







In collaboration with:









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We also would like to extend our utmost gratitude to our research partners from the following organisations in the Asia Pacific Region and China who disseminated the survey, including:

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We are extremely grateful to our extensive network of research assistants and fellows for their contribution to the data collection, sanitation and analysis. The data collection would not have been possible without the incredible work of the CCAF research team, in particular Bianca Dy, Mei Shen, Fran Chen, Vincent Yinqiao Li, Aditya Rathi, Viraj Tamhankar, Shuhua Zhang, Syed Raif Sayeed, Derek Snow, Alessia Pedrazzoli, Hanna Golikava, Kota Shinkawa and Kristian Ujejski. We would also like to thank Davinia Cogan, Karsten Wenzlaff, Rotem Shneor, and Kieran Garvey for their outreach support.

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Thank you to our China focused research and Chinese translation teams including: Peipei Chen, Yi Wu, Yujing Gu, Xin Li, Xi (Nancy) Nan, Liyuan Yang, Xinhui Zhang, Yixuan Fang, Yilun Xu and Yitao Wang.

We would also like to thank Robert Wardrop and Raghavendra Rau for their counsel and guidance.

Finally, we thank Louise Smith for all her hard work on designing the publication, and Charles Goldsmith, Kate Belger, and Philippa Coney for their continued support in producing and publishing this report.

We are very grateful for the help and support of the following industry research partners:

































We also wish to thank the following platforms who participated in our industry research:











































































































































































































































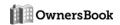










































































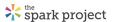






















































































































































































































FOREWORDS

Cambridge
Centre
for Alternative
Finance



This is our third research report examining the development of online alternative finance in the Asia Pacific region. and this year's research was undertaken in conjunction with the Academy of Internet Finance at Zhejiang University and the Asian Development Bank Institute. The contribution of additional research resources from our partners enabled us to expand our data collection and analysis to 30 countries across the region.

Online alternative finance channels have emerged quickly across the region, resulting in few sources of empirical analysis providing financial services regulators and policy makers with the information needed to understand and respond to these developments. Over the past three years, our annual regional benchmarking reports have evolved to fill this information gap and are now recognised as the most comprehensive source of empirical analysis of online alternative finance developments around the world.

This year's benchmarking report for the APAC region highlights both China's slowing growth rate and the accelerating growth rate elsewhere the region. Regulation continues to play a critical role in the development of the market and 2017 saw new regulation in several markets. This year's report also provides insight in new areas of market development regarding both the level of R&D investment by platforms and measures of financial inclusion.

The foreword I wrote for our first APAC benchmark report in early 2015 expressed a hope that it would be the first of many such reports and that the findings would be useful in addressing the challenges presented by the development of alternative finance. Those hopes have largely been realised through the efforts of hundreds of researchers around the world, in cooperation with industry trade bodies and, of course, the platforms providing alternative finance.

Dr. Robert Wardrop

Director

Cambridge Centre for Alternative Finance



Alternative finance has experienced vigorous growth in recent years across the globe, with various business models flourishing in different regions and markets. In particular, Marketplace Lending and Crowdfunding have gone through very rapid and dynamic development throughout the world, creating highly diversified business models.

The alternative finance market in the Asia Pacific region has experienced a challenging period of transformation "from quantity to quality". Developing countries have experienced an inadequacy of regulatory capabilities, where too much "regulation leads to the cessation of activities all together, but no regulation leads to a messy market". However, the gradually emerging ecosystem built by enterprises, governments and industry associations will lead to a bright future.

This report studied more than 30 countries in the region, attempting to sketch the development of alternative finance based on the performance of local enterprises—including operation, management, risk management and so on. Hopefully, this report will reveal opportunities and directions for the future development of alternative finance, provide useful insights for both policy makers and practitioners, and help create a better market and policy environment.

Professor Ben Shenglin

Dean, Academy of Internet Finance (AIF) Zhejiang University



Inclusive growth has recently become one of the world's most important policy goals, and has been recognized as such in global forums such as the Group of Twenty (G20). Governments, development institutions and economists are promoting a broad agenda of inclusion in economic and social life, including universal access to education, health care, social security, clean water and sanitation. Promoting sustainable and inclusive growth is a key objective of the Asian Development Bank, and financial inclusion has come to be viewed as an important part of this agenda for inclusion. This reflects the view that individuals, households and firms cannot fully take advantage of the opportunities for economic and social development available if they do not have adequate and appropriate access to financial products and services. Nonetheless, many Asian economies still have relatively low rates of financial access, especially in rural areas.

Financial inclusion has come to refer not to just any form of financial access, but access to financial products and services that is convenient, affordable (taking into account the relevant costs and risks), appropriate for the circumstances of the users, and accompanied by legal and supervisory safeguards, including consumer protection and regulatory and supervisory frameworks.

Developments of financial technology (fintech) show great potential to extend the availability of financial products and services to individuals and households in Asia. The widespread penetration of the internet and mobile phone networks, together with developments in artificial intelligence, big data, and biometric identification, have revolutionized both the modes of delivery and the methodologies of providing financial services. Fintech companies, whether in P2P lending, crowd funding or other areas, are playing a key role in this transformation. Therefore, it is critical to monitor the development of the fintech industry in Asia to assess its potential to contribute to overall economic and financial development.

Fintech innovations often involve the adoption and adaptation of new technologies, and the merging of activities of the financial sector with others such as telecommunications. All of these developments require that the progress of regulatory and supervisory frameworks to address them needs to be monitored as well.

We at the Asian Development Bank Institute are very pleased to have participated in this study and hope that its results will provide valuable information and analyses to promote the role of fintech in supporting the development of financial access in Asia.

Naoyuki Yoshino, Dean Peter J. Morgan, Senior Consulting Economist and Vice Chair of Research, *The Asian Development Bank Institute*



The global fintech sector continues to go from strength to strength. Over the past 12 months alone, a record USD\$86 billion has been invested globally in the once nascent sector, representing a 65% increase on 2017 investment levels.

