

UK FinTech

On the cutting edge

An evaluation of the international
FinTech sector

Executive summary - abridged report

Commissioned by:



HM Treasury



Building a better
working world

Foreword

Financial Technology – or FinTech – is fundamentally changing the way financial services firms operate and transforming the way we transfer, borrow, protect and manage our money.

Just as the UK is the financial capital of the world, so we are also a leading FinTech capital, with increasing FinTech activity taking place across the financial sector. Small start-ups and innovation within existing large financial services firms is creating jobs and attracting investment. The sector has now grown from its disruptive roots into an industry in its own right – generating £6.6b in revenue in 2015.

The UK Government is committed to supporting the development of the UK's FinTech sector. We have already taken a number of measures to further this aim, including measures to support alternative lenders and the digital currency sector as well as an industry-led initiative to give consumers better access to their bank data.

However, we know that if we are to remain a leading global FinTech hub we will need to go further. In order to inform our FinTech strategy going forward, HM Treasury commissioned EY to produce a report to consider the UK environment for FinTech compared to that in other leading FinTech hubs and highlight areas where the UK needs to improve, drawing on best practice from other leading FinTech hubs which we may wish to emulate.

We have published this report as we believe those in the FinTech economy, including FinTechs, investors, regulators and traditional financial services firms will benefit from increased research and transparency on this innovative and fast-growing sector.

I welcome this report and its recommendations to ensure the UK's continued strength as the leading global FinTech hub.



HM Treasury



Harriett Baldwin
Economic Secretary to the Treasury

About this report

In August 2014, the Chancellor of the Exchequer, George Osborne, announced the UK Government's ambition to make the UK the "global capital of FinTech". As part of Government's work to realise this aim, Harriett Baldwin, Economic Secretary to the Treasury, commissioned EY to produce this benchmarking study of the UK and selected international FinTech ecosystems.

The purpose of the study is to assess how the UK FinTech ecosystem compares to that of California, New York, Germany, Singapore, Hong Kong and Australia. These regions were selected by HM Treasury based on their status as notable FinTech hubs. Across the seven in-scope regions, the report considers four Attributes essential to a FinTech ecosystem, namely Talent, Capital, Policy and Demand. We use this framework to assess international best practices and propose a series of recommendations to maintain the UK's position as a leading FinTech centre.

The analysis, views and recommendations expressed in this report were produced by EY and informed by over 65 stakeholder interviews held with FinTech firms, investors, trade associations and policy makers across the in-scope jurisdictions. We are very thankful to all those who contributed their time and insights, and made the production of this report possible.

We hope this report will be used by the UK Government to inform policy and further support this vibrant and dynamic sector. We also hope the analysis and insights offered in this report will be helpful to all stakeholders across the FinTech ecosystem.



Imran Gulamhuseinwala
EY FinTech Leader



Key takeaways

- ▶ The UK is a global capital for FinTech. We estimate that the UK FinTech sector generated c.£6.6b in revenue in 2015, and accounted for c.32% of all revenues generated across in-scope regions.¹ The UK FinTech sector attracted c.£524m in investment in 2015, and employs a FinTech workforce of c.61,000, second only to California which employs a FinTech workforce of c.74,000.
- ▶ The UK also ranks first as having the strongest FinTech ecosystem based on our benchmarking exercise. A particular competitive advantage is its world-leading FinTech policy environment. This stems from the supportiveness of regulatory initiatives, tax incentives, and government programmes designed to promote competition and innovation.
- ▶ The UK's position as the leading FinTech ecosystem is closely followed by California and New York. There is a gap between the top three and the remainder of the in-scope regions comprising Germany, Singapore, Australia, and Hong Kong.²
- ▶ The UK ranks second for its availability of technical, financial services (FS) and entrepreneurial talent across benchmarked regions. It is particularly noted for its unrivalled access to financial expertise, employing c.1.2m people in FS.
- ▶ California dominates FinTech investment with c.£3.6b invested in 2015. The UK appears to have robust access to early-stage capital, although growth capital appears constrained.
- ▶ Based on the EY FinTech Adoption Index, consumer demand for FinTech is highest in New York with c.33% of digitally active consumers identifying themselves as FinTech users. California and Hong Kong follow with c.32% and c.29% adoption respectively. This compares to c.25% adoption in London and c.14% across the UK.
- ▶ The UK has an enviable position in FinTech today. However, we see strong competition from emerging FinTech hubs that are implementing progressive policy initiatives, and specialising in disruptive technologies. Countries such as China are rapidly scaling up across the sector.
- ▶ In order for the UK to maintain its world-leading position in FinTech, we have proposed several recommendations on the basis of our analysis of best practices. These recommendations include: creating a FinTech "delivery body" to drive high-impact policy initiatives; building FinTech "bridges" to support FinTechs expanding internationally; collating FinTech sector growth metrics to improve investor awareness; and strengthening the UK's tech talent pipeline.
- ▶ This executive summary forms an abridged account of the report "UK FinTech: On the cutting edge" published on 24 February 2016.

