

THE GLOBAL FINTECH LANDSCAPE

HOW COUNTRIES AROUND THE WORLD ARE
EMBRACING DIGITAL DISRUPTION IN FINANCIAL
SERVICES

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KEY POINTS

- **Fintech hubs — cities where startups, talent, and funding congregate — are proliferating globally in tandem with ongoing disruption in financial services.** These hubs are all vying to become established fintech centers in their own right, and want to contribute to the broader financial services ecosystem of the future. Their success depends on a variety of factors including access to funding and talent, as well as the approach of relevant regulators.
- **This report compiles various fintech snapshots, which together highlight the global spread of fintech.** Each provides an overview of the fintech industry in a particular country or state, and details the evolution of its development. We also include notable fintechs in each geography, and discuss what the opportunities or challenges are for that particular domestic industry. These jurisdictions are home to some of the most promising fintech hubs in the world, and are likely to play a significant and ongoing role in shaping the global industry.
- **Most countries in Europe have made some formal effort to stimulate the development of their domestic fintech industries.** However, there are clear leaders when it comes to fintech hubs — London, Berlin, and Dublin stand out as cities with significant fintech activity, for example, while Paris is on the rise. The countries that house these hubs have worked hard to encourage their development, and much of their success can be attributed to support from their national governments. As a note, the UK is not covered in this report due to our extensive coverage of the country's fintech industry in our daily briefings and other content.
 - **Germany is increasingly establishing its credentials in the fintech sector.** National financial regulator BaFin has clearly laid out regulatory requirements for fintechs wanting to operate in the country, while venture capital (VC)-backed funding for German fintechs increased 118% in 2016. Major hubs in the country include Berlin and Frankfurt.

- **France got off to a slow start in fintech, but that's starting to change.** Spurred in part by the potential opportunity offered by Brexit, the country has launched a campaign to promote itself as a future European fintech leader. Much like in the UK, France's fintech industry is currently centered on one major city, Paris.
- **Ireland is in the midst of establishing a thriving fintech ecosystem.** These efforts are likely helped in part by the country's decades-long reputation as a center for technology and financial services. Perhaps unsurprisingly considering its size, Ireland's fintech industry is also centered on its capital city, Dublin.
- **The Asian fintech scene took off later than in the US and Europe, but it's seen rapid growth lately.** India, for example, has seen significant success when it comes to fintechs attracting monster funding rounds, while Hong Kong is starting to establish itself as a location for business-to-business (B2B) fintech. Meanwhile, in Singapore, the government is working hard to create a fintech-friendly regulatory environment.
 - **India is rapidly morphing into an Asian fintech leader,** thanks to the pre-existence of a successful high-tech industry, as well as government initiatives largely aimed at reducing the underbanked population in the country. India has a couple of fintech hubs, namely Bengaluru and Mumbai.
 - **Hong Kong is building on its robust financial ecosystem with fintech initiatives.** The city's efforts have focused on the development of fintech areas that can help its legacy financial services industry remain globally competitive, such as blockchain technology and regtech. These initiatives will likely help to establish Hong Kong as a B2B fintech center.
 - **Singapore has successfully established itself as an Asian fintech hub.** In 2016, the city-state accounted for three-quarters of Southeast Asia's fintech funding, half of the deals, and three of the top five deals by value. This comes down to several factors, including strong support from the Monetary Authority of Singapore (MAS).

- **As fintech hubs continue to develop around the world, leaders are likely to emerge in each region.** Countries whose regulators take an active role in creating clear, fintech-specific regulation will have the most success in promoting thriving fintech hubs. Additionally, international bodies will probably start to issue fintech-specific regulations. That would further promote the development of fintech hubs, as more uniform legislation makes it easier for companies to operate internationally and open offices in multiple locations.

[Download the charts and associated data in Excel »](#)

INTRODUCTION

Around 10 years ago, a significant number of companies in a few major cities, notably San Francisco and London, began applying technology to financial products and services with the aim of improving them. These firms are known as fintechs, and the result of their efforts has been the emergence of so-called fintech hubs — cities where startups, talent, and funding congregate.

Fintech hubs have now begun to proliferate globally, as the digital disruption of financial services gathers pace. That has been further accelerated as legacy financial services players come to see the importance of using technology, meaning fintech is now impacting many people's lives on a regular basis, even if they don't realize it. Fintech now powers new operating systems that major banks rely on, and offers new ways for people to pay and be paid. Meanwhile, startups are issuing credit to large numbers of small businesses and consumers, and are changing the way capital markets operate. These are only a few areas where the impact of fintech is becoming systematically important.

That has sparked the interest of both national and international governments and regulators, which are increasingly active in shaping the global fintech industry. In most cases, the more active the national bodies, the more successful the country is at establishing a thriving fintech ecosystem. Governments have a number of motives for involving themselves; one key reason is the potential that fintech industries hold for creating jobs and revenue, therefore contributing to the wider economy. Most are also aware of the need to understand, and if necessary regulate, new technologies and business models in order to ensure they don't put consumers, businesses, or the wider financial ecosystem at disproportionate risk.

This report compiles various fintech snapshots, which together highlight the global spread of fintech, and show where governments and regulatory bodies are shaping the development of national fintech industries. Each provides an overview of the fintech industry in a particular country or state, and details what is contributing to, or hindering its further development. We also include notable fintechs in each geography, and discuss what the opportunities or challenges are for that particular domestic industry.








EUROPE

The European fintech landscape is fairly broad geographically speaking, with most countries having made some formal effort to stimulate the development of their domestic fintech industries by now. That said, there are clear leaders when it comes to fintech hubs. London, Berlin, and Dublin stand out as cities with significant fintech activity in terms of startups, talent, and their ability to attract funding. Additionally, Paris has increasingly been upping its efforts to better compete with these three outliers. Below, we take a look at the countries that play home to these hubs, and how their ecosystems are evolving. As a note, we've opted to exclude the UK from this list, due to our extensive coverage of the country's fintech industry in our daily briefings and other content.



As the overall European fintech industry matures, Germany is increasingly establishing its credentials in the space — national financial regulator BaFin has [clearly laid out](#) regulatory requirements for fintechs wanting to operate in the country, while venture capital (VC)-backed funding for German fintechs bucked the downward global trend in 2016 to reach \$421 million, up 118% from \$193 million in 2015. Germany is also starting to catch up with the UK, which has historically been the leading European country when it comes to attracting fintech funding — [in both Q2 and Q3 2016](#), and again in [Q2 2017](#), German fintechs attracted more VC funding than firms in the UK. We expect Germany will continue to build on this strong base to establish itself as a European fintech leader over the next few years.

GERMANY BY NUMBERS

 Population	81 million
 Population (15+ yrs) with a financial account	99%
 Population (15+ yrs) with a credit card	46%
 Mobile banking adoption	51%
 Regulatory bodies relevant to fintech	European Banking Authority (EBA), European Central Bank (ECB), BaFin (Germany's financial regulator)
 Fintech-based agreements with other countries	No explicit agreements; member of the EU which means financial firms licensed in Germany can operate in the 29 other countries of the EEA without further authorization.
 Total VC-backed fintech funding in 2016	\$421 million

