk-management strategies particularly around the area of cybersecurity. The Commission intends to issue guidance/standards on cybersecurity for the securities industry to assist in maintaining the safety and soundness of the financial system and integrity of data.

When the Commission conducts compliance reviews of registrants, the quality of enterprise wide risk management frameworks is normally reviewed and recommendations for improvement are made where deficiencies are noted. The quality and robustness of business continuity and recovery plans (“BCP”) are also examined. An appropriate BCP is essential to managing operational risks particularly in an organisation’s ability to withstand and rapidly recover from operational disruption. Registrants are expected to have back-up systems, incident response plans and regular testing of the BCP.

XI. Encourage international cooperation and information-sharing.

International, regional and local collaboration will lead to greater harmonization of regulatory frameworks and facilitate the adoption of innovative technologies in financial services. From an international perspective, the Commission is a signatory to International Organization of Securities Commissions (“IOCSO”) memorandum of understanding and a member of the IOSCO Initial Coin Offering (“ICO”) Consultation Network. Within the Caribbean, the Commission is a member of the Caribbean Group of Securities Regulators (“CGSR”) and currently chairs the CGSR Fintech meetings on a monthly basis.

In an attempt to foster greater collaboration locally, the Commission held meetings with the CBTT, the Financial Intelligence Agency (“FIU”), the International Financial Corporation (“IFC”) and local associations representing the securities dealers and collective investment schemes. It was agreed that a joint regulatory sandbox may be necessary between the Commission and the CBTT in regulating the Fintech market.

XII. Enhance collective surveillance of the international monetary and financial system.

In 2015, the Commission began the process of strengthening its data collection by implementing the Micro Macro Prudential Reporting Framework (“MMRF”). The data collected, through the MMRF, allows the Commission to analyse and evaluate the health, soundness, and potential vulnerabilities of the securities market, as it informs key micro and

macro, prudential and financial soundness indicators, for all segments of the securities industry (securities, mutual funds, repos, etc.).

The Commission is designated to ensure compliance with ML requirements. The Proceeds of Crime Act (“POCA”) specifically names the Commission as a supervisory authority for anti-money laundering and countering the financing of terrorism (“AML/CFT”) s along with other regulators such as the CBTT. The Commission is required to ensure that the financial institutions, that it regulates, comply with the AML/CFT legislation and implement robust AML/CFT frameworks that are commensurate with their size, complexity and risk profile. The Commission has developed a risk-based approach to inspecting its registrants and has applied risk ratings accordingly. Fintech providers will be required to comply with AML/CFT requirements.

7. The way forward

The Commission will utilise an implementation action plan to guide the development of the regulatory approach to Fintech. These requirements will be categorised into people, processes, tools and legislation.

People

Skilled human resources are important to the successful creation and implementation of the Fintech regulatory tools. Allocation of human resources will be required for the following reasons:

- Completion and establishment of frameworks for the Regulatory tools (Innovation Hub and Regulatory Sandbox).
- Documentation of internal policies and procedures for the operation of regulatory tools.
- Ongoing monitoring of regional and international developments to keep abreast of Fintech advancements.
- Collaboration with other domestic regulators to ensure Fintechs, within Trinidad and Tobago, are appropriately regulated.
- Development of the Cybersecurity Guidelines for the Securities Industry.

Process

There must be documentation of internal policies and procedures for the operation of regulatory tools. This should include the following:

- Establishment of charters/terms of reference for regulatory committees.
- Processes to determine eligibility criteria for entry into the regulatory sandbox.
- Drafting of legal terms and conditions for utilisation of the regulatory tools.
- Processes to guide the following:
 - functions of the regulatory committees;
 - regulatory tools application process;
 - testing of products and extending or exiting the regulatory sandbox.
- Processes for registration, surveillance and inspections of Fintechs that successfully exit the regulatory sandbox.

Tools

As previously discussed, the Commission's engagement with Fintechs will be done through the establishment of an Innovation Hub. The formalizing of this framework will enhance the Commission's understanding of Fintech products/services while simultaneously affording providers an opportunity to understand the regulatory framework under which they are required to operate. The establishment of a regulatory sandbox in consultation with CBTT and FIUTT is also important to the success of the Commission's Fintech policy.

Legislation

A Fintech company/product/service may be subject to the Commission's supervision once the activity performed is a regulated activity under the Act. No legislative amendment is required for the Commission's implementation of an Innovation Hub or Regulatory Sandbox. Fintechs that cannot be covered by the Act may be under the jurisdiction of a different regulator or may remain unregulated, in which case legislative amendment may be necessary to mitigate against regulatory arbitrage and reduce potential systemic risks.

The potential benefits introduced by Fintech are significant. However, the risks for customers brought about by innovative technologies may also be considerable. The Commission must adopt a balanced approach to regulation which encourages innovation while protecting investors and maintaining financial stability. The Commission's aims to continue achieving its legislative mandate by issuing its Fintech policy and ensuring the Fintech sector of the securities industry is appropriately regulated.

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