1. The £6.6b of revenues relates to high growth FinTechs only. If traditional FinTechs are included, the combined size is in excess of £20b. Please see UKTI's "Landscaping UK FinTech" for further details
2. In this report, Hong Kong (HK) refers to Hong Kong Special Administrative Region (HKSAR)

Approach

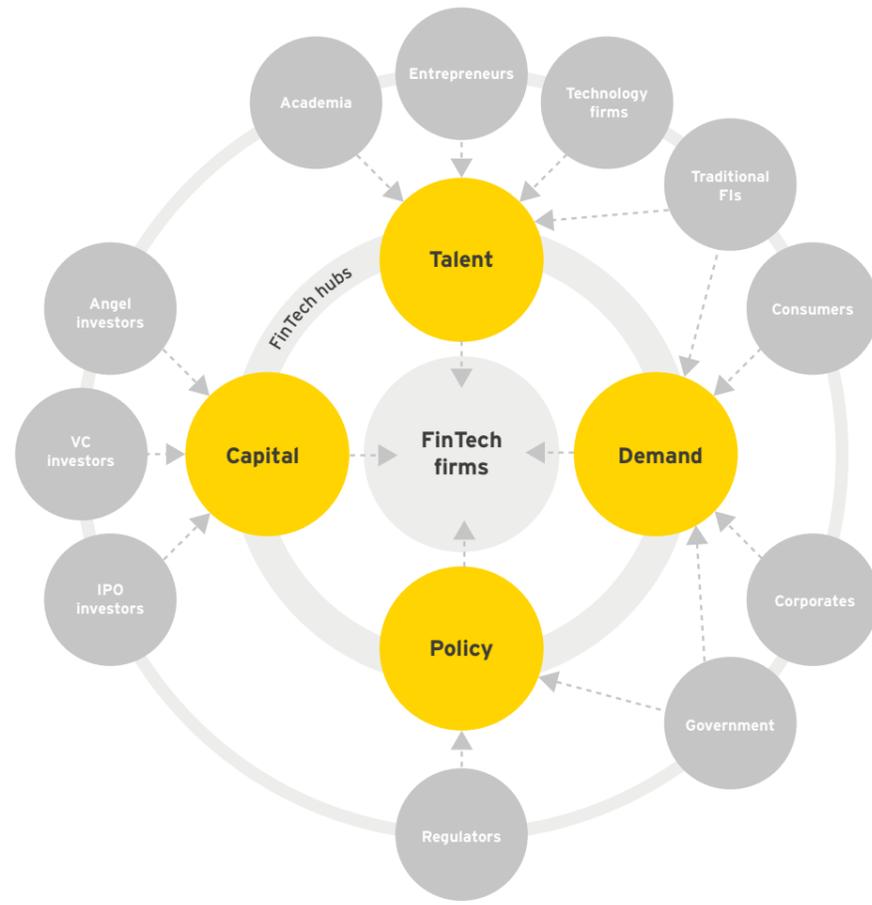
A well-functioning FinTech ecosystem is built on four core ecosystem attributes (“Attributes”):

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

In this report, we benchmark the FinTech ecosystems of seven regions: the UK, California, New York, Germany, Singapore, Hong Kong and Australia. These in-scope regions were selected by HM Treasury on the basis of the reputation and size of their FinTech sectors.