Sources: World Bank, ING, CB Insights

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Fintech Hubs

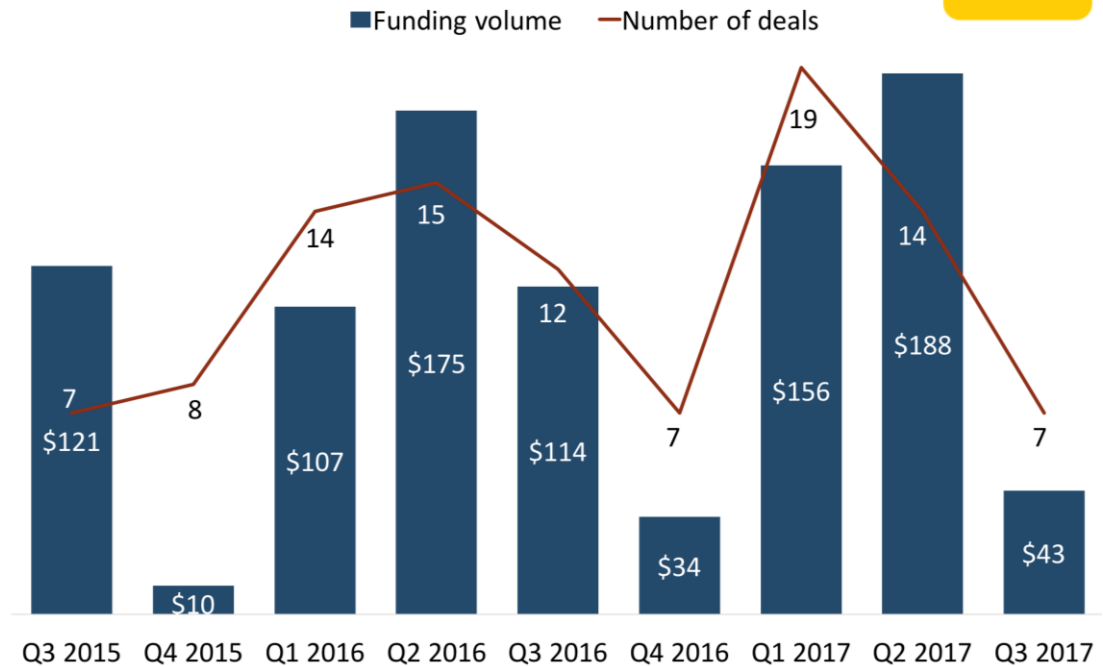
Multiple German cities are seeing significant progress in building up fintech communities. This suggests a model more closely aligned with the US, which has at least two fintech hubs in San Francisco and New York, and is in contrast to the UK, where the fintech industry has been concentrated in one city, London.

Berlin. Germany's capital city is home to 87 fintechs, according to [data from EY](#). Although not historically a financial center, Berlin does have a reputation as a technology hub, which is helping to make it attractive to fintechs. That's because tech skills and expertise are [arguably harder](#) to come by than experience in the financial services industry. Further boosting Berlin's fintech appeal are a number of corporate-sponsored accelerators that have [recently set up in town](#). The city also has a relatively international populous, and English is commonly used as the language of business — an attractive attribute for firms planning further global expansion or those looking to relocate from the UK. And its [lower cost of real estate](#) is an advantage over London in particular — commercial rents are around one-fifth of those in the UK's capital, while domestic rents are also significantly cheaper in Berlin.

Frankfurt. This city has long served as a financial center in Germany, and the financial services community and local government are actively working to expand that reputation to fintech. Frankfurt and the surrounding region boast around [80 fintechs](#), and at least five incubators, accelerators, and labs, with sponsors including major banks and universities. In addition, the local government is sponsoring a coworking space. Frankfurt is particularly known for fintechs providing business-to-business (B2B) products and services.

German VC-Backed Fintech Funding

Millions (\$)



Source: KPMG and CB Insights

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Notable German Fintechs

Kreditech. The consumer-focused alt lender [raised \\$120 million](#) in May 2017, taking its total funding to about \$280 million. The investment, which was reportedly mostly in equity, came from one of Kreditech's partners, global payments company PayU. The two firms planned to follow the funding with expansion of Kreditech's services to more of PayU's markets, particularly India. Given Kreditech's expertise in lending to consumers who don't have conventional credit histories, it seems wise to expand into India, which has a large underbanked population. Having a partner that knows the market will also likely help Kreditech gain a foothold in the country.

N26. [Digital-only bank N26](#) raised \$40 million in 2016, taking its total funding raised to \$53 million. It also gained its own banking license, enabling it to operate in any EU country and offer loans off its own balance sheet. The bank provides customers with a combination of its own products and solutions from third-party providers — it allows customers to access TransferWise's international money transfers from within its app, for example. N26 is one of the most established consumer-facing digital-only banks in Europe, with operations in 17 countries and around 500,000 customers.

Finanzcheck.de. The consumer loans marketplace [raised \\$39 million](#) in April 2016, bringing its total funding raised to \$53 million. The platform works by enabling consumers to input their financial details, which are analyzed by Finanzcheck's proprietary algorithms. It then calculates consumers' credit scores and offers them a range of suitable loan and credit products in real time. The loans come from a number of different providers, including banks and marketplace lending platforms. In addition, Finanzcheck offers white-labeled consumer finance solutions to banks and brokers, which provides it with an additional source of revenue and should increase its chances of long-term success.

Notable VC-Backed Fintech Funding Deals To German Fintechs

Millions (\$), 2016-2017



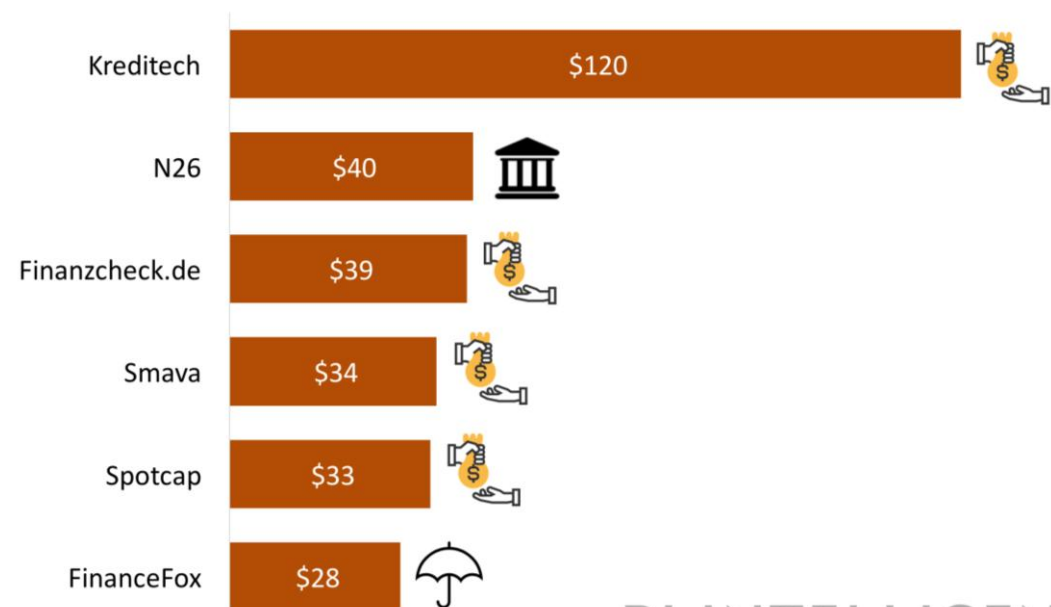
Insurtech



Lending fintech



Digital-only bank



Source: CB Insights

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A Significant Opportunity For German Fintech

Brexit. The UK's decision to exit the EU has left the future of its fintech industry unclear, creating an [opportunity](#) for Germany to step into the potential breach. UK-based firms will likely lose the benefits of passporting — which allows any firm authorized in one EU country to operate in any other without additional licensing — while firms based in Germany will continue to profit from that right, and thereby access a consumer market of over 500 million. Germany will also maintain visa-free access to talent from across the wider European Economic Area (EEA), which its British peers will lose, drastically reducing the available talent pool in the UK. These factors could make Germany more attractive than the UK to firms looking to expand to Europe, and may also convince fintechs that are currently based in the UK to relocate. That said, the UK remains a valuable market for many fintechs, both British and European, so we expect maintaining bases in both regions will be the more popular strategy.

Challenges For German Fintech








Language barrier. Although English is widely accepted as the international language of business, and is commonly spoken in Germany, it's not an official language of the country. As a result, international investors and startups may be wary of potential problems when it comes to the ease of doing business. Should that drive investors and fintechs to look elsewhere, it could hinder further development of Germany's fintech industry.

Cultural conservatism. German culture is rather conservative, and that extends to fintech adoption — [only 51% of adults](#) use mobile banking, for example. In contrast, 60% of adults in the UK, and 67% in the US, use the service. This mindset could make it harder for fintechs to attract customers in the country, reducing their ability to scale, and ultimately thrive.