From a regional perspective, Asia Pacific has also continued to dominate the global landscape. It achieved a record level of investment with USD\$20.6 billion invested over the past year, with substantial funding rounds achieved in both payments and lending, the dominant categories of fintech. Futhermore, the region now has eight of the 33 fintech unicorns and five of the world's top 10 fintech companies coming from the Asia Pacific region. This underscores the impact of fintech in the region.

However, the fintech movement must be measured on more than the investment levels achieved and individual company successes, it has a bigger, more important role to play.

No more fitting example of this is the development of the alternative finance sub-sector of fintech - which continues to deliver tangible social and economic benefits in the area of financial inclusion - bringing to the unserved and underserved, the sort of mainstream financial services that most consumers and businesses in the Western world have understood for many year and commonly take for granted.

Whilst alternative finance remains a small fraction of overall credit outstanding in the financial system of many countries, it is growing rapidly. In addition, the innovative digitisation of services these platforms offer can lower transaction costs and enhance the convenience for end users.

These benefits, will need to be pursued with a commensurate focus on understanding, identifying and mitigating any potential risks and vulnerabilities for the long-term viability of the sector.

This third annual comprehensive study of the Asia Pacific online alternative finance market contributes to the growing body of data supporting the region's development. The 2018 report highlights a Chinese industry with a slower pace of growth that is undergoing regulatory changes to enhance the governance practices and the long-term transparency and sustainability of the market.

Whilst China remains well entrenched as the largest online alternative finance market in absolute terms, both globally and regionally, the report also shows the rapid growth in the rest of the Asia Pacific region, with both Australia and South Korea recording market volumes in excess of the USD\$1 billion for the first time.

KPMG is proud to partner again with The Cambridge Centre for Alternative Finance at Cambridge Judge Business School, The Academy of Internet Finance at Zhejiang University, The Asian Development Bank Institute, Invesco and CME Group Foundation on this important initiative and we look forward to engaging with policy-makers, regulators and industry participants in the Asia Pacific region to discuss the report's key findings and the implications for the continued development of the alternative finance sector.

Ian Pollari

National Sector Leader, Banking and Global Co-Leader, KPMG Fintech Practice KPMG Australia



The financial services industry is standing at the threshold of unprecedented disruption. The fourth industrial revolution is upon us, and companies are investing record amounts of capital into innovation to ensure their relevance and competitiveness are maintained. As a part of this fourth industrial revolution, a growing alternative finance industry is changing the way individuals and organizations interact with flowing global capital and envision new kinds of products and distribution methods.

This report from the Cambridge Centre for Alternative Finance, The Academy of Internet Finance at Zhejiang University and the Asian Development Bank Institute delves into the finer details of how alternative finance is influencing and impacting economic operations of the Asia Pacific region using data collected from over 1000 platforms from China and the 29 other countries and territories comprising the region. The report highlights the dynamism and willingness of this region to embrace alternative finance and test, learn, and grow with new systems and models.

Some may find the mix of participants, regions, and instruments in alternative finance enabled by new digital endpoints and platforms growing across Asia Pacific regions surprising, while others may find it completely in line with the combined cultural preferences and regional nuances of conducting business in those countries. One of the more salient details of the report is the journey in alternative finance experienced by China who saw the year-on-year market growth slowed significantly in 2017 and considerable downturn in 2018 amid profound industry shake-ups and regulatory changes. As a cautionary tale, the growth of technology-enabled alternative finance models can outpace the development of regulatory knowledge and capacity, in turn, lead to uncertainties and risks. In other Asia Pacific region countries, however, we do see examples where pro-active regulations and regulatory innovations can be conducive for the sustainable growth of financial innovation that can benefit consumers and businesses.

A special thanks to all the individuals and organizations who collaborated to bring this report together. Reports such as these help to inform conscientious investors and enterprises to provide clear understanding of the ways alternative finance models are undertaken across Asia Pacific countries and in turn helping global investors make more informed investment and strategic business decisions.

The projection for advancement in alternative finance based on the findings uncovered in this report show that the opportunities remain enticing across the Asia Pacific region. As digital experiences mature, traditional financial models and instruments and the emerging technologies driving alternative finance such as artificial intelligence, process automation, and blockchain collide and intertwine.

Dave Dowsett

Global Head of Technology Strategy, Innovation, and Planning *Invesco*

EXECUTIVE SUMMARY

This report marks our 3rd year of tracking the growth and development of the online alternative finance industry in the Asia Pacific region. Our report last year reflected how this nascent industry has evolved across the region, affecting the way people, businesses and institutions access, raise and invest money. This year's report illustrates the geographically uneven yet considerable growth of online alternative finance in many countries across the Asia Pacific region. Based on the survey data collected from 340 entries from APAC's 29 countries and 782 entries from China, the analysis contained in this report will provide a snapshot of the rapidly changing and highly fluid Asia Pacific alternative finance market.

This report is jointly produced by The Cambridge Centre for Alternative Finance at Cambridge Judge Business School, The Academy of Internet Finance at Zhejiang University and the Asian Development Bank Institute. This report was also generously supported by KPMG Australia, Invesco and CME Group Foundation.

