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## Towards a FinTech Strategy for Canada – Background Briefing<sup>1</sup>

*This note outlines the key elements of the UK and Australian FinTech strategies. It then summarizes key issues with the FinTech ecosystem in Canada and recommendations from different reports for improving it. The note concludes with questions for discussion at the November 30<sup>th</sup> meeting.*

### Meeting Objectives

Most commentators agree Canada and the Greater Toronto Area (GTA) have many of the elements required to support a vibrant FinTech ecosystem, notably a stable and secure financial system, a high-concentration of financial institutions, access to a large pool of talented employees, and high-living standards. But a key shortcoming is the absence of a clearly defined FinTech strategy championed by government and other FinTech stakeholders. As stated in the Munk report (2015), “Most successful ecosystems are the result of critical interventions by key actors and local leaders, often within the context of a supportive policy environment, but rarely led exclusively by public sector actors”. According to these authors, Canada’s key challenge is to develop a vision of the interventions needed to cultivate and support the FinTech ecosystem and to develop a strategy for what each stakeholder group can do to address them.

The discussion at this meeting is intended to encourage key stakeholders to debate potential interventions, to align on who should do what, and to promote a comprehensive strategy for Canada’s FinTech sector. Two models for Canada are the FinTech strategies published by the United Kingdom and Australia, both in 2016. These two countries bear many similarities to Canada in terms of the structure of their financial sector, their culture and institutions, and the structure of regulation. While there are important differences with Asia, Canada may also consider adopting some of the best elements from Hong Kong and Singapore. Despite China and the United States being leaders in FinTech, entrepreneurship, and innovation more broadly, the differences in terms of their market sizes, their competitive landscape, their institutions and regulator approaches suggest they are less relevant.

The goals of the meeting are:

- To begin a dialogue around the key elements of a FinTech strategy for Canada
- To articulate the key elements of such a strategy
- To discuss the regulatory and institutional issues identified by reports on FinTech in Canada
- To get input for a White Paper to be published a FinTech strategy for Canada

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<sup>1</sup> The views expressed in this article are those of the authors and do not necessarily reflect those of Ivey Business School.

- To discuss possible sponsors / publishers of this White Paper

## Key Elements of the UK FinTech Strategy

In April 2016, the UK Treasury released a report commissioned from Ernst & Young (“EY”) that assessed the UK environment for FinTechs and compared the UK to leading FinTech hubs in other countries. The goal was to inform the UK government’s FinTech strategy by highlighting areas where the UK needs to improve and by summarising best practices in foreign FinTech centres to emulate. When the report was published, Harriett Baldwin, Economic Secretary at the UK Treasury announced a set of new commitments and measures that the UK government would take to ensure the UK developed and retained a leading FinTech sector. The main elements are:

- to create an industry-led FinTech Panel to inform the strategy and policy, and to identify niches where UK FinTechs can develop a competitive advantage globally
- to introduce policies to support FinTechs including: open access to bank data (open API); a visa scheme to facilitate immigration of tech talent; regulatory relief and advice through a regulatory sandbox;
- to provide greater support and services to help UK FinTechs develop nationwide, including: Access to professional services at reasonable cost; coordinate development of a Pension dashboard,
- to build FinTech bridges with priority export markets and identify best practices to emulate in the UK.

Exhibit 1 provides more detail on the UK’s FinTech strategy.

### *Ernst & Young Assessment of UK FinTech Ecosystem*

As part of the 2016 report for the UK government, titled “UK FinTech: On the cutting edge – An evaluation of the international FinTech sector”, Ernst & Young identified four core attributes of a well-functioning FinTech ecosystem:

1. Talent: the availability of technical, financial services and entrepreneurial talent
2. Capital: the availability of financial resources for start-ups
3. Policy: government policy across regulation, tax and sector growth initiatives
4. Demand: end-client demand across consumers, corporates and financial institutions

The EY report broke down these four attributes into categories, and provided a qualitative score from less supportive to more supportive. Exhibit 2 summarizes this analysis, and provides greater detail on each of the categories. We feel it would be valuable to conduct a similar assessment for Canada.