The development of France's fintech industry got off to a slower start than some of its European neighbors, but that's starting to change. Spurred in part by the potential opportunity offered by Brexit, the country has launched a campaign to promote itself as a future European fintech leader. It's begun tackling its reputation as a heavily bureaucratic country by [introducing](#) fintech-friendly regulation, and by offering foreign fintechs an [expedited](#) licensing process. We expect France's fintech scene to develop over the next couple of years, though it will struggle to reach the scale of either the UK or Germany in this period. That's not necessarily a bad thing — a market with fewer competitors could mean more funding to go around, while increasing the likelihood of employees staying in roles longer.

FRANCE BY NUMBERS

 Population	65 million
 Population (15+ yrs) with a financial account	97%
 Population (15+ yrs) with a credit card	44%
 Mobile banking adoption	55%
 Regulatory bodies relevant to fintech	European Banking Authority (EBA), European Central Bank (ECB), Autorité de contrôle prudentiel et de résolution (ACPR – bank and insurance regulator), Autorité des marchés financiers (AMF – financial market regulator)
 Fintech-based agreements with other countries	No explicit agreements; member of the EU which means financial firms licensed in France can operate in the 29 other countries of the EEA without further authorization.
 Total VC-backed fintech funding in 2016	\$68 million

Sources: World Bank, ING, CB Insights, Innovate Finance

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Fintech Hubs

Much like in the UK, France's fintech industry is currently centered on one major city.

Paris. The French capital is home to around 200 fintechs, according to lobbying group Europlace, and serves as the country's financial center. It's also the location of several fintech accelerators and organizations, including [BNP Paribas' accelerator](#) created in partnership with US accelerator operator Plug and Play; Finance Innovation, the city's fintech network; and [France Fintech](#), a fintech membership organization with over 60 members. Additionally, Paris is the center of the French government's efforts to promote technology more broadly, and boasts a new 34,000-square-meter "startup campus," dubbed [Station F](#), which offers 3,000 desks, as well as event space and accommodation. Céline Lazorthes, founder and CEO of French fintech Leetchi Group, says Paris offers two major attractions for fintechs: the accessibility of tech talent from nearby French higher-education institutions, and the low cost of running a business in comparison to other European cities, notably London. In particular, office space is widely available and reasonably priced.

Notable French Fintechs

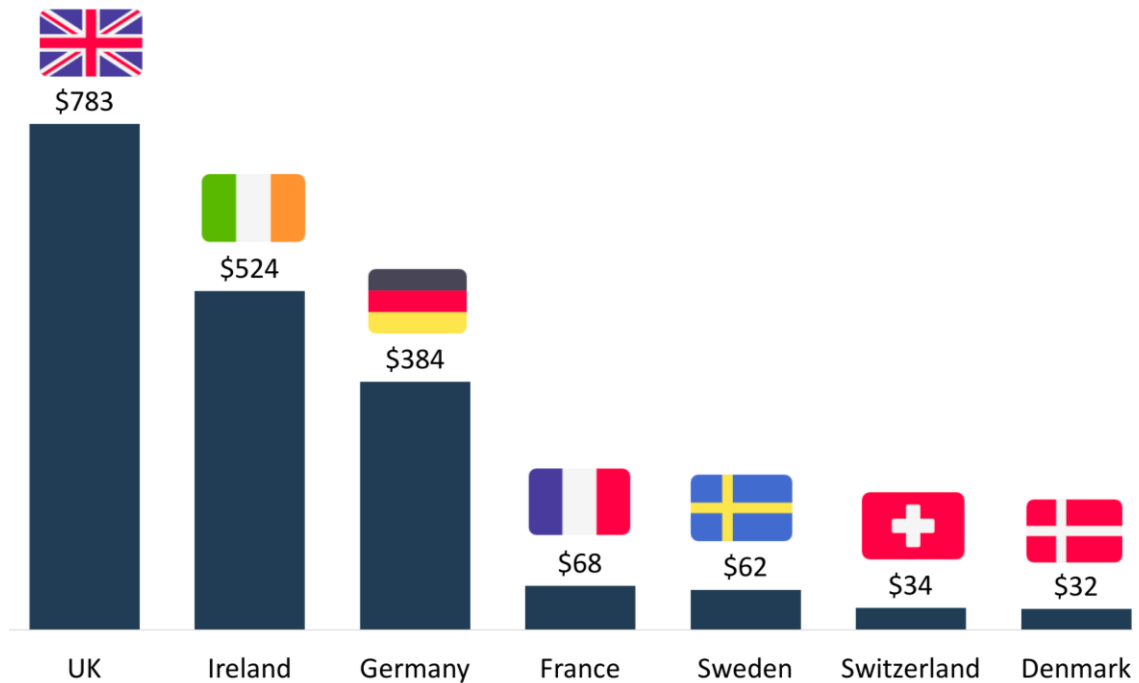
Leetchi Group. The group includes [Leetchi](#), a digital service that lets groups of consumers collect "pots" of money for specific purposes, like birthday presents or charity fundraising, and [Mangopay](#), a payments solution for online marketplaces. Leetchi Group was acquired by French banking group Credit Mutuel Arkéa in 2015 for around €50 million (\$54 million), marking the first major French fintech exit. The group's brands still operate independently, and Lazorthes continues to oversee the day-to-day running of the business. She believes this cooperation model works well for both fintechs and banks — the former gains access to industry knowledge and funding, while the latter gets new business lines and greater agility when expanding internationally.

Younited Credit. Previously Pret d'Union, Younited Credit is a marketplace lender that offers consumer loans. It has raised \$122 million in total, \$48 million of which came in [September 2017](#), and is slotted for expansion. Operating in France, Italy, and Spain, it's lent over \$600 million to date. France's alternative finance market is considerably smaller than the UK's, but it's the largest in continental Europe. In fact, it was 28% larger than in Germany, its nearest competitor, in 2015, [according to](#) KPMG. Other major players in this segment include small business marketplace lender [Lendix](#) and equity crowdfunding platform [SmartAngels](#). With its recent funding, Younited Credit stands a good chance at becoming the dominant alternative consumer lender in the country.

Compte-Nickel. The neobank offers consumers an account similar to a retail bank account that can be opened in minutes in a number of small shops; it comes with a payment card, can be managed digitally, and costs €20 (\$21) a year. It's raised \$10 million in funding and has over 500,000 customers. French banking giant BNP Paribas [acquired](#) the firm in July 2017, though Compte-Nickel continues to operate independently in much the same manner as Leetchi Group. The French neobank market is far less crowded than in other European countries, like the UK, which gives Compte-Nickel a good chance of acquiring market share. That's a situation enhanced by the fact that it now has the brand, experience, and funding of BNP Paribas behind it.

European VC-Backed Fintech Deal Values In 2016

Millions (\$)



Source: Pitchbook for Deloitte

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Opportunities For French Fintech

Brexit. Like several other EU countries, France is looking to boost its fintech industry by using any potential opportunities that may arise from Brexit. In April 2017, Business France, the agency responsible for attracting foreign investment to the country, embarked on a [French Fintech Tour](#) of the UK designed to lure British fintechs to France. However, while these efforts may convince some British fintechs to set up subsidiaries in the country, it seems unlikely that many will relocate completely, as previously mentioned.

Government support. The French government has been [working hard](#) to change perceptions that the country is overly bureaucratic and unsupportive of entrepreneurship, while promoting the development of the tech industry more broadly. Along with efforts to make the licensing process for fintechs easier, France has taken a stake in Station F, and has introduced the "French Tech Ticket," which includes a €45,000 (\$38,000) grant for foreign entrepreneurs in addition to help with visa applications. As we've seen in the UK, government support is vital for the successful development of a national fintech industry; therefore, France's efforts could encourage more fintech entrepreneurs to set up shop in the country.








Challenges For French Fintech

Low fintech adoption. French consumers are seemingly reluctant to use fintech products, with just 36% saying they use at least one nontraditional firm for financial services, compared with 58% in Spain, 49% in the UK, and 46% in the US, according to [Capgemini](#). This suggests that startups in the country may struggle with customer acquisition, which could make it hard for them to achieve the scale they need and hinder the growth of the broader fintech industry. It may also mean that non-European fintechs looking to expand into the area bypass France in favor of other countries in the region with higher fintech adoption rates.