A HIGHLIGHT OF THE KEY FINDINGS:

- In 2017, China's alternative finance industry accounted for 99% of the overall Asia Pacific region market volume. Having grown by approximately 47% year-on-year since 2016, China's alternative finance market reached US \$358 billion in 2017. Though no longer growing at triple-digit rates, this annual growth is reflective of consolidation across the sector amidst an array of regulatory measures to tackle problematic activities within the sector.
- In contrast, the rest of the Asia Pacific region has experienced rapid growth, having increased year-on-year by 81% from USD\$2 billion in 2016, to USD\$3.6 billion in 2017. This overall market volume is derived from 29 countries or territories outside of China with data from 10 new countries covered in the survey for the first time. We also observed a 134% increase in the number of platforms participated in the survey outside of China in the Asia Pacific region.
- In 2017, both Australia and South Korea recorded total market volumes over USD\$1 billion. Australia was the market leader in the Asia Pacific region for a third year running, up 88% to reach USD \$1.15 billion. In addition to having one of the most diverse alternative finance landscapes in terms of business models, Australia's volume increase was driven largely by the Balance Sheet Business Lending model in 2017. South Korea grew to \$1.13 billion, up nearly 200% against the previous year. This was driven in large part to a booming P2P Property Lending and Real Estate Crowdfunding market, where a handful of large deals propelled the rapid growth of these two sectors.

- Across the Asia Pacific region, alternative finance for the purpose of business funding was the 'growth engine' for market development in nearly every country surveyed. Business funding across the Asia Pacific region (excluding China) accounted for 61% of all volume, the equivalent to USD \$2.23 billion. Not surprisingly, debt-based models were responsible for the lion's share of this volume (98%). Interestingly, though Equity-based models made up only 1% of this volume, the number of start-ups and SMEs that were utilizing equity models accounted for 17% of all businesses that accessed some form of alternative finance in the Asia Pacific region in 2017.
- With respect to key sub-regions, Oceania was responsible for 37% of all business finance, followed by South East Asia (12%). Interestingly, Oceania's business finance was driven largely by debt-based models, dwarfing equity and non-investment models. Yet, South East Asia was the leader in Equity-based models, accounting for 16% of all equity-based business finance.
- In China, whilst consumer facing models continued to be the largest market segment for the third year, the proportion of business focused funding was still considerable, accounting for USD\$111.8billion, having grown by nearly 20% against the previous year. Business focused finance accounted for 31% of the overall Chinese alternative finance market. Business finance in China was driven almost entirely by P2P/Marketplace Business Lending.
- The trend of institutionalization of funding continued to grow across the region, although unevenly demonstrated across models. Institutional funding was most significant in Balance Sheet models (93%), followed by P2P/Marketplace Consumer Lending (43%) and Invoice Trading (42%) across the Asia Pacific region. With respect to countries with the most active institutional funders, the Indian market took the lead with 74% of its funding coming from institutional investors, followed by Australia (65%) and Indonesia (61%). The pattern of institutionalization correlates heavily with markets that have strong Balance Sheet and P2P/ Marketplace lending sectors.
- In 2017, a significant proportion of platforms were pursuing global strategies to increase their presence across the region and beyond. Some 25% of all surveyed firms indicated that they have active operations in a country that was not their original headquartered country. Across every model, more than half of the surveyed firms expressed having a 'global website and brand' or a 'global brand with localized domains'. Not surprisingly, there was considerable cross-border flow across the region in terms of market volumes.
- Innovation is a driving force for alternative finance market development across the Asia Pacific region, with firms pursuing changes to both their business models and the products on offer. In China, 15% of the company budgets are being committed to Research & Development departments, with approximately 75% of surveyed firms pursuing R&D into Process Streamlining and Automation. Similarly, firms across the rest of the region have committed nearly a quarter (24%) of their operating budget towards R&D. Payment Processing, AI, and

- Process Streamlining & Automation are amongst the top three priorities for business models across the region.
- Regulation remains a hot-button topic across the region, with varying degrees of satisfaction from firms depending upon their country and/or business model type. In China, recent regulatory clampdowns has led to a fall in the number of platforms operating in the country. In fact, 79% of firms surveyed viewed the future of regulation as 'unclear or unstable' and an estimated 15% of their operating budget are related to costs of regulatory scoping, licensing and ongoing reporting. Meanwhile, in countries like Malaysia, Singapore, Australia, there is a more positive outlook towards regulation.
- With respect to risk factors, platforms across the Asia Pacific region (excluding China) viewed 'potential fraud' as the most significant risk factor to their business, followed by Cybersecurity Breach (38%) and Regulatory Changes (37%). Interestingly, platforms also indicated spending approximately 16% of their operating budget on Cybersecurity costs, and some 23% on additional IT costs.

METHODOLOGY

The Annual Asia Pacific (APAC) Alternative Finance Benchmarking Report systematically records the development of the online alternative finance industry across the region. This report is jointly produced by The Cambridge Centre for Alternative Finance (CCAF) at Cambridge Judge Business School, The Academy of Internet Finance at Zhejiang University and the Asian Development Bank Institute. Now in its third year, this report tracks the growth and development of this industry from thirty countries and territories in 2017. Alternative finance volumes were recorded in: Australia, Bangladesh, Bhutan, Cambodia, China, Hong Kong, India, Indonesia, Japan, Kazakhstan, Kyrgyzstan, Laos, Malaysia, Mongolia, Myanmar (Burma), Nepal, New Zealand, North Korea, Pakistan, Philippines, Singapore, South Korea, Sri Lanka, Chinese Taipei, Tajikistan, Thailand, Timor-Leste, Tokelau, Vanuatu and Vietnam, and represents capital raising activities from 15 distinct model types.

The analysis presented in this report is based on the 'Global Alternative Finance Benchmarking Survey', which was the primary means of collecting data. The survey was hosted by CCAF and was only accessible to the principle research team based at Judge Business School. The survey was available in English, Simplified and Traditional Chinese, Korean, Japanese and Thai.