Figure 1 below highlights how these four Attributes interconnect and the network of stakeholders.

Figure 1: **The FinTech ecosystem**



- Key**
- Attributes
 - Stakeholders

In order to assess the quality of the FinTech ecosystem in each region, each Attribute was assessed against the following factors:

Figure 2: **Ecosystem Attributes and benchmark Factors**

Attributes	Factors	Description
Talent	Talent availability	Current availability of technical, FS and entrepreneurial talent
	Talent pipeline	Availability of future talent, both domestic and foreign
Capital	Seed capital	Access to start-up capital (£0m-£5m)
	Growth capital	Access to growth capital (£5m-£100m)
	Listed capital	Access to the public markets
Policy	Regulatory regimes	Regulator support for new entrants and innovative business models
	Government programmes	Government support for programmes to open up the sector, increase competition, attract foreign FinTechs and improve cybersecurity
	Taxation policy	Availability of tax support for investors and corporates
Demand	Consumer demand	Adoption by local market consumers (B2C)
	Corporate demand	Adoption by corporates, particularly SMEs (B2B)
	FI demand	Adoption by FIs (enterprise)

Benchmarking world-class FinTech ecosystems

We ranked in-scope regions based on an analysis of the ecosystem Attributes and supporting Factors and simply adding the rankings across each Attribute (figure 3).

We find that the UK ranks first, as the leading global FinTech ecosystem. The UK has a well-rounded FinTech ecosystem with particular competitive advantage in its government and regulatory policy.

"I can't think of another FinTech market that combines expertise, a captive market of consumers, and a facilitating regulatory framework better."

FinTech, UK

"The UK is what you get if you take the best of other regions like Silicon Valley and New York."

FinTech hub, International

We analysed New York and California separately as they operate as distinct FinTech hubs with little collaboration between them. However, if the US were assessed on a consolidated basis it would clearly lead by a considerable margin.

The analysis highlights the considerable gap between the top three regions and the remainder of the group, amongst which Singapore and Australia stand out as having progressive policy attributes.

Figure 3: Benchmarked ranking of FinTech ecosystems

Region	2015 rank by ecosystem Attribute				Total points
	Talent ▸ Talent availability ▸ Talent pipeline	Capital ▸ Seed ▸ Growth ▸ Listed	Policy ▸ Regulatory regimes ▸ Government programmes ▸ Taxation policy	Demand ▸ Consumers ▸ Corporates ▸ FIs	
UK 	2	3	1	3	9
California (CA) 	1	1	6	2	10
New York (NY) 	3	2	7	1	13
Singapore (SG) 	4	7	2	6	19
Germany (DE) 	6	4	5	5	20
Australia (AU) 	5	5	3	7	20
Hong Kong (HK) 	7	6	4	4	21

Relative rank: 1 = highest, 7 = lowest

Talent

The UK currently has a strong talent pool, however, there are concerns about the future tech talent pipeline. California leads for the depth of talent overall.

Capital

The availability of capital in the UK is good for early-stage investment although growth capital appears constrained. California dominates FinTech investment overall.

Demand

FinTech demand is robust in the UK, driven by London's strength as the global financial capital. New York also benefits as a financial hub and has the highest current rate of consumer adoption.