Administrative hurdles. Despite the French government's best efforts, setting up a fintech in France is still likely harder than it is elsewhere in Europe, as many changes to the bureaucracy have yet to be fully implemented. That is exacerbated by a language barrier — the majority of French bureaucracy is conducted only in French. The two factors combined could put off foreign fintechs, while the former may spur French entrepreneurs to look outside the country to found their startups. As a result, we will likely see fintech industries in other countries pull ahead of France in terms of growth and maturity in the near future.



Ireland, which has been a center for [technology](#) and [financial services](#) for decades, is now in the midst of establishing a thriving fintech ecosystem. The country's success in attracting the likes of Google, Apple, and international financial services firms is due to a combination of factors, including: a favorable tax regime, the relatively low cost of doing business compared with elsewhere in the EU, its proximity to London and the rest of Europe, English being the dominant language, and similarities between Irish and English law making it easy for firms to operate across the UK. Those factors will also work in its favor as it looks to attract international fintechs to its shores, particularly in light of Brexit. Additionally, the existing tech and finance industries mean that there is already highly skilled talent in the country, as well as a plethora of financial services firms looking to innovate. All told, we expect Ireland to firmly cement its reputation as a fintech leader in Europe over the next 12-24 months.

IRELAND BY NUMBERS		
	Population	4.8 million
	Population (15+ yrs) with a financial account	95%
	Population (15+ yrs) with a credit card	46%
	Mobile banking penetration	43%
	Regulatory bodies relevant to fintech	Central Bank of Ireland
	Fintech-based agreements with other countries	None formally
	Total fintech funding in 2016	\$524 million
Sources: World Bank, Pitchbook, CB Insights, Deloitte		BI INTELLIGENCE

Fintech Hubs

Perhaps unsurprisingly considering its size, Ireland's fintech industry is also centered on its capital city.

Dublin. The Irish capital hosts a number of fintech-specific organizations, including [DogPatch Labs](#), a coworking space for tech and fintech startups. Ulster Bank, one of Ireland's largest banks, has taken an interest in the organization, and aims to help it expand by investing in it. It's also moved its own offsite innovation team to the coworking space. Additionally, Accenture has an accelerator program running in Dublin, in the form of a [Fintech Innovation Lab](#) based in the city, while an area known as "Silicon Docks" has sprung up to house a number of fintech startups. And the cost of doing business in Dublin is [far cheaper](#) than in many major UK cities, making the city attractive to international firms.

Notable Irish Fintechs

Plynk. The money messaging app raised €25 million (\$28 million) in [June 2017](#) from investors, including private investment trust Swiss Privee in the [largest ever](#) Series A round for an Irish fintech. Plynk enables users to send money via social messages by linking to their Facebook accounts, and gives them a prepaid virtual Mastercard for shopping online. Users top up their accounts by transferring money from their bank accounts. Plynk plans to use the funding to expand into the rest of Europe, starting with Spain and Portugal, add support for other currencies, and integrate with Apple Pay and Android Pay. Given the increasing popularity of messaging apps, and the relative lack of competing products in Ireland, Plynk is well placed to gain customers quickly. That's key to the fintech's chances of success, which hang on its ability to make its solution the dominant messaging payments app — before more competitors enter the market.

Future Finance. The online student loan platform has lent over [£50 million](#) (\$65 million) since 2014, and has secured funding of around £185 million (\$241 million) from big-name investors, [including](#) QED Investors. It's also backed by Goldman Sachs, which provides a credit facility to fund the platform's loans. Future Finance, which assesses students' creditworthiness using a range of factors — such as their course of study and future likelihood of employment — currently operates in the UK and Germany, with plans to expand further into Europe in the future. Future Finance's model is unusual in Europe, as most governments in the region subsidize university education and provide their own loan options, meaning the market for private loans for education has historically been small. That said, university fees across Europe, and particularly [in England](#), are rising, and government support is failing to increase at the same pace. That likely means Future Finance's potential market is expanding, and with its established backers and high level of funding, the firm is in a good position to capitalize on the changing environment. In fact, we will probably see its expansion plans come to fruition in 2017.

CurrencyFair. The eight-year-old money transfer firm, which raised €8 million (\$9 million) [last year](#) to bring its total funding to about €21 million (\$24 million), is one of Ireland's oldest fintechs. CurrencyFair's online platform lets people exchange money directly with others who want to make the same trade, but in the opposite direction; this is a similar model to that used by UK fintech unicorn TransferWise. In the aftermath of the Brexit vote, CurrencyFair CEO Brett Meyers [said the firm](#) would likely open a new office in the UK in 2017 to ensure it could continue serving the British market. His decision highlights the fact that the hurdles presented by Brexit are not only faced by UK-based fintechs, and suggests that Irish fintechs will also need a strategy in place to continue operating in what, for many, is their largest market.

Opportunities For Irish Fintech

Brexit. Ireland's largest opportunity to boost the size and reputation of its fintech industry comes from Brexit. The country's proximity to London, its continued membership of the EU, and the fact that English is the dominant language are all factors in its favor. Major financial institutions (FIs) have already taken the leap to relocate parts of their business to Ireland, in particular to Dublin, and it's probable more will follow in the near future — by July 2017, 19 FIs based in London had publicly mentioned Ireland as a potential relocation site, [according to EY](#). Given these factors also appeal to startups, it's unsurprising that UK-based fintechs appear to be on the same page — remittance fintech WorldRemit has already [mooted](#) Dublin as a potential location for a new headquarters, for example. It's important to note, however, that WorldRemit is not planning to exit the UK, and other fintech firms considering Ireland aren't expected to either. It's more likely they will follow WorldRemit's lead and simply move to house new business units in the country.

Government support. The Irish government has launched a number of initiatives designed to help boost the Irish fintech industry, including providing funding for fintechs via the [Competitive Start Fund](#) (CSF), which is run by Enterprise Ireland, the agency responsible for supporting Irish businesses. The [Irish Strategic Investment Fund](#) has also provided funding to both private investment funds focused on fintechs, and fintechs themselves. Additionally, [IFS 2020](#), the government's strategy for its financial sector to 2020, includes specific actions designed to support the fintech industry, such as easing access to funding and partnering with existing fintech accelerators. This strong government support will likely aid the development of a strong and sustainable domestic fintech sector, and also help attract international fintechs to Ireland.

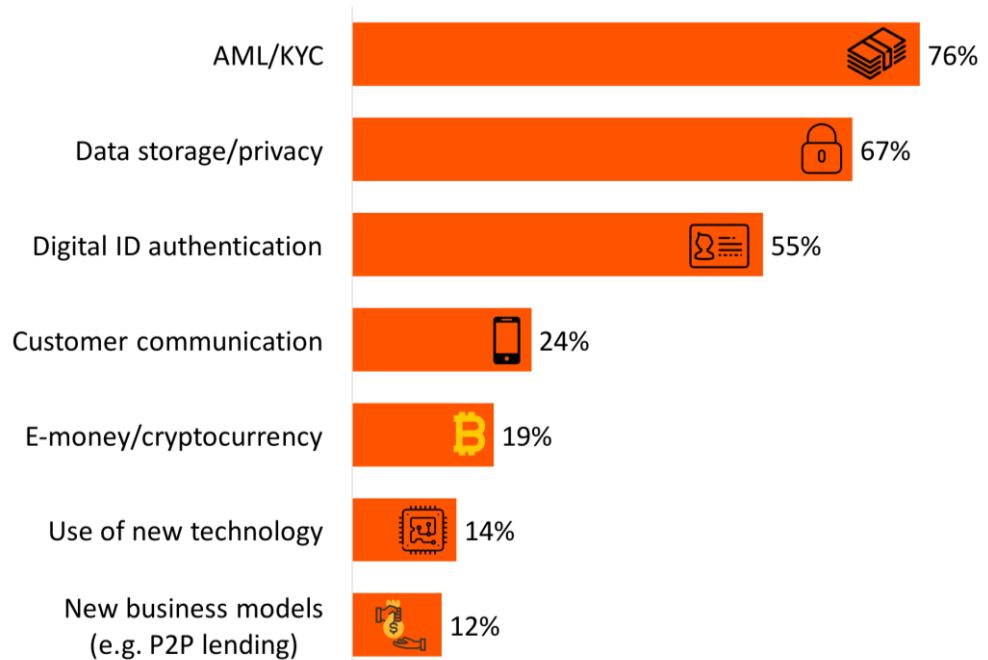
Interest from abroad. Fintech advocacy group [Fintech Ireland](#) has been actively engaging international fintech hubs in countries like Australia and the US to promote the benefits of Irish expansion. Two large US fintechs, money transfer firm Circle and alt lender Kabbage, have [already chosen](#) Ireland as a site for European expansion, with Circle recently announcing plans to double the number of employees it has in Ireland, and Kabbage choosing Dublin for its European headquarters. The presence of big-name US fintechs will only make Ireland more appealing to international fintechs, providing yet another factor in the country's favor as European countries battle for fintech supremacy over the next 12-24 months.