## Key Elements of the Australia FinTech Strategy

Australia published a document outlining their FinTech Strategy called “Backing Australian FinTech” in March 2016. In the preamble, Australian Treasurer Scott Morrison stated: “I want to help create an environment for Australia’s FinTech sector where it can be both internationally competitive and play a central role in aiding the positive transformation of Australia’s economy. The Turnbull Government wants to offer home-grown and offshore FinTech innovators an opportunity to develop and refine new

*products and services in the Australian market through a regulatory system that allows them to be frictionless through their scale journey while still becoming regulatory match fit for deployment into domestic and global markets.”*

The Australian report outlined numerous initiatives being undertaken by the government and other policy bodies to support and promote Australia’s FinTech sector. This document contains many interesting proposals, which are summarised in a set of tables on pages 26-28.

The key elements of the Australian strategy are:

- Define and promote a FinTech strategy
- Create a FinTech Advisory Group
- Provide support for Innovation
- Introduce funding and tax incentives
- Develop local talent and attract foreign entrepreneurs
- Provide support for incubators
- Reform insolvency laws to encourage angel investment
- Promote FinTech exports and partnerships
- Address data accessibility and cybersecurity
- Establish a regulatory sandbox and Innovation Hub
- Ensure regulation is technology neutral
- Provide support for crowdfunding, robo-advice, and digital currencies
- Encourage government procurement of FinTech

Exhibit 3 provides more detail on these proposals.

## Comparison of Regulatory Approaches to FinTech

Regulation is a frequent topic when discussing FinTech – who should regulate, whether to provide regulatory relief, how to balance stability and consumer protection with innovation and competition. The list goes on. The points made for or against depend on the point of view: FinTech start-ups and their investors argue that regulation is a major cost and represents a barrier to entry that protects incumbents and discourages innovation; incumbent financial institutions and large consulting firms suggest that many FinTechs are engaging in regulatory arbitrage, which gives them an unfair advantage. It is difficult to find an objective point of view.

It is helpful to consider how other jurisdictions regulate their FinTech sectors. Exhibit 4 compares the approaches taken in five countries, based on analysis from Deloitte. When comparing different jurisdictions, the key questions to ask are:

- Is the regulatory approach principles-based or rule-based?
- Are the regulations FinTech specific or generic?
- Is the approach light-touch or heavy-handed?
- Is there clear accountability and coordination across regulatory bodies, or is the system fragmented with overlapping responsibilities?
- Is the process simple, quick and inexpensive or complex, time consuming and expensive?

- Are regulators supportive or repressive of innovation and start-ups?
- Are regulators collaborative with industry or uncooperative and overly legalistic?
- Is there a regulatory sandbox offering in place or not?
- Do the regulators have a dedicated FinTech team with specific expertise or not?
- Are regulators proactive and hands-on, or reactive and hands-off?
- What specific initiatives or regulations have been introduced to promote the FinTech sector?

By most accounts, the UK's Financial Conduct Authority is the gold-standard for FinTech start-ups, followed by the Australian Securities and Investments Commission (ASIC). Among Asian countries, Singapore is seen as more proactive and a better partner for FinTech vs. China where regulators operate in silos and have become more restrictive. The U.S. regulators are seen as the worst to deal with due to the lack of clarity about who regulates (due to overlapping state and federal jurisdictions), the focus on financial stability post-2008, the lack of coordination and the lack of dialogue. The Canadian regulatory landscape likely shares many of these limitations.

## Studies of Canada's FinTech Ecosystem

We have identified six reports and articles that assess Canada FinTech sector, highlight shortcomings and weaknesses, and make recommendations on how to develop it. These reports are listed in the references. The most in-depth analysis is provided by the Munk School of Global Affairs, entitled *Current State of the Financial Technology Innovation Ecosystem in the Toronto Region (2015)*; it is also the most critical. We would recommend readers review it in its entirety.