The survey consisted of 32 questions, gathering self-reported aggregate-level data from platforms across Asia Pacific in 2017. Deviating slightly from previous survey structures, this year's survey consisted of four parts: Fundraisers, Funders, Platform Structure & Strategy, and Risks & Regulations. This survey structure allowed platforms to provide more comprehensive, precise and cohesive data. Many of the questions remained the same to ensure longitudinal analysis was possible, relating to total transaction volumes, number of funders and fundraisers among other factors. The CCAF has standardized the survey questionnaire across all regions and models to ensure comparable longitudinal data on an annual basis. Platforms were also presented with a series of noncompulsory questions which built on key research themes identified in last year's report. Platform respondents were able to select multiple countries of operation and models and were able to indicate the local currency in which they were responding.

The research team surveyed online alternative finance platforms between April 2018 and September 2018 and subsequently compiled a platform-outreach database which included previous survey participants and newly identified platforms across the region. Sanitization of this list occurred to ensure that platforms included in the outreach database were active and trading in 2017 and were operating in at least of the models included in the study's taxonomy. The research team also relied upon known

outreach partners (including 17 external industry organizations or trade bodies) to assist in identifying new platforms. These industry research partners contributed to making this research possible by identifying and engaging with online alternative finance platforms, as well as providing local market analysis and insights of country-specific trends and developments. Qualified platforms received communication in the form of emails, social-media invites and phone calls from designated research team members throughout the data collection period. Upon request, platforms were provided copies of the survey questionnaire, in addition to dedicated assistance in completing the survey from members of the research team.

Once the data was collected, any discrepancies such as misattributed volumes or anomalous figures were cross-checked through direct contact with the platforms. In cases where the survey could not obtain primary data (or where there were discrepancies in reported data), the team consulted secondary data (public information, annual reports and press releases) to calibrate the data. In order to obtain the most up-to-date online alternative finance volumes, the team also used web-scraping methods during the verification process and as a compliment to the survey. This was carried out using widely available Python web-scraping libraries, devised within the research center. The CCAF estimates that our database has captured a minimum of two thirds of the visible online alternative finance market covered in the Asian region.

In total, the survey captured 293 survey entries from APAC (excluding China) from 221 unique firms. Approximately 25% of these firms responded to the survey in multiple countries or territories. To complement the survey, web-scraping was also used to get the most up-to-date transaction volumes for three additional key platforms, accounting for an additional 47 entries. This represents a 134% increase in platform coverage against the previous year. In total, 340 entries were analyzed to inform the research.

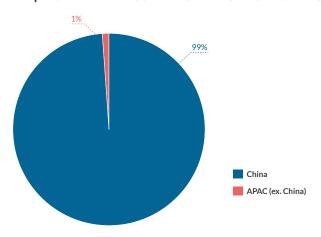
The China-specific analysis included in this report comprises a combination of survey-based data and web-scrapped data from The Academy of Internet Finance, Zhejiang University. The Zhejiang team collected web-scraped data from 700 Chinese firms, capturing primarily loan-based platform activity for 2017. The research team captured key qualitative data points akin to those sought in the global benchmarking survey, in order to input these into the overall benchmarking database. Additionally, this data collection was coupled with 82 unique survey responses from Chinese Fintech firms. After analyzing platforms at the country level and with the addition of top-line web scraping information, a total of 782 Chinaspecific platforms were analyzed for this research, in particular the findings presented in Chapters 1 and 2. The Zhejiang team also conducted a complimentary analysis on loan-based platforms to understand greater complexities around loan-purpose and to more accurately assess the alternative finance landscape in China. They did this by reviewing an additional data-set of 1800 platform, which provided additional data related to geographic distributions, average deal sizes, interest rates and other data-points not included in the web-scrapped or survey-based responses. The results of this additional work can be found in Chapter 3.

All analysis performed was conducted upon a thoroughly sanitized and anonymized data-set, removing any platform-identifying information. For all average data points, the team applied weightings by transaction volume per question in order to produce the most accurate estimates of responding platforms by model; significant outliers were removed to maintain the accuracy and validity of the dataset. At completion, the data was encrypted and stored for retrieval exclusively for the use of this project and was accessible only to the core research team.

CHAPTER 1: MARKET FUNDAMENTALS

SIZE AND GROWTH OF THE ASIA PACIFIC ALTERNATIVE FINANCE MARKET

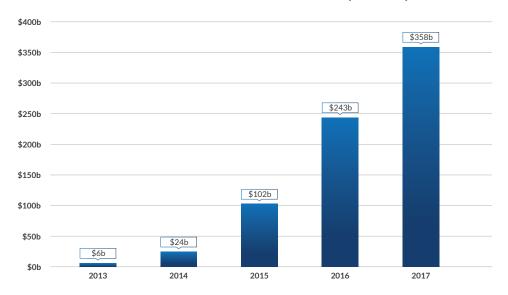
Proportion of Alternative Finance Market Volume: China vs. APAC 2017



Across the Asia Pacific region, the Fintech landscape is rapidly evolving, with some alternative finance models deepening their strongholds and others failing to deliver.

In 2017, the entire APAC region (including China) achieved an overall online alternative finance market volume of US\$361.9 billion¹. As with previous years, Mainland China accounted for just over 99% of the overall regional volume, remaining the regional leader for the third-year running.

Chinese Alternative Finance Market Volume 2013-17 (\$billions)



In 2017, China's total alternative finance market volume totaled US\$358 billion. No longer growing at triple-digit rates, China's alternative finance market's annual growth rate slowed down to 47% in 2017, from the 138% record in 2016. This slower pace in China is reflective of consolidation in the industry amidst an array of regulatory measures to tackle problematic activities within the sector. A slowing down across the country, in part, foreshadows the 2018 alternative finance crackdown across the Chinese market, which has led to numerous and abrupt platform closures and bankruptcy cases. It should be noted that despite a slow down, China's overall volume is steadily growing at slightly faster rates than that of other major Alternative Finance volume driving countries. For instance, the USA grew by 24% annually, and the UK grew by 35% annually. China still dwarfs the rest of the region and remains the global market leader ahead of the United States (\$42.8) billion in 2017) and UK (\$7.98 billion in 2017²).