A Potential Challenge For Irish Fintech

Regulatory uncertainty. Seventy-six percent of Irish FIs and fintechs say know your customer (KYC) and anti-money laundering (AML) regulation is a barrier to innovation, compared with just 48% globally, [according to PwC](#). Meanwhile, 78% percent of Irish fintechs cite regulatory uncertainty as a challenge when it comes to working with FIs, in contrast to just 48% of fintechs globally. This indicates that the Irish regulatory environment presents a significant hurdle to the development of the fintech industry. The Irish regulator has [acknowledged](#) the issue and established an internal fintech working group to help it better understand the sector. It has also said it's aware that fintechs' lack of regulatory expertise may limit their ability to comprehend rules that apply to their business models. In order to combat this issue, as well as ensure it has a complete understanding of the industry, its next step should be to engage fintechs and FIs directly, potentially through fintech forums, where all stakeholders can share their pain points and learnings.

Areas Where Irish FIs And Fintechs See Regulatory Barriers To Innovation

2017



Source: PWC








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ASIA

The Asian fintech scene took off later than in the US and Europe, but it's seen [rapid recent growth](#). India, alongside China, has seen significant success when it comes to fintechs attracting monster funding rounds, while Hong Kong is starting to establish a reputation for itself as a location for B2B fintech. Meanwhile, in Singapore, the government is working hard to create a fintech-friendly regulatory environment, as it looks to attract more startups and investments to the city-state. In this section, we take a closer look at few of the countries helping to shape the fintech environment in Asia, and how they're working to establish themselves in a region that still has considerable room to run.



India is rapidly morphing into an Asian fintech leader, in part thanks to the pre-existence of a successful high-tech industry. The development of the Indian fintech sector is also being significantly aided by government measures largely aimed at reducing the underbanked population of the country. These projects include an ongoing [initiative](#) to give every resident a unique digital ID, the introduction of [new types](#) of banking licenses predominantly aimed at technology firms and telcos, and [demonetization](#) designed to drive electronic payments. Like many countries, India also offers tax [exemptions](#) for startups. The combination of these factors has attracted significant investment to the country, from both VCs and international corporations. While a lack of mega-deals drove the volume of that investment down in 2016, the number of deals actually went up, and we expect to see a healthy flow this year.

INDIA BY NUMBERS		
	Population	1.3 billion
	Population (15+ yrs) with a financial account	53%
	Population (15+ yrs) with a credit card	3.4%
	Mobile account	2.4%
	Regulatory bodies relevant to fintech	Reserve Bank of India (RBI), Securities and Exchange Board India (SEBI), Ministry of Finance (MoF)
	Fintech-based agreements with other countries	The state of Anresh Padesh has an agreement with Singapore
	Total VC-backed fintech funding in 2016	\$388 million
Sources: World Bank, KPMG, CB Insights		BI INTELLIGENCE

Fintech Hubs

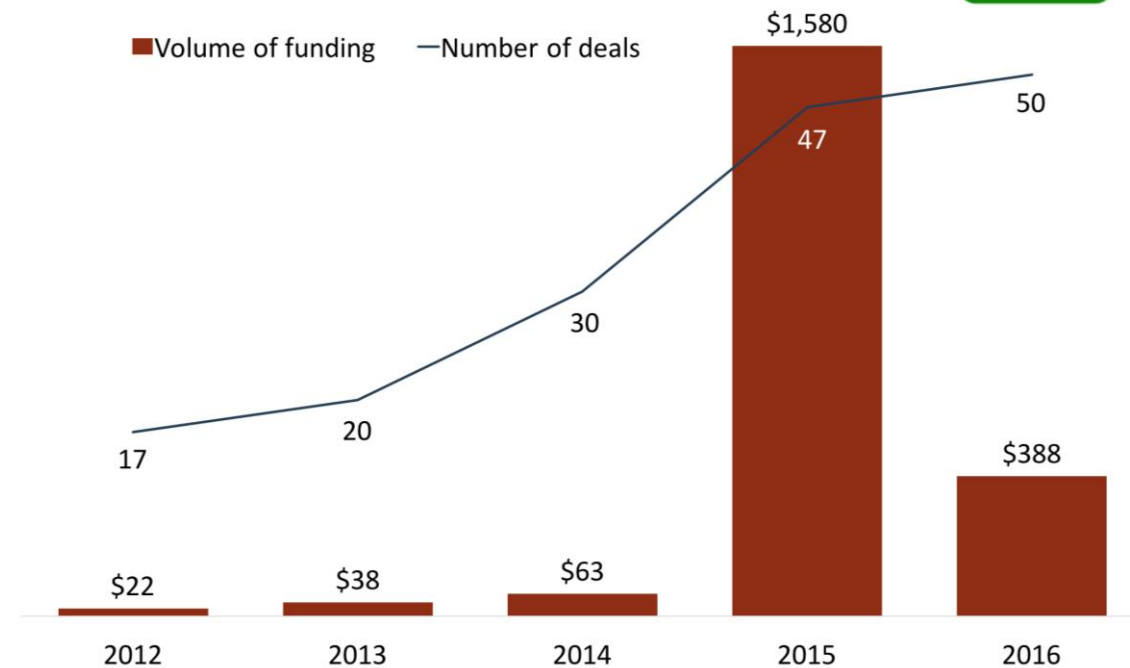
As might be expected given the country's size, India has a couple of fintech hubs.

Bengaluru. The city houses the headquarters of a number of India's biggest and most successful tech firms as well as regional offices of international firms like Uber and Amazon. It's also home to more startups than anywhere else in the country, and a plethora of incubators, accelerators, and coworking spaces have sprung up. Additionally, major VC firms like Sequoia Capital and Accel have set up offices there, helping to create an ecosystem of talent, funding, and support well suited to nurturing nascent fintech firms.

Mumbai. The financial center of India is working hard to earn the title of fintech center as well. Mumbai attracted over [one-third](#) of total fintech investment in the country in 2016, and is home to a branch of international fintech incubator [Startupbootcamp Fintech](#). The city also boasts a Barclays Rise coworking space that hosts international [hackathons](#) and is piloting a UK-India fintech exchange initiative. The city's financial center status means it's well placed to supply financial talent to startups, while overseas involvement will likely bring Mumbai resources that are lacking in other Indian hubs, such as fintech-specific experience.

Indian VC-Backed Fintech Investment Activity

Millions (\$)



Source: CB Insights

BI INTELLIGENCE

Notable Indian Fintechs

Paytm. The mobile payments provider is arguably India's largest and most well-known fintech. After [raising](#) around \$700 million in 2015 from investors, including Chinese tech giant Alibaba, Paytm [raised](#) a further \$1.4 billion in May 2017 from Japanese communications firm SoftBank. The fintech also [launched](#) a bank in May of this year after being awarded a Payment Bank license, a new authorization [introduced](#) in 2015 to let firms accept deposits and issue payment cards, but not issue credit. Given Paytm's sizable user base of around 200 million, and India's low banking penetration, this initiative will likely see considerable success.