These reports identify a number of weaknesses and shortcomings with Canada's FinTech ecosystem:

No Single FinTech Champion: No Canadian government has taken ownership of FinTech. Canada is at risk of pursuing a silo approach with multiple actors weighing in but no champion, similar to the USA and China, rather than the targeted approach of the UK, Australia, Hong Kong and Singapore.

Fragmented Regulatory System: Canada's national and provincial regulators do not currently have a formal, consolidated approach to FinTech. Instead, the number of federal and provincial regulatory bodies and their overlapping jurisdictions imposes high costs and acts as a barrier to entry to FinTech start-ups.

Regulation is a Barrier: While most reports acknowledge that Canada has an excellent regulatory system, Many regulators lack a strong awareness or understanding of FinTech, as well as having limited networks and relationships in the space. Specific regulatory bodies are perceived to act with inherent tendencies that limit or restrict new innovations emerging from new companies, thus preserving the status-quo for incumbents. This indirectly impacts access to capital for start-ups because venture capitalists, for example, are reportedly required to get regulatory approval in each province.

Difficulty Collaborating with Incumbents: FinTech start-ups find it very difficult to collaborate with Canada's leading financial institutions. Most collaborations happen at the periphery of the banks' primary management structures and are led by people who lack the executive power to make the needed procurement decisions. Similarly, there is an opportunity to improve the level of FinTech expertise among incumbent firms. As interviewees contacted by the Munk team put it: "the only way to get a contract with a Canadian bank is to have one first with a U.S. bank". Banks and FinTechs need understand each other's strengths and constraints so they can work together to broaden available products, and create more cost efficient means of converting Canadians into active users of FinTech.

Problems with Late Stage Funding: The availability of seed and pre-seed financing for FinTech companies has improved, but there are concerns about access to later stage funding. While access to seed and Series A funding has improved, the way Canadian VC deals are structured is an obstacle when looking for later stage funding. Canadian start-ups are therefore strongly dependent on U.S. VCs for later-stage investments. In order to effectively scale up, FinTech firms in Canada often need to leave the country.

More Effective Forums for Knowledge Sharing, Collaboration and Networking: Toronto lacks sufficient breadth, depth and consistency in forums for knowledge-sharing, collaboration, networking, and mentorship to help start-ups succeed. While the region has the MaRS FinTech hub, the Ryerson DMZ, Rotman's Creative Destruction Lab and Communitel, the roles and strategies of these organizations should be better developed, coordinated and publicized.

Inexpensive Incubators and Cheap Office Space Needed: Toronto's ecosystem is lacks large, inexpensive incubator centres offering basic professional services with high connectivity at highly discounted rates. It also does not offer enough high-quality office space that is both cheap and co-located near the financial industry, and hence, conducive to collaboration.

Consumers Need Educating: Canadians are developing a greater desire for FinTech products and services – particularly tech-savvy millennials who do not trust banks – but awareness and education remain as barriers to adoption. Weak understanding of FinTech products and services will translate to high customer acquisition costs as start-ups seek to educate prospective customers.

Cybersecurity is Big, Shared Concern: Cyber threats to financial institutions are increasing, driving investment to protect all systems from security threats and breaches such as customer asset or identity theft, fraud and money laundering or DDoS attacks. This is a big impediment to FinTech adoption.

## Recommended Actions and Interventions

In response to these and other weaknesses and shortcomings, these reports make the following recommendations:

### *1. General Recommendations*

Establish an Industry-led FinTech Panel: The federal and provincial governments should follow the UK and Australia and create an industry-led FinTech Advisory Panel. The panel should consist of key representatives from financial institutions and the FinTech community. This FinTech Advisory Panel should contribute to the development of an overarching strategy for Canadian FinTech, and produce progress reports towards the goals laid out in such a strategy.

Make the FinTech Case: Canadian industry leaders need to educate the public, policymakers (at all levels of government), and regulators on the opportunity presented by FinTech for Canada.

Identify FinTech Niches: The government should work with industry to identify niches or areas of specialization where Canada has a comparative advantage in FinTech or wants to develop one.