\$4.0b \$3.64b \$3.5b \$2.5b \$2.00b \$2.0b \$1.5b \$1.12b \$1.0b \$0.5b \$0.27b \$0.14b \$0b 2013 2014 2015 2016 2017

APAC (excl. China) Alternative Finance Market Volume, 2013-2017 (\$billions)

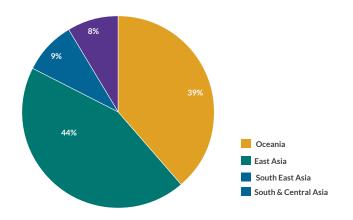
When excluding China, the rest of the Asia Pacific region has experienced a year-on-year increase of 81%, from US\$2.0 billion in 2016 to US\$3.6 billion in 2017. Given the diversity of models and alternative finance activities across Asia Pacific, it is somewhat of a disservice to treat the region monolithically. In certain jurisdictions, alternative finance firms have strengthened their position within the existing regulatory and policy landscape of their respective countries, while in others, emerging capital raising Fintech products and services are relatively nascent and developing disproportionately to previous expectations.

In 2017, the online alternative finance market continued to expand in most countries across the Asia Pacific region. For the purposes of analysis, APAC was split up into four overarching regions: Oceania, East Asia, South East Asia, and South and Central Asia³. East Asia had the highest overall volume in 2017, generating US \$1.6 billion. This represented 43.7% of the entire APAC region (excluding China). Compared with last year, total trading volume in East Asia grew by 92.5%, a slight decrease from the 95.8% growth from 2015 to 2016.

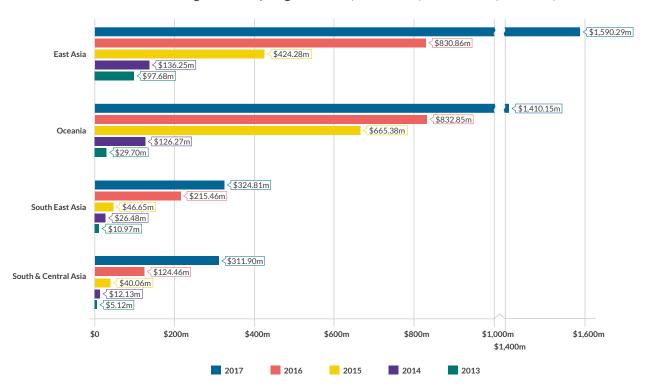
Oceania was the second largest region, with a total volume of US\$1.4 billion, accounting for 39% of APAC's volume. Oceania's growth rate between 2016 to 2017 was 69.3%, a significant increase compared to its 25.2% growth rate during the preceding year.

South East Asia and South and Central Asia's total volumes in 2017 were US\$324.8 million (8.6% of APAC excl. China) and US\$311.9 million (9% of APAC -excluding China), respectively. Notably, the growth rate of trading volume in South and Central Asia was the highest in APAC, with a 150.6% increase from the previous year. Growth in trading volume in South East Asia was softer, with a 50.4% increase from 2016.

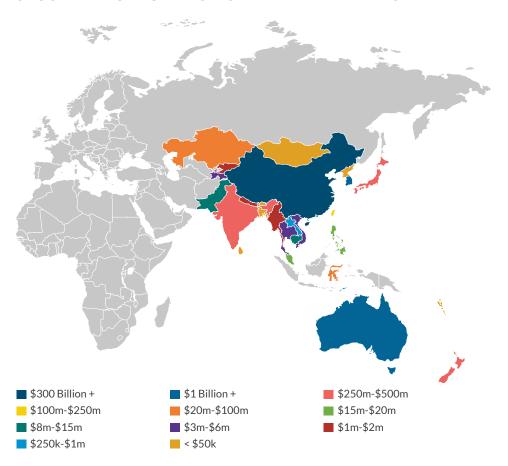
Proportion of Trading Volume by Region APAC (Excl. China) 2017



Trading Volume by Region APAC (Excl. China) 2013-2017 (\$millions)

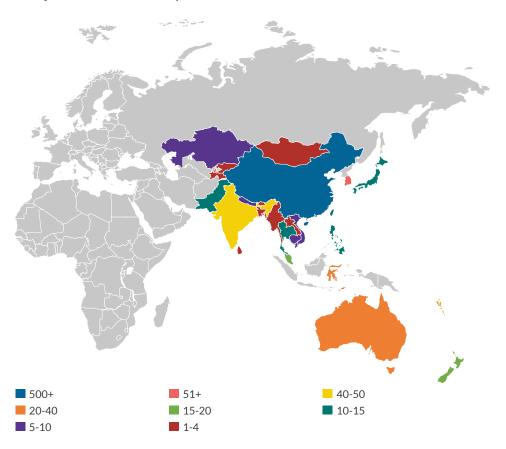


GEOGRAPHY OF ASIA PACIFIC ALTERNATIVE FINANCE



This study captured alternative finance market activity from 30 countries across the Asia Pacific region. As noted above, China generated most of the region's market volume. Australia and South Korea have the next largest alternative finance markets, accounting for 63% of remaining APAC market volume. Australia raised a total of US\$1.15 billion, a 31.6% share of the total market. South Korea overtook Japan to be the second largest market in the Asia Pacific region, with US\$1.13 billion, accounting for 31.1% of the total market (excluding China). Japan was the third largest market in APAC, with US\$348.7 million raised, accounting for 9.6% of total market. India, with a market volume of \$268.6 million, came in fourth place and accounted for 7.4% of the market. Comparable to 2016, New Zealand was the fifth largest market (7.2%) in the APAC region (excluding China) with US\$ 261.6 million raised. Singapore was the sixth largest market with US\$ 190.6 million raised (5.2%). Chinese Taipei and Indonesia followed, raising US\$103.5 million and US\$80.1 million, respectively. Combined, the top eight countries account for over 97% of the entire Asia Pacific (excluding China).