Mobikwik. Another mobile payments provider, Mobikwik, [raised](#) \$50 million in May 2016 from investors, including Mediatek and Sequoia Capital, taking its total funding to around \$85 million. The firm is now [rumored](#) to be raising another \$100 million at a potential valuation of \$1 billion. If it succeeds, it would become India's second fintech unicorn after Paytm. Aside from demonetization, a combination of other factors have contributed to the success of mobile payments fintechs in India: It's the world's [second-largest](#) smartphone market, and has a booming e-commerce industry, alongside low payment card penetration, which has created a huge population looking for ways to buy online. The government has also been keen to push consumers toward mobile payments because digital transactions are easier to track, making the detection of offenses like tax fraud and money laundering much easier.

IncRED Finance. The firm [raised](#) \$75 million in August 2016 to launch its digital loan platform, which went live in February 2017. It offers a variety of lending products, including small business loans, personal loans, home loans, and education loans. IncRED Finance is one of a number of Non Banking Financial Companies (NBFCs), which are licensed by the Reserve Bank of India (RBI) to issue loans, but can't accept demand deposits and aren't part of the country's payment and settlement systems. These companies have seen significant growth in the last year or so because many of India's banks are reluctant to lend while they struggle under huge volumes of [stressed loans](#), and demonetization has reduced the number of cash lenders in the country. Neither issue is likely to be resolved anytime soon, meaning we'll probably see further funding for alt lending firms as they look to fill the credit gap left by incumbents.

MOST ACTIVE VC INVESTORS IN ASIAN FINTECH COMPANIES IN 2016

Rank	Investors	
1		500 Startups
2		East Ventures
3		Sequoia Capital India
4		SBI Investment
5		IDG Capital Partners
5		Golden Gate Ventures
5		Accel India
5		Spiral Ventures (previously IMJ Investment Partners)
5		Arbor Ventures

Sources: CB Insights

BI INTELLIGENCE

Opportunities For Indian Fintech

Demonetization. By far the biggest opportunity for Indian fintech stems from the government's demonetization initiative. As access to and use of cash is restricted, consumers are turning to digital alternatives — Paytm saw a [1,000%](#) increase in money added to wallets following the removal of 500 and 1,000 rupee notes from circulation. Alternative lenders have also [received](#) a boost, as informal cash lenders find themselves unable to operate, thanks to new restrictions on volumes of cash that can be held. Indian fintechs should therefore expect significantly increased demand for their products, which alongside ongoing government support for digital money solutions, will likely help them attract investment, and in turn, achieve scale.

International interest. Amid ongoing uncertainty about the future of the fintech industries in the [UK](#) and [US](#), it's probable international investors interested in the sector will increasingly look toward Asia. This presents an opportunity for the Indian fintech industry, especially given its existing international links. To make the most of this, Indian regulators would do well to push through frameworks for specific fintech segments that have already been [mooted](#), and consider widening their scope, as clear regulation reassures both investors and potential fintech users.








A Major Challenge For Indian Fintech

A fractured market. One of Indian fintech's biggest advantages — its huge addressable consumer market — also presents one of its biggest challenges. The country's population of 1.3 billion contains a wide variety of demographics, along with vast discrepancies in wealth, making targeting specific market segments difficult. This hurdle is compounded by the fact that, despite the government's best efforts, around half the population remains without an account at a formal institution, and cash is still preferred wherever possible. As a result, while the Indian fintech industry should continue to flourish over the next year, it'll likely take longer before we see many more firms achieve the scale and success of Paytm.



Long known as a global financial services center, Hong Kong is now working to expand that reputation to fintech. The Hong Kong Monetary Authority (HKMA) has launched initiatives designed to encourage the development of the fintech industry, including a [fintech sandbox](#) to encourage innovation among banks. Meanwhile, [InvestHK](#), the government department that looks to attract foreign direct investment to the city, has been [hunting](#) for established fintechs overseas that it can persuade to expand to Hong Kong. Notably, the city's top-down efforts have focused on the development of fintech areas that can help its legacy financial services industry remain globally competitive, such as blockchain technology and regtech. That's in contrast to other cities that have centered their efforts on consumer-facing fintechs as a way of boosting competition within the domestic financial services industry. These efforts, combined with its proximity to China, will likely enable Hong Kong to establish itself as a leading center for B2B in the near future.

HONG KONG BY NUMBERS

 Population	7.4 million
 Population (15+ yrs) with a financial account	96%
 Population (15+ yrs) with a credit card	59%
 Smartphone penetration	86%
 Regulatory bodies relevant to fintech	Hong Kong Monetary Authority (HKMA), Hong Kong Securities and Futures Commission (SFC), Office of the Commissioner of Insurance (OCI)
 Fintech-based agreements with other countries	HKMA and the UK's FCA have a regulatory cooperation agreement (Fintech Bridge); SFC has a cooperation agreement with Australia's ASIC
 Total fintech funding in 2016	\$216 million

Sources: World Bank, KPMG, CB Insights, eMarketer

BI INTELLIGENCE

Notable Hong Kong Fintechs

ANX International. ANX, one of Hong Kong's most successful fintechs, raised \$160 million [in 2016](#) at a valuation of nearly \$1 billion. It provides a range of services built using blockchain technology, including cryptocurrency debit cards for consumers and businesses. The Visa and Mastercard prepaid cards can be loaded with cryptocurrencies, which can be spent anywhere the cards are accepted. ANX also offers cryptocurrency exchange services and wallets, and for businesses, it provides customized blockchain-based products, including payment and commerce solutions, and proprietary digital assets. Additionally, businesses can access blockchain-based applications to incorporate into their own products and solutions via ANX Blockchain Services (ABS). Given the ongoing [global interest](#) in cryptocurrencies, and the firm's broad product base, it's poised for future international growth, particularly if it continues to position itself as an infrastructure supplier for the legacy financial services industry.

8 Securities. For consumers, 8 Securities provides automated investing via its robo-advisor product Chloe, which launched in Hong Kong in 2012, and Japan in 2017. It also offers a free trading platform where users can trade US, Hong Kong, and China H (shares in companies that are incorporated in mainland China but also listed in Hong Kong) stocks, as well as ETFs. On the B2B side, it offers a white-labeled robo-advisor solution to other financial institutions. It has raised \$29 million to date, with the last round completed in 2014. Given that wealthy individuals in Asia have a [higher propensity](#) to use automated investment services than in other regions, and 8 Securities has already expanded its product suite to include a white-label offering, it seems well positioned for further success. Providing its foray into Japan goes well, we also expect to see it expand into other geographies soon.

Opportunities For Hong Kong Fintech

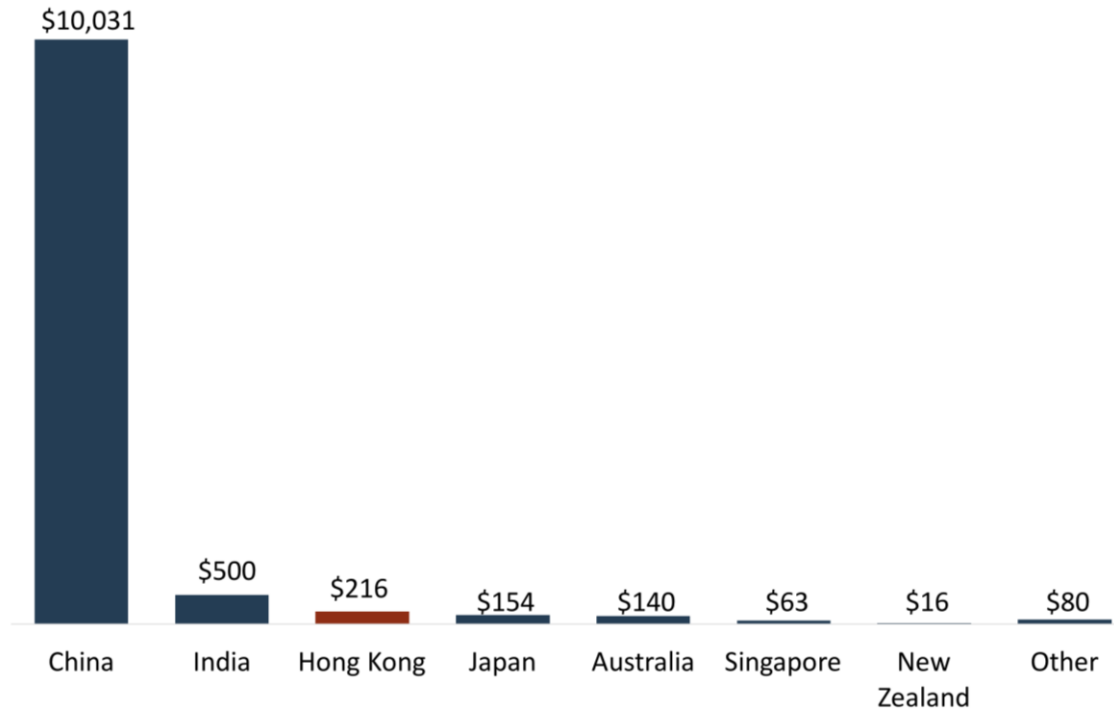
Talent. Hong Kong is home to several prestigious universities, one of which, the Chinese University of Hong Kong (CUHK), launched an undergraduate degree in fintech in 2017. Additionally, the city's government sponsored an [accelerator](#) in partnership with Applied Science and Technology Research Institute (ASTRI) that began in July 2017. The initiative provides internships of up to one year for undergraduate and postgraduate students in designated disciplines at 10 universities, during which time they participate in the fintech projects of 12 banks and HKMA. These initiatives should help Hong Kong ensure a ready supply of fintech talent for the future, which could help it overcome one of the biggest hurdles cities wishing to become fintech hubs face. In the short term, however, Hong Kong will have to try hard to tempt tech talent away from other hubs if it wants to boost its fintech prowess.