Collaborate on Structural Problems: In order for the FinTech ecosystem to truly flourish, structural problems needs to be addressed, notably cybersecurity, and data availability (open API). These are areas where greater collaboration among start-ups, incumbents, and policymakers would have a significant impact. The industry needs a holistic strategy to guide and coordinate the activities of multiple stakeholders around these complex problems.

More Coordination and Support for Existing Incubators and Accelerators: Canada should develop a clearer strategy and ecosystem around our existing FinTech accelerators, ensuring they are aligned with the needs of firms at different stages of development and that they are well communicated. These entities are vital to the ecosystem and need more financial support, both from the incumbents and the government. Within this ecosystem, start-ups require more mentorship from successful FinTech entrepreneurs, VCs, and experienced professionals at banks at different stages of their development.

Provide Access to Professional Services at Reasonable Cost: The Canadian government should follow the UK example, and work with industry to launch an initiative to bring the major professional services providers together to provide FinTechs with practical and cost-effective basic services.

## *2. Recommendations for Government*

Provide Open Access to Data: The Canadian government should follow the UK, Australia and the European Commission in implementing an open banking standard (open API)<sup>2</sup> that will allow FinTechs to use bank data to develop and provide a range of value-added services to consumers.<sup>3</sup> Non-sensitive government data and data on the Canadian economy and consumer should also be made available free of charge.

Use Government Procurement of FinTech: Similar to Australia, the Canadian government should look for ways to use FinTech to provide solutions for Government procurement and service delivery needs at all levels of government.

Provide Direct Funding to Start-Ups: Government intervention (both federal and provincial) should follow Israel and Finland in providing more direct funding to FinTech start-ups in the form of grants or conditionally repayable loans.

Provide Incentives for VCs: The Canadian government should follow Australia and create tax and other incentives for specialized FinTech VC funds co-sponsored by institutional investors and provincial governments.

Attract Foreign Talent: Canada should actively recruit high-potential FinTech start-ups from around the world. Canada should put in place work visas to help attract tech talent and entrepreneurs from around the world, similar to the UK's Tech Nation Visa Scheme and Australia's Entrepreneur Visa.

Mentor Entrepreneurs: The government can provide mentoring for nascent or serial entrepreneurs, allowing entrepreneurs to learn how to achieve and manage business growth from the best sources of professional advice as well as from other experienced entrepreneurs (i.e. peer-to-peer learning).

Build Bridges Abroad and Promote FinTech Exports: Canada should follow the UK and Australia and establish bridges with FinTech clusters in priority markets to allow Canadian FinTech firms expand internationally, as well as attracting international FinTech companies and investors to Canada.

Invest in Incubators and Accelerators: Similar to Australia, the Canadian government should provide matched funding to support development of incubators and accelerators in regions or sectors with high innovation potential.

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<sup>2</sup> API = application programming interfaces

<sup>3</sup> The EC is mandating standardized API access across the EU as part of the Directive on Payment Services (PSD2), through a revision called Access to the Account (XSA2). This revision will require banks to provide standardized API access to third parties under the auspices of the European Banking Authority (EBA) by 2016.

### *3. Recommendations for Regulators*

Foster communication, consultation and collaboration: Canada needs a regulatory structure for FinTech that fosters communication, consultation and collaboration between government, regulators, FinTechs, and incumbent institutions. Leaders in FinTech and financial services should begin a formal dialogue with the Canadian Securities Administrators (CSA) and Finance Canada on the topic of evolving regulation.

Lighten the burden on start-ups: While Canadian regulators must maintain customer protection standards, the CSA should adopt a Canada-wide regulatory sandbox (similar to OSC's LaunchPad) to lighten the burden on small players to an agreed-upon baseline level.<sup>4</sup> This baseline can be increased as FinTech entities grow and begin to pose more material impact to the system or to consumers.

Set up FinTech specific teams: The examples of other jurisdictions show that it is extremely beneficial to set up new structures and teams specifically designed to help the FinTech sector. These structures should institutionalize dialogue and connection with FinTech and the financial services industry.