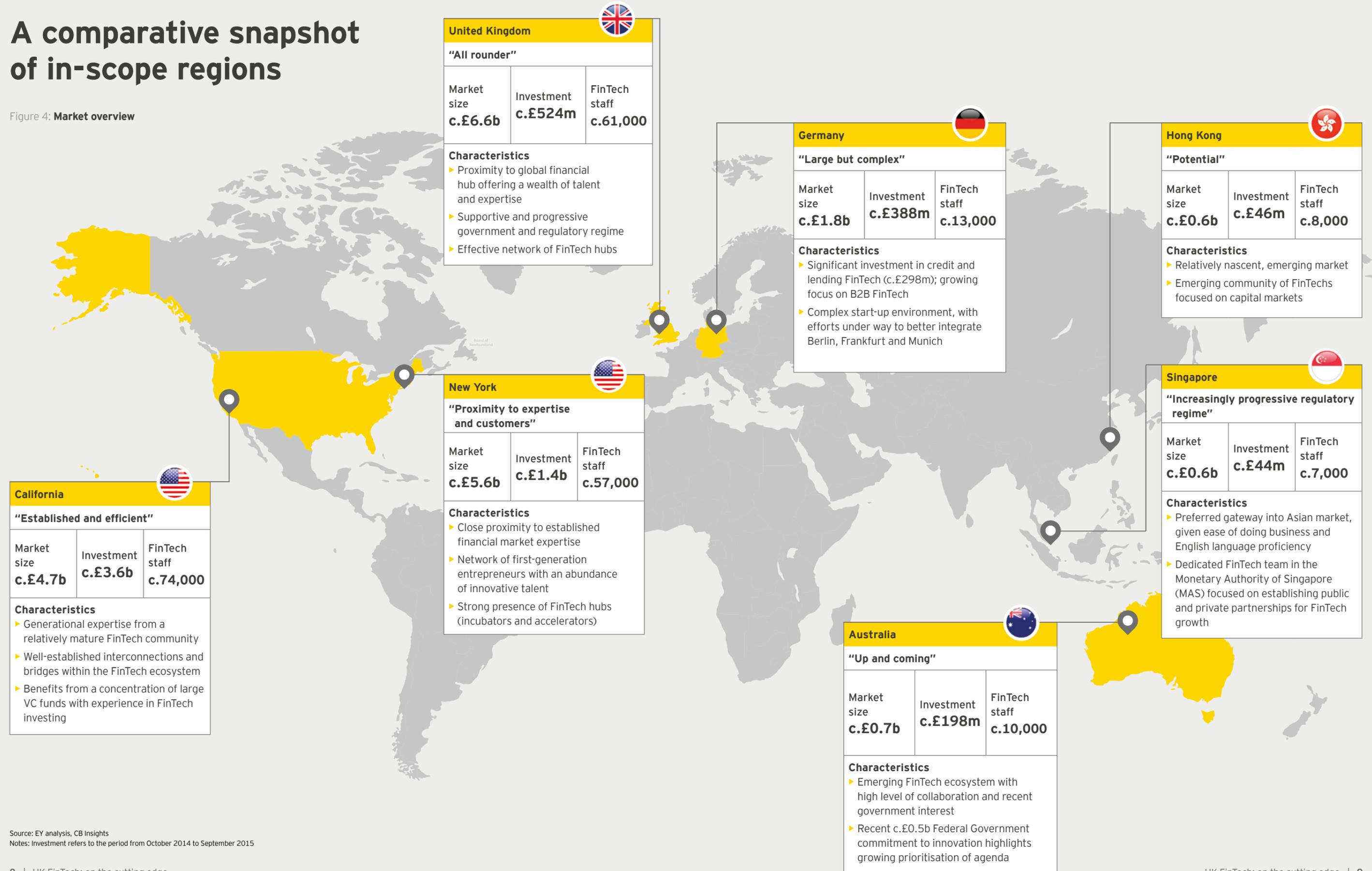
Policy

The UK has the strongest FinTech policy environment, with the most supportive regulatory regime. Policy initiatives in Singapore and Australia are increasingly progressive.