Proximity to China. The city is in a unique position because it's known as the gateway to China, thanks to the fact that it's an administrative region of the country, but it maintains a separate economy, currency, and legal and parliamentary systems. These factors enable firms looking to expand into China to learn more about Chinese market conditions and potential cultural and language barriers prior to entry, but in an environment that's relatively easy for Western firms to set up in. In some segments, initiatives have also been developed to make access to the Chinese market easier. One such example is the [Stock Connect](#) project, which enables investors in Hong Kong to access the Shenzhen and Shanghai stock markets, and vice versa. In turn, Hong Kong-based trading platforms can offer their clients a wider selection of shares.

Legacy financial services industry. Hong Kong has a huge and well-established financial services industry with 157 banks and over 600 [stock brokers](#). That provides a significant market for fintechs looking to act as third-party suppliers to incumbents, as well as a ready supply of talent with financial services skills. These two factors increase the appeal of Hong Kong to foreign B2B fintechs looking to expand internationally, and provide an attractive environment for domestic fintechs.

APAC Fintech Financing Activity

Millions (\$), 2016



Source: Accenture analysis of CB Insights data

BI INTELLIGENCE

Challenges For Hong Kong Fintech

Market size. Hong Kong has a population of around 7 million, providing a much smaller potential market than many European or other Asian jurisdictions. That means consumer-facing startups looking to succeed will face a greater imperative to scale internationally than those based elsewhere. That can be expensive and complex due to differing regulatory requirements across countries and regions, and may discourage fintechs from establishing themselves in Hong Kong. Entering China remains challenging, even for firms that have first explored the Hong Kong market, thanks largely to the mainland's major regulatory body, The People's Bank of China (PBOC), which has yet to clarify its position on many areas of fintech, and also has a reputation for making [sudden crackdowns](#). One way regulators in Hong Kong could help fintechs overcome this obstacle is by [working with](#) other regulatory bodies in the region to develop rules that are similar in scope, or permissions that allow a firm authorized in one region to expand to another without further licensing.








Proximity to China. Hong Kong's connections with, and proximity to, China can also be a disadvantage. Many Hong Kong-based fintechs may be looking to expand into the mainland, but Chinese fintechs are also [moving the other way](#), and in some cases, using the city as a stepping-stone to Western markets. That could be problematic for startups in Hong Kong, as the interlopers often have well-known brands and vast amounts of funding behind them, which could enable them to gather market share very quickly, potentially squeezing out homegrown competitors.

Competition from other regional players. Other cities and jurisdictions in the Asia-Pacific (APAC) region, notably [Australia](#) and [Singapore](#), are also looking to boost their fintech industries, and have implemented numerous initiatives to achieve that goal, including fintech-friendly legislation and regulatory agreements with other countries. That means fintechs and investors looking to expand into the region have a number of options, and Hong Kong will have to work hard to promote its differentiators and advantages to build a thriving fintech industry. In particular, the city could look to capitalize on its already strong framework for B2B fintech, carving out a niche for itself in the wider Asian market.



Singapore has successfully established itself as an Asian fintech hub — in 2016, the city-state [accounted](#) for three-quarters of Southeast Asia's fintech funding, half of the deals, and three of the top five deals by value. This comes down to several factors, including that the [Monetary Authority of Singapore](#) (MAS), Singapore's central bank and financial regulator, has shown strong support for the industry. MAS has made the establishment of fintech businesses easier and more efficient by creating a Fintech Office, which provides grants to startups, and launching a [sandbox](#) where fintechs can test new technologies, among other initiatives. In addition, international fintechs in Singapore are able to register by using two local agents to act on their behalf. Meanwhile, the majority of the population has access to 3G/4G and the internet, meaning the market is well primed for digital services.

SINGAPORE BY NUMBERS

 Population in 2016	5.6 million
 Population (15+ yrs) with a financial account	96%
 Population (15+ yrs) with a credit card	31%
 Mobile banking penetration	41%
 Regulatory bodies relevant to fintech	Monetary Authority of Singapore (MAS)
 Fintech-based agreements with other countries	Japan, Switzerland, Thailand, Australia, UK, South Korea, Denmark, France, India, Luxembourg, Abu Dhabi
 Total fintech funding in 2016	\$51 million

Sources: Statistics Singapore, KPMG, MAS, eMarketer, Finextra

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Notable Singaporean Fintechs

PolicyPal. After [graduating](#) from Startupbootcamp Fintech Singapore's second cohort last year, insurtech PolicyPal was the [first](#) to receive approval from MAS to enter its sandbox, and finished its six-month testing period at the end of August 2017. In partnership with a variety of insurance companies, including Aviva and Etiqa, the insurtech aims to [provide](#) a simple way for consumers to buy and manage insurance policies. Users are guided through the process of buying a new insurance policy by the app's chatbot, Kate. Given that PolicyPal has had time to experiment with new technologies via MAS' sandbox, and likely has capital available to support it for a while yet, it stands a fair chance of building out a robust portfolio of offerings. Moreover, its stint in the sandbox could push it ahead of other insurtechs by helping it get regulated faster for new services developed in the testing period.

QUOINE. [QUOINE](#) provides cryptocurrency trading and exchange solutions, as well as other financial services, powered by blockchain technology. It's headquartered in Singapore, and has offices in Japan and Vietnam. QUOINE received \$20 million in funding in 2016, in the [highest-valued](#) deal in Southeast Asia that year, and in 2017, it [launched](#) its own initial coin offering (ICO). It was also the first global cryptocurrency fintech to be [licensed](#) by the Japanese financial regulator. Currently, QUOINE is only web-based, but it has plans to expand its services via mobile apps for both iOS and Android users. In June 2017, it [launched](#) a new crypto-to-crypto only platform, called QRYPTOS, in beta. The aim of this launch is to make cryptocurrency trading convenient and efficient for everyone, from retail investors to corporate clients. Given the speed at which QUOINE is launching new products, along with its status as a regulated exchange, it'll likely only continue to attract new users and further establish itself as a leading provider of cryptocurrency trading and exchange solutions in the region.