Clarify bounds and responsibilities: The bounds of regulation and authority should be clearly defined, ensuring that firms understand the regulatory burden being placed on them. It is critical for national and provincial regulators to coordinate how they will approach and liaise with the FinTech sector, who is responsible for what activities. Having defined zones of influence, regulators need to ensure standardization and no overlap between regulatory approaches with a 'passport' approach across jurisdictions.

Ensure Technology Neutrality: Regulation should be technology-neutral, encouraging regulators should focus on markets rather than services, and preventing bias towards specific delivery mechanisms.

Partner with Foreign Regulators: Following the example of the FCA, ASIC and MAS, the CSA or OSC should sign agreements with regulators in other jurisdictions to attract international FinTech companies and investors to Canada while opening doors for Canadian FinTechs abroad.

### *4. Recommendations for Banks and Incumbents*

FinTech Partnership: The Big 6 banks and Canada's insurance companies should establish a position at the Executive level who is responsible for partnering and collaborating with FinTechs. This individual must have sufficient subject matter expertise, authority and support to make meaningful commitments. Banks should also create clear intake mechanisms to help prospective FinTech partners navigate their complex and changing org structures and plug into the right stakeholders across the business as quickly as possible. This intake mechanism should be widely communicated, particularly through incubators and innovation hubs.

Partner with Incubators and Accelerators Across Canada: In early 2015, CIBC announced its partnership with MaRS to create a new corporate innovation hub. RBC has a partnership with the Communitech Hub in Waterloo and recently announced an initiative to help Canadian start-ups in Silicon Valley.<sup>5</sup> Canada's other banks and insurance companies should invest in similar initiatives, particularly incubators and accelerators across Canada.

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<sup>4</sup> See: <http://www.osc.gov.on.ca/en/osclaunchpad.htm>

<sup>5</sup> On January 27, 2016, the MaRS Discovery District, Communitech, University of Waterloo Velocity, C100 Association and RBC teamed up to create a co-working space for Canadian entrepreneurs visiting Silicon Valley, called Canada House.

Create pools of capital dedicated to investing in FinTech: Incumbents are ideal partners to fund proofs of concept (“POCs”) for FinTech start-ups, in order to quickly assess the viability of their value proposition and business.

Explore niche business models that leverage incumbent strengths: In the same way the industry uses Equifax data, banks could explore FinTech business models and solutions that leverage their regulatory capabilities (e.g. KYC, AML, customer authentication).

*Recommendations for Start-Ups:*

Get your house in order: Seek professional advice early on regarding key aspects of IP protection, conflicts of interest, trade secret accusations, corporate/deal structuring and other key success factors.

Validating your use case: Too often, start-ups start building product and pitching incumbents based on a neat idea, without having translated it into a clear use case with a clear addressable market. Failing to do this creates delays and re-work that start-ups can ill-afford

Investigate regulatory and legal framework: Many start-ups have encountered issues because they didn't fully understand or were dismissive of regulatory/legal constraints. Start-ups need to know who regulates them, forge relationships and seek advice.

Make effective use of advisors: The selection of advisors, setting expectations and defining terms of engagement is a critical success factor for start-ups. Advisory boards should be structured and managed to achieve concrete strategic objectives, not just for optics.

*5. Recommendations for Universities*

Develop Curriculums for FinTech: Leading universities should scale up programs in key areas such as data analytics, digital marketing, customer experience design, software engineering and IT architecture. Academics and students could use these programs to collect data for FinTechs to use when developing and testing products. They should also provide educational programs for Start-Ups and internships for students in FinTechs.

Sponsor Hackathons and Competitions: Universities could sponsor largescale FinTech hackathons or launch global FinTech competitions.



Questions for Discussion:

1. Given our regulatory framework, tax/policy jurisdictions and geography, what is the most effective jurisdictional definition of this FinTech strategy? Specifically, can we have a greater impact by focusing on the Waterloo/Toronto/Ottawa innovation super-corridor or must our scope be national?
2. Which jurisdictions do you think provide the best model for us to emulate in establishing a FinTech strategy?
3. Who do you think should be the champion for FinTech in Canada?
4. What do you see as the biggest barriers to the success of Canada's FinTech sector?
5. Which recommendations from the report do you see as the top 3 to 5 priorities? Who should be responsible for these recommendations?
6. What recommendations do you see as least likely to be implemented and why?
7. What are your organization's priorities in FinTech?