Source: EY analysis

A comparative snapshot of in-scope regions

Figure 4: Market overview



Source: EY analysis, CB Insights
Notes: Investment refers to the period from October 2014 to September 2015



The UK's leading position will increasingly be under pressure

Despite the UK's leading position as a global capital for FinTech, its long-term position is not assured as other regions accelerate policy initiatives, specialist regions emerge, and China emerges as a FinTech juggernaut. The trends below highlight each of these three challenges, and help inform our subsequent recommendations for the UK.

- 1. Accelerated policy initiatives:** Examples of progressive policy initiatives internationally include Singapore's launch of a c.£100m Financial Sector Technology and Innovation Scheme, and the Australian Government's announcement of a c.£500m National Innovation and Science Agenda.
- 2. Regional specialisation:** Emerging technologies are gaining traction in smaller, focused regional centres. Examples include Israel's focus on cybersecurity, Benelux's focus on payments, and Estonia's focus on financial identity.
- 3. Rapid emergence of China:** The Chinese FinTech sector, which is largely concentrated in Beijing, has outgrown almost all the other regions. Beijing's VC market is now second only to San Francisco, and an arm's length approach to regulation is enabling FinTechs to achieve tremendous scale.

A simple scenario analysis enables us to understand the implications of these challenges on the international landscape (figure 5).

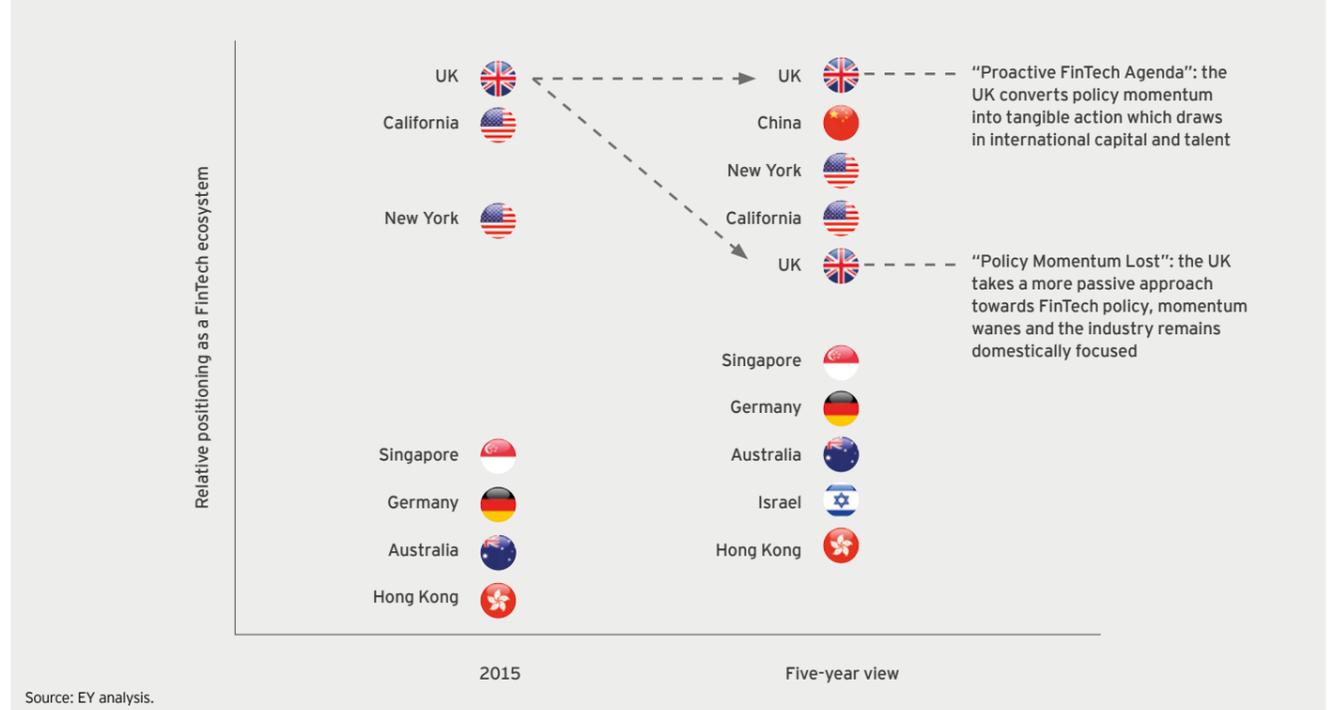
Scenario A: "Policy Momentum Lost"

The UK does not proactively respond to the challenges posed by other FinTech regions, its current momentum wanes and leading position diminishes.