Opportunities For Singaporean Fintech

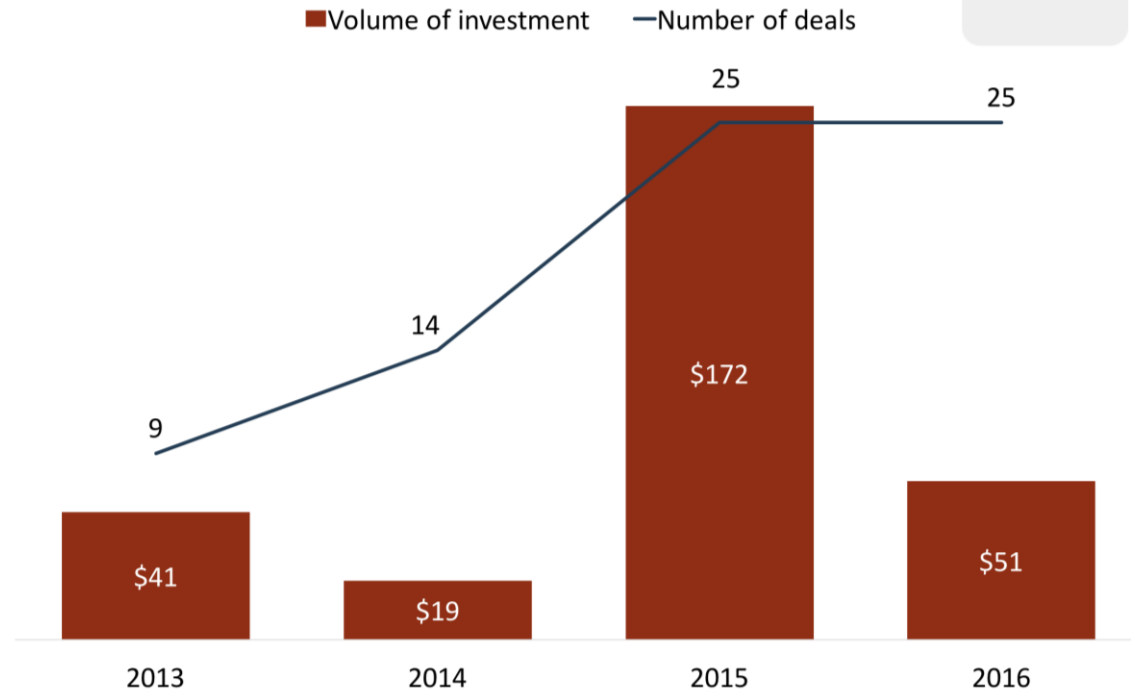
Regulatory support. Straightforward, fintech-specific regulation is one of Singapore's biggest strengths, especially as many other countries in APAC have more [complicated](#) regimes. MAS boasts a virtual Fintech Office, [launched](#) in collaboration with the National Research Foundation (NRF) in May 2016, which develops funding schemes, identifies gaps in regulatory oversight and ways to bridge them, and manages the marketing of Singapore as a fintech hub. Additionally, MAS recently [proposed](#) making it easier for firms to offer digital advice to retail investors through updated legislation, and it supports Singapore's fintech festival, first held in November 2016. Moreover, the regulator has formed fintech agreements with a number of other [countries](#), facilitating information sharing and collaboration with international fintechs and regulators. These initiatives demonstrate MAS' commitment to making Singapore a place where both domestic and international fintechs can develop and thrive — and its efforts seem to be paying off, as indicated by UK fintech [TransferWise's](#) recent decision to establish an office in the city-state.

Fintech sandbox. MAS published [guidelines](#) for the utilization of its sandbox to facilitate a smooth application process in November 2016. The facility is a major advantage for fintechs in Singapore, as it allows them to develop new technologies that may not fit into the existing regulatory framework, thereby encouraging experiments and preventing regulatory concerns from suppressing innovation. The sandbox ensures appropriate measures are taken to contain any consequences of failure and to maintain the overall safety of the financial system. If a company's testing leads to a successful new technology, it's then required to comply with any relevant legal and regulatory requirements before launch. In contrast to the [UK](#), the first country to launch a sandbox, Singapore's accepts applications on a rolling basis, with a response time of 21 days. This may make Singapore's sandbox more attractive to fintechs, since they won't have to wait for a window to open to apply. Additionally, any new technology emerging from Singapore's sandbox must be [deployed](#) in Singapore upon exit. This ensures the city-state will benefit from the newly developed technologies, and prevents the sandbox from being taken advantage of by companies from other countries.

Culture. Singapore's population is relatively advanced when it comes to tech adoption — the city-state is [ranked](#) No. 1 in the Network Readiness Index, which measures the propensity of countries to adopt new information and communications technology (ICT) solutions. Additionally, 95% of the population uses a smartphone, and debit- and credit-card [inclusion](#) is high, illustrating Singaporeans' comfort with electronic payment methods. Eighty-nine percent of the population uses the internet on a digital device for banking and finance more than monthly, while 12% does so on a daily basis. This is very good news for consumer-facing fintechs, as the market seems primed to accept new fintech solutions, and consequently, willing to adopt them. Additionally, Singapore uses [English](#) in business dealings, distinguishing it from many of its regional competitors. This could prove particularly helpful in encouraging international fintechs to enter Singapore, as it enables a smoother transition. Singaporean [law](#) also has its roots in English law, which can further facilitate launching operations in Singapore, especially for international companies.

VC Investment In Singaporean Fintechs

Millions (\$)



Source: KPMG

BI INTELLIGENCE

Challenges For Singaporean Fintech

Population size. With a population of 5.6 million, Singapore is significantly smaller than many of its fintech hub rivals. That means startups in Singapore have a smaller population to address, making it harder to establish their technologies in this competitive market. This will be a constant issue for startups in the country. However, with its fintech agreements, Singapore is attempting to make expansion to other markets easier for startups.

Regional competition. Like Hong Kong, Singapore is facing a lot of competition in APAC from other [locations](#) vying to be the region's leading hub. For now, its supportive regulatory regime is a major advantage, but other contenders will likely see the benefits brought by MAS' approach and introduce similar regulation. Therefore, Singapore can't ignore the competition if it wants to become a global fintech hub. Potentially, the city-state could differentiate by promoting itself as a gateway into other markets in Southeast Asia.

THE FUTURE OF FINTECH

The increasing importance of technology-enabled products and services within the financial services ecosystem means the global fintech industry isn't going anywhere. Firms will continue to use technology to solve many of financial services' biggest pain points, as well as to help legacy players stay relevant. Meanwhile, incumbents will look to boost their own tech capabilities. As these trends play out, the fintech industry will employ more and more people, and will include an ever-greater number of firms.

The result will be the continued proliferation of fintech hubs, with leaders emerging in each region. These hubs will become regional centers for fintech, developing reputations for expert talent, access to fintech funding, and a broader supportive ecosystem. Other hubs will evolve to become specialists, solving problems for a specific segment of the finance industry; Dubai may become the leader in Sharia-compliant fintech, for example. Meanwhile, some cities will develop expertise in a particular type of fintech — as mentioned, Hong Kong could emerge as a leading hub for B2B fintech.

The future fintech landscape will be molded by regulatory bodies. Countries whose regulators take an active role in creating clear, fintech-specific regulation will have the most success in promoting thriving fintech hubs. That's because current financial regulation is often the biggest barrier to startups' success. If the broader government also takes an interest — by encouraging the development of educational programs and providing financial incentives for fintech firms, for example — the country's chances of success will be even greater.

It's also increasingly likely that international bodies will start to issue fintech-specific regulations. That would further promote the development of fintech hubs, as more uniform legislation would make it easier for companies to operate internationally and open offices in multiple locations. This would also provide guidance to countries that have struggled to formulate regulatory structures that enable the development of their fintech industries.

Research Associate Lea Nonninger also contributed to this report.

THE BOTTOM LINE

- Fintech hubs — cities where startups, talent, and funding congregate — are proliferating globally in tandem with ongoing disruption in financial services.
- Most countries in Europe have made some formal effort to stimulate the development of their domestic fintech hubs. London, Berlin, and Dublin stand out as cities with significant fintech activity, for example, while Paris is on the rise.
- The Asian fintech scene took off later than in the US and Europe, but it's seen rapid recent growth. Several hubs in India are booming, while Hong Kong and Singapore are working to become dominant fintech players in the region.
- As fintech hubs continue to develop around the world, leaders are likely to emerge in each region. Countries whose regulators take an active role in creating clear, fintech-specific regulation will have the most success in promoting thriving fintech hubs.

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