## Exhibit 1: Key Elements of UK FinTech Strategy

In her April 2016 speech, Harriett Baldwin, Economic Secretary at the UK Treasury, outlined the key elements of the UK's FinTech Strategy. The eight elements highlighted were:

**Industry-led FinTech Panel:** The UK government will create an industry-led FinTech panel, working with Tech City UK as well as Innovate Finance and other key representatives of the FinTech community. This industry-led panel will oversee the overarching strategy for UK FinTech. It will also have its very own delivery support function to accelerate the time to market of government and industry initiatives. The UK government will consult with industry to solicit their experiences and ideas for how the UK can best ensure continued and sustainable growth of FinTechs across the UK.

**Identify FinTech Niches:** The UK government will work with industry to identify niches or areas of specialization across a broad range of FinTech areas where the UK has a comparative advantage or wants to develop one. The concentration of knowledge and efficiencies will provide UK FinTechs with a potential market edge.

**Open Access to Bank Data (Open API):** UK government will implement an open banking standard that will allow FinTechs to use bank data to develop and provide a range of value-added services to consumers. UK government will ensure that we have the right framework within which customers' data can be safely shared. This effort mirrors steps being taken by the European Commission to accelerate retail banking innovation and simplify payments. The EC is mandating standardized API access across the EU as part of the Directive on Payment Services (PSD2), through a revision called Access to the Account (XSA2). This revision will require banks to provide standardized API access to third parties under the auspices of the European Banking Authority (EBA) by 2016.

**Tech Nation Visa Scheme:** UK government will attract the exceptional talent needed in the digital technology field through the UK visa system. The Tech Nation Visa Scheme was enhanced in October 2015 to include new qualifying criteria for digital experts. This will allow for a wider range of FinTech specialists to get a visa to work in the UK.

**Regulatory Relief and Consulting:** UK government has a key role in ensuring the right regulatory environment in which FinTechs can thrive. The Financial Conduct Authority (FCA) will work on a simple, transparent and industry-led regulatory approach to help UK FinTechs to navigate regulatory complexity through Project Innovate – described as a regulatory sandbox to allow innovative businesses a 'safe space' to test innovative products and services. As part of Project Innovate, the FCA will support the development and adoption of new technologies that facilitate the delivery of regulatory requirements, so called 'RegTech'.

**Access to professional services at reasonable cost:** UK government will work with industry to launch an initiative to bring the major professional services providers together to provide FinTechs with practical and cost-effective basic services. This effort will make it easier for UK FinTechs to access the basic professional services they need – legal, accounting, human resources or regulatory compliance – at a reasonable cost. Industry will build an information hub that makes it easier for FinTechs to navigate through the range of services providers and find the help that will benefit their businesses. One example is EY's FinTech talent program.

**Pensions Dashboard:** UK government will champion industry in designing and delivering a Pensions Dashboard that would allow people to access their pension data easily, viewing all of their pension savings in one place. The participants in this initiative will collaborate to bring this technology to consumers.

**Bridges to FinTech Clusters Abroad:** The UK Treasury will work with UK Trade and Investment to establish FinTech bridges with FinTech clusters in priority markets. These bridges will help UK FinTech firms expand internationally, as well as attracting international FinTech companies and investors to the UK.