Scenario B: "Proactive FinTech Agenda"

The UK converts policy momentum into tangible action to boost the market, draw capital and talent and position the UK as the global expert hub.

Figure 5: Scenario analysis – relative positioning of leading FinTech regions



Summary recommendations

Based on interviews and our analysis of best practices, we have drawn up a long list of recommendations to enable the UK to remain the global capital of FinTech. These recommendations address each of the four Attributes and are included here in summary form.

1. Create a FinTech “delivery body” to drive high impact policy initiatives to implementation as quickly as possible

The UK Government has already identified a number of bold initiatives designed to encourage competition and innovation across the FS sector and thereby indirectly support the FinTech sector. We recommend the Government accelerate the time to market of these pipeline initiatives. In order to do this, the Government should consider creating and funding a FinTech “delivery body” to lead and manage the implementation of these pipeline initiatives.

2. Build on the FCA’s position as the most progressive regulatory body globally

The Financial Conduct Authority (FCA) is highly regarded and should now consider scaling-up Project Innovate to strengthen support for a larger number of domestic and foreign FinTechs and, increasingly, established tech businesses. The FinTech sector would also benefit from the FCA forming a clear strategy on high-impact initiatives such as RegTech and the Regulatory Sandbox platform.

3. Deliver practical business support to FinTechs

The Government should consider making available Government office space to FinTechs, encouraging FinTech hubs to create a national database of experienced, freelance professional services providers, and working with the FCA to review Know Your Customer (KYC) procedures to ease the challenges of opening business banking accounts.

4. Build FinTech “bridges” to support UK FinTechs expand internationally

The Government should identify and invest in a small number of regions to build two-way collaborative “bridges” that would deliver a well-invested network of local talent, professional services, regulatory contacts and investors.

5. Strengthen the UK’s talent pipeline, particularly for tech talent

The Government should consider broadening the Tier 2 Visa with respect to foreign tech talent, supporting foreign tech graduates to stay in the UK, and promoting FinTech and Science, Technology, Engineering and Mathematics (STEM) in universities and schools with specialist modules, apprenticeships and sponsored work placements.

6. Establish regional Centres of Excellence in the UK

The Government should consider undertaking a capability review across the UK to create Centres of Excellence. These centres should be seeded with dedicated physical space and aim to establish an active collaboration network with academia and other FinTech centres to create globally recognised FinTech capabilities.

7. Initiate investor-focused programmes to improve access to growth capital

The Government should consider sponsoring events for VCs to meet early-stage FinTechs and creating a growth capital fund such as the Business Growth Fund to finance FinTechs. We think the Government can improve the visibility of the sector by encouraging an industry body to collate and report on sector growth metrics and by commissioning dedicated equity analyst coverage of the listed market sector.

8. Broaden tax initiatives to drive greater investment in UK FinTech

The Government should consider widening the application of seed-based funding initiatives and expanding the investment thresholds of early-stage initiatives such as the Enterprise Investment Scheme (EIS) and Venture Capital Trust (VCT) Scheme.

9. Promote government, consumer and FI adoption of FinTech services

The Government should consider working with local government to adopt FinTech propositions such as payment and supply chain solutions. The Government should also consider involving FinTechs to support the financial inclusion agenda. Lastly, the Government should consider promoting greater collaboration between FinTechs and FIs by encouraging professional services firms to act as intermediaries and multi-corporate accelerators to set up in the UK.

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