Compared to last year, most of the countries surveyed increased their annual market volume with the exceptions of Japan, Thailand and Mongolia, which experienced slight volume declines. Otherwise, and most notably, both Australia and South Korea crossed the US\$1 billion mark in yearly transaction volume for the first time. Additionally, South Korea overtook Japan to become the second largest market in the Asia Pacific region outside of China. Countries including India, Indonesia, Chinese Taipei, the Philippines and Pakistan have also made large increases in market activity, which will be reviewed in more detail in the country-specific analyses later in this report.



Volume generation did not, however, necessarily correlate with platform distribution. For instance, 46 platforms in India reported activity but ranked fifth in terms of volume whereas Australia, with 36 platforms, was ranked in second place as related to volume. Similarly, South Korea had participation from 69 platforms (the highest in the region, excl. China), while 14 platforms had activities in Japan.

The geographical distribution of participating platforms in the region shows the highest concentration of unique platforms in China (782), followed by South Korea (69), India (46), Australia (36) and Indonesia (24). Singapore, New Zealand and Malaysia each had more than 15 participating platforms. Japan, Thailand, the Philippines, Chinese Taipei and Pakistan each had more than 10 platforms that reported country-level activities. It is also worth noting that there were a few countries where data was obtained for the first time in 2017, either due to newly established firms or due to foreign Fintech firms that have established local offices in new countries to support those local activities.

DIVERSITY OF MODELS IN ASIA PACIFIC: A WORKING TAXONOMY

In order to more accurately track the development of alternative finance in the Asia Pacific, this study reports aggregate modelbased figures from 12 different alternative finance models. The taxonomy used to classify the various online alternative finance models has been developed by the CCAF since 2013 and is utilized to accurately track growth and development of these various models at a comparable global level. The taxonomy used in this study was first derived from the work the CCAF conducted in the United Kingdom in 2013 and has been adopted accordingly to encapsulate activities occurring in the Asia Pacific and globally. The alternative finance activities included in this report can be characterized as technology-enabled online channels or models that act as intermediaries in the demand and supply of funding (e.g. capital formation and allocation activities) to individuals and businesses outside of the traditional banking system. Platforms that facilitate the following were therefore excluded: payments, crossborder remittances and foreign exchange transactions outside of the banking system. Platforms only acting as information bulleting boards, providing information about traditional or alternative finance providers were similarly excluded.

By utilizing a standardized taxonomy that is comparable to other regional studies, researchers can compare and track the online alternative finance landscape globally. This report taxonomy consists of three broad themes, namely: non-investment-based models (reward-based crowdfunding and donation-based crowdfunding), equity-based models (such as equity-based crowdfunding and real estate crowdfunding), and debt-based models (P2P/Marketplace lending). For each of these models, the platform functions as an intermediary between a cohort of individuals or institutional funders and a fundraiser, facilitating the transfer of funds between the two. For non-investment-based models, funders do not expect to receive a financial return. Investment-based models, however, rely upon the assumption that funders can reasonably expect a financial return based upon their investments, as they are purchasing a debt or equity security instrument. The below table includes a definition of the key models analyzed in this report.

MODEL	DEFINITION	2017 TOTAL VOLUME APAC	2017 TOTAL VOLUME CHINA
Marketplace/P2P Consumer Lending	Individuals or institutional funders provide a loan to a consumer borrower.	\$824,552,497.00	\$224,431,765,158.86
Marketplace/P2P Business Lending	Individuals or institutional funders provide a loan to a business borrower.	\$623,349,853.00	\$97,430,537,311.80
Marketplace/P2P Property Lending	Individuals or institutional funders provide a loan secured against a property to a consumer or business borrower.	\$667,250,710.00	\$5,940,105,541.83
Balance Sheet Business Lending	The platform entity provides a loan directly to a business borrower.	\$680,313,030.00	\$6,868,910,660.65
Revenue Sharing/ Profit Sharing Crowdfunding	Individuals or institutions purchase securities from a company, such as shares or bonds, and share in the profits or royalties of the business.	\$176,037.00	\$977,885,322.32
Real Estate Crowdfunding	Individuals or institutional funders provide equity or subordinated-debt financing for real estate.	\$367,914,327.00	
Equity-based Crowdfunding	Individuals or institutional funders purchase equity issued by a company.	\$100,896,122.00	\$224,968,323.45
Invoice Trading	Individuals or institutional funders purchase invoices or receivable notes from a business at a discount.	\$174,795,096.00	\$5,605,170,415.75
Reward-based Crowdfunding	Backers provide funding to individuals, projects or companies in exchange for non-monetary rewards or products.	\$71,440,507.00	\$5,037,740.24
Donation-based Crowdfunding	Donors provide funding to individuals, projects or companies based on philanthropic or civic motivations with no expectation of monetary or material return.	\$53,169,352.00	
Debt-based Securities	Individuals or institutional funders purchase debt-based securities, typically a bond or debenture at a fixed interest rate.	\$25,578,193.00	
Balance Sheet Consumer Lending	The platform entity provides a loan directly to a consumer borrower.	\$9,666,370.00	\$15,762,790,359.65

ALTERNATIVE FINANCE MARKET VOLUMES BY MODEL IN CHINA

In 2017, the study captured activity from eight distinct alternative finance models in China, compared to twelve models in the 2016 data-set. Of the eight models represented in the 2017 collection, three I models experienced a year-on-year decline, while the remaining five saw, in some cases, significant year-on-year increases.

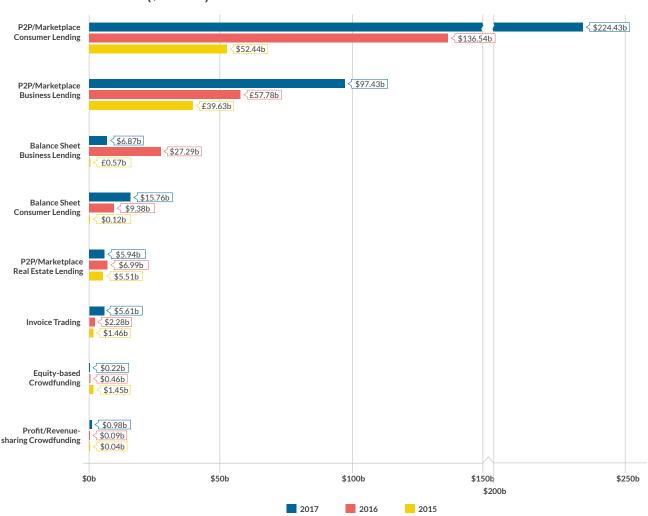
The two largest models in China, P2P/Marketplace Consumer Lending and P2P/Marketplace Business Lending, both saw an annual increase in volume. P2P/Marketplace Consumer lending grew by 64%, accounting for \$224 billion, and capturing 63% of the alternative finance market share in China. Before a borrower is able to raise funds on a P2P/Marketplace lending platform, the fundraiser must first go through a series of checks and assessments to determine suitability. This is referred to as the onboarding rate. While this assessment process varies from platform to platform, the onboarding rates across key models provide insight into how this first platform-led checkpoint impacts success. In China, the P2P/Marketplace Consumer Lending onboarding rate was approximately 47%. Of those that were then able to attempt to raise funds via a platform, 75% were successful.

The second largest model, P2P/Marketplace Business Lending, generated a volume of US \$97.4 billion, and represented a 27% market share. The onboarding rate for this model was 57%, followed by an 86% successful funding rate. Combined, these two models make up 90% of the Chinese alternative finance market volume.

Going hand in hand with marketplace activities, the Balance Sheet Consumer Lending model grew by 68% to \$15.8 billion in 2017. The model captured 4.4% of the Chinese market, but it should be noted that there exists considerable hybridization between this model and that of P2P/Marketplace Consumer Lending. In contrast, Balance Sheet Business Lending declined by 75%, to \$6.9 billion. The P2P/Marketplace Property Lending model also saw an annual decline (51%), accounting for \$5.9 billion.

Invoice Trading grew exponentially in 2017, by 146%, and accounted for \$5.6 billion. Though capturing a small proportion of overall market share (1.6%), this model is becoming a serious contender, driving business-focused finance across China and the region. Profit/Revenue Sharing Crowdfunding also saw exponential annual growth in 2017, despite being one of the smaller over-all models. A relative new-comer to the industry, this model grew by 972%, and accounted for \$977 million. Finally, equity-based crowdfunding shrank by 51% in 2017, accounting for \$225 million.

Total Alternative Finance Market Volume by Key Models - China 2015-2017 (\$billions)



ALTERNATIVE FINANCE MARKET VOLUMES BY MODEL IN ASIA PACIFIC

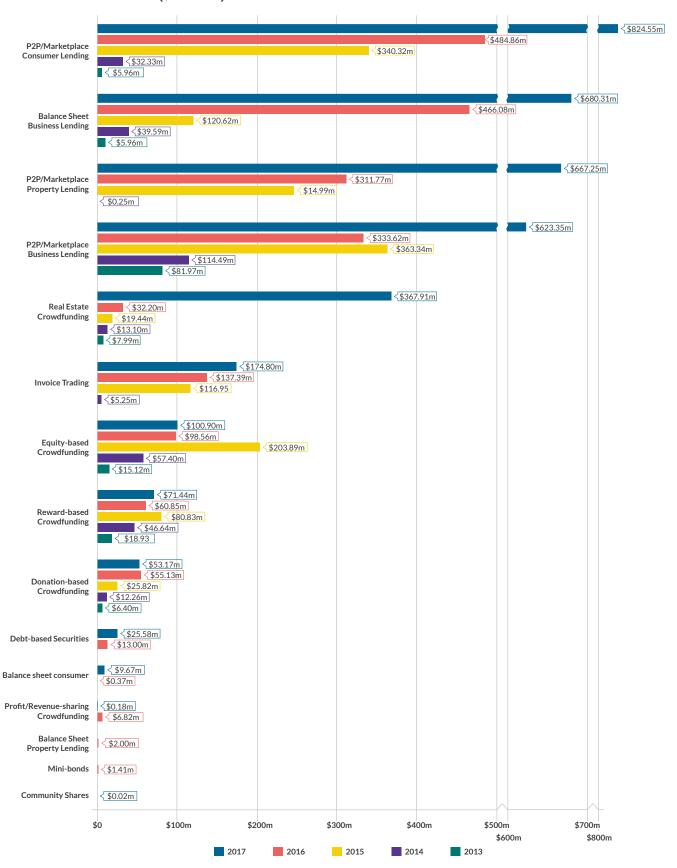
Across the Asia Pacific region (excluding China), P2P/Marketplace Consumer Lending continued to be the largest alternative finance model, with a total market share of 22.9% (US\$ 824.6m) in 2017 compared to 24% in 2016. This was in line with previously reported global trends, where more than 55% of the total online alternative finance activities in 2016 belonged to P2P/Marketplace Consumer Lending. Volumes within this model grew 70% yearon-year, compared to 42% in the preceding year. The onboarding statistics show that 29% of prospective borrowers were allowed to proceed with a funding campaign, 80% of which successfully raised finance. Given the inherent risks associated with unsecured, personal loans on offer in this model, platforms have endeavored to pursue rigorous onboarding processes. Of those raising funds in P2P/Marketplace Consumer Lending, 20.2% were repeat borrowers. Repeat funders also made up 46.28% of lenders. Additionally, 97.3% of lenders utilized auto-selection to execute their investments.

The second largest model was Balance Sheet Business Lending, accounting for an 18.9% regional market share and generating US\$680.31 million in 2017. Overall, Balance Sheet Business Lending experienced a year-on-year growth of 46%, notably slower than the 286% growth between 2015 and 2016. Balance Sheet Business Lending had a 61% onboarding rate and an 80% successful funding rate. Fifty-seven percent of borrowers were repeat users. As this model caters exclusively to business borrowers, the top three funded sectors represented by this model were Retail & Wholesale (28% of borrowers), Business & Professional Services (9%) and Food & Drink (7%).

P2P/Marketplace Property Lending was the third largest model – nearly matching Balance Sheet Business Lending - with 18.5% of the total market share in 2017. The model experienced an annual growth rate of 114% in 2017, rising from US\$311.8 million in 2016 to US\$ 667.25m in 2017. P2P/Marketplace Property Lending had the second lowest onboarding rate, with only 13% of potential fundraisers progressing to utilize the platform. P2P/Marketplace Property Lending also had the second highest successful funding rate, with 98% of those onboarded successfully funding their projects.

While P2P/Marketplace Business Lending saw an 8% decline in volume in 2016, it grew by 87% in 2017, from US\$ 333.6 million in 2016 to US\$ 623.4 million in 2017. Despite this growth the model's overall market share only rose marginally from 17% to 17.3% yearon-year. The onboarding and successful funding rates for P2P/ Marketplace Business Lending were 26% and 89% respectively. Many remarks from platform operators state that acquiring highquality borrowers is of paramount importance to the success of their platforms. Therefore, platforms are concentrating on improving their underwriting capabilities and enhancing their credit scoring mechanisms. Consequently, the onboarding rate remains relatively low. As this model caters exclusively to business borrowers, the top three funded sectors represented were Financial Services (20%), Real Estate & Housing (18%) and Food & Drink (14%). The platforms for this model recorded a repeat fundraiser rate close to 62% and a repeat investor rate of 70%, with 15.9% utilizing an autoselection process.

APAC (excl. China) Alternative Finance Market Volume by Model, 2013-2017 (\$millions)



Real Estate Crowdfunding experienced exponential growth, growing by 1042% between 2016 and 2017, making it the fifth largest model. The model grew from a mere US\$ 32.2 million in 2016 to US\$ 367.9 million in 2017, contributing just over 10% of the total market share. The onboarding rate was 38% and the successful funding rate was the third highest among models at 94%. Since the platform must conduct additional affordability assessments on the real estate or property asset, onboarding is critical to the success of a given deal. A stringent qualification process, coupled with the fact funding is syndicated, accounts for the high rate of success.⁵ Notably, compared to other models in the region, this model recorded the lowest repeat investor rate of 13%. Collectively, the top five models contributed 88% (US\$ 3.2 billion) of the total market share in the Asia Pacific region excluding China.

The other models supporting business finance, Invoice Trading and Equity-based Crowdfunding accounted for 4.9% (US\$ 174.8 million) and 2.8% (US\$ 100.9m) of total market share in 2017 respectively. Invoice Trading had an onboarding rate of 47%, with an 88% successful funding rate. A total of 80% of successful borrowers utilizing the Invoice Trading model were repeat borrowers. This is not altogether surprising, as many small businesses utilizing this model put forward a number of invoices to support their working capital needs. Additionally, 96.4% of investors were repeat investors. As this model caters exclusively to business borrowers, the top two funded sectors represented by this model were Business & Professional Services (52%) and Technology Software (23%).

In 2016, Equity-based Crowdfunding had experienced significant decline (52%) and this trend was expected to continue into 2017. However, model volume grew by 2.4% and the research team also noted an increase in platforms operating this model type across Asia. Overall, the model accounted for \$100.9 million in volume and recorded 29 successful exits in 2017. Equity-based Crowdfunding had a low onboarding rate (11%) and successful funding rate (14%). As this model caters exclusively to businesses whom are issuing shares, the top three funded sectors represented by this model were Leisure & Hospitality (32%), Technology Software (26%) and Internet & E-commerce (10%).

Non-investment-based models such as Reward- and Donation-based Crowdfunding contributed US\$ 71.4 million (2.0% market share) and US\$ 53.2 million (1.5%) respectively. It is interesting to note that surveyed platforms reported a non-delivery rate of 10.1% for the Reward-based Crowdfunding model. Reward-based Crowdfunding grew by 17% across the region. Additionally, while Donation-based Crowdfunding accounted for triple digit year-on-year growth (114%) in 2016, it experienced a 3.6% decline in activity in 2017.

Other models like Debt-based Securities, Balance Sheet Consumer Lending and Revenue-sharing/Profit-sharing Crowdfunding contributed less than 1% of the total market share. Debt-based Securities and Balance Sheet Consumer Lending experienced strong growth, increasing by 97% and 255% respectively. Revenue-sharing/Profit-sharing Crowdfunding's volume, on the other hand, declined by 97% in 2017.

The Debt-based Securities model had the highest successful funding rate of 99%, meaning that almost all qualified fundraisers successfully received funding through the platforms. Its onboarding rate was 60%. Balance Sheet Consumer Lending had the second lowest conversion rate of all models at 24% (50% onboarding rate), whilst Revenue Sharing/Profit Sharing Crowdfunding had the third lowest at 58% (45% onbarding rate).

No activity was recorded in 2017 for Balance Sheet Property Lending or Mini-bonds. For the first time, however, platforms utilizing a Community Shares model recorded some activity.

THE USE OF ONLINE ALTERNATIVE FINANCE BY BUSINESSES

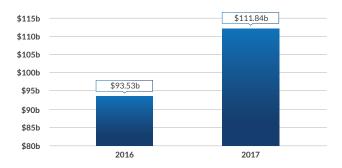
According to the