Source:

Exhibit 2: Ernst & Young’s FinTech Ecosystem Scorecard

Ecosystem Attribute	Categories	UK score (0 to 4)	Sub-Category	Issue for Canada <sup>1</sup>
TALENT	Talent availability	3	Technical training (STEM programs)	X
			Financial expertise	√
			Entrepreneurs domestically	
	Talent pipeline	2	Academia & curriculum initiatives	
			Immigration / VISAs for tech employees	
Programs targeting foreign entrepreneurs				
CAPITAL	Seed capital	2	Angel investors	
			Incubators and Accelerators	
			Angel tax incentives	
			Affordable office space	
	Growth capital	2	Size of VC funds	
			Investor attitudes / risk appetite	
			FinTech specialization	
			VC tax incentives	
	Listed capital (IPO)	3	Size & number of stock exchanges	
			Research coverage	
IPO / Listing fees				
Tech valuations				
POLICY	Regulatory Regime	4	Simple, transparent & easy to navigate	
			Activist and collaborative	
			Clear accountability across jurisdictions & products	
			Dedicated FinTech team with expertise	
	Government Programs	3	Regulatory sandbox and innovation hub	
			Opening up FS to new entrants	
			Access core infrastructure & data	
			Attracting foreign FinTechs	
			Ease of setting up business	
	Tax policy	3	Strategy on cybersecurity	
			FinTech steering group + budget	
			Promote investment & funding	
Promote start-ups				
DEMAND	Consumer (B2C)	3	Incentivise entrepreneurship	
	Corporate (B2B)	2	Innovation & R&D tax incentives	
			FinTech adoption & use	
			Size and # of SMEs	
			SME adoption of Tech & FinTech	
	Financial Institutions (FIs)	4	Corporate adoption of Tech & FinTech	
			Government adoption of Tech & FinTech	
			Size and number of FIs	
			Adoption of Technology and FinTech	
			Partnerships with FinTech	
Incubators for FinTech				
			FIs with Corporate venture vehicles	

1. Views of authors.

Source: Ernst & Young, 2016, “UK FinTech: On the cutting edge – An evaluation of the international FinTech sector” (April 11); authors modifications.

### Exhibit 3: Key Elements of Australia FinTech Strategy

The Australian government published a report in 2016 titled “Backing Australian FinTech”. The key elements of strategy are:

**Define a FinTech Strategy:** Australia has set out a clear strategy and agenda for the FinTech sector in collaboration with the industry and other key stakeholders, including regulators.

**Set Up FinTech Advisory Group:** The Australian government has established a FinTech Advisory Group to advise the Treasurer directly on issues important to Australia’s FinTech industry.

**Support for Innovation:** The Australian government launched the National Innovation and Science Agenda (NISA) to improve funding for start-ups. As part of NISA, the Australian government created a new independent statutory board, Innovation and Science Australia (ISA), with responsibility for providing strategic advice to the Government on all innovation matters. The Australian government is investing \$36 million over five years in a Global Innovation Strategy and establishing five ‘landing pads’ (in Tel Aviv, San Francisco, Shanghai and two other locations).

**Funding and Tax Incentives:** Australia introduced tax incentives for investments in early-stage innovation companies. These incentives include a 20 per cent non-refundable tax offset on investment capped at \$200,000 per investor per year and a new 10 year capital gains tax exemption for investments held for 12 months.

**Develop and Attract Talent:** Starting in 2016–17, Australia is committing \$112 million to equip its future workforce with STEM skills. In November 2016, Australia will introduce a new Entrepreneur Visa.

**Support for Incubators:** Australia is committing \$8 million to an Incubator Support Program and will offer matched funding to support development of new incubators and accelerators.

**Reform Insolvency Laws:** Australia is reducing the current default bankruptcy period from 3 years to 1 year; introducing a ‘safe harbour’ for directors from personal liability for insolvent trading; and making ipso facto clauses that allow contracts to be terminated solely due to an insolvency event unenforceable if a company is undertaking a restructure.

**Promote FinTech Exports:** Australia is working with regional partners to develop the Asia Region Funds Passport that will waive or diminish key regulatory impediments to trade. ASIC has signed formal Cooperation Agreements with the UK FCA and MAS.

**Data Accessibility:** The Australian government has tasked the Productivity Commission with consideration of the up-take of comprehensive credit reporting (CCR) data as part of its inquiry of data accessibility. Non-sensitive government data will be open by default and available for free.

**Address Cybersecurity:** Australia is providing \$30 million through to 2019–20 to establish a new industry-led Cyber Security Growth Centre to grow and strengthen Australia’s cyber security industry.

**Regulatory Sandbox and Innovation Hub:** ASIC has launched a ‘regulatory sandbox’ and an Innovation Hub to help FinTech start-ups get set-up and navigate Australia’s regulatory system. ASIC has authority to grant waivers (or relief) from the law to facilitate business.

**Technology Neutrality Principle:** Australia committed to amending priority areas of existing financial regulation to ensure they are technology neutral, and will embed this principle into future legislation and regulations.

**Government Procurement of FinTech:** Australia is looking for ways to use FinTech to provide solutions for Government procurement and service delivery needs, and supports the uptake of FinTech services by public agencies.

Source:

Exhibit 4: Comparison of Regulatory Approaches Across Countries

Country	Regulator(s)	Approach to FinTech	Innovations
UK	<ul style="list-style-type: none"> <li>Financial Conduct Authority (FCA) 2</li> <li>Prudential Regulation Authority (PRA)</li> </ul>	<ul style="list-style-type: none"> <li>Principles-based</li> <li>FinTech specific</li> <li>Light-touch</li> <li>Coordinated across bodies</li> <li>Proactive</li> <li>Collaborative</li> </ul>	<ul style="list-style-type: none"> <li>FCA Project Innovate with Innovation Hub (Oct 2014) &amp; regulatory sandbox (Sep 2015)</li> <li>Promoting open API</li> <li>Tax deductibility of investments</li> <li>RegTech niche</li> <li>Agreements with ASIC and MAS for referral &amp; support (2016)</li> </ul>
China	<ul style="list-style-type: none"> <li>People's Bank of China (PBOC)</li> <li>China Banking Regulatory Commission (CBRC)</li> <li>China Securities Regulatory Commission (CSRC)</li> </ul>	<ul style="list-style-type: none"> <li>Light touch initially → Now tightening</li> <li>Mix of principle-based and rule-based regulation</li> <li>FinTech specific</li> <li>Silo'ed; regulatory oversight divided up among bodies</li> </ul>	<ul style="list-style-type: none"> <li>Registration system for P2P lenders</li> <li>Recent Internet Finance Guidelines</li> <li>PBOC: payments</li> <li>CBRC: P2P lending</li> <li>CSRC: crowdfunding, sale of online funding</li> </ul>
Singapore	<ul style="list-style-type: none"> <li>Monetary Authority of Singapore (MAS) 2</li> </ul>	<ul style="list-style-type: none"> <li>Very light-touch</li> <li>FinTech specific</li> <li>Proactive</li> <li>Collaborative</li> </ul>	<ul style="list-style-type: none"> <li>Regulatory sandbox (Sep 2016)</li> <li>FinTech and Innovation Group (FTIG) with sub-depts</li> <li>Committed S\$225 over 5 years to growing FinTech sector</li> <li>Agreement with FCA &amp; ASIC for referral &amp; support (2016)</li> </ul>
Australia	<ul style="list-style-type: none"> <li>Australia Securities and Investment Commission (ASIC) 2</li> <li>Australian Prudential Regulatory Authority (APRA)</li> <li>Reserve Bank of Australia (RBA)</li> <li>Treasury</li> </ul>	<ul style="list-style-type: none"> <li>Principles-based</li> <li>FinTech specific</li> <li>Light-touch</li> <li>Coordinated across bodies</li> <li>Proactive</li> <li>Collaborative</li> </ul>	<ul style="list-style-type: none"> <li>Designated FinTech strategy: 'Backing Australian FinTech'</li> <li>Regulatory sandbox (ASIC's Innovation Hub) (</li> <li>Council of Financial Regulators provides coordination</li> <li>ASIC is using its waiver powers to help reduce regulatory barriers and the cost of compliance</li> <li>Agreements with FCA and MAS for referral &amp; support (2016)</li> </ul>

Source: "Closing the Gap: Encouraging FinTech Innovation in Canada -- Discussion document for the Montreal FinTech Conference", 2016, Deloitte (September); author's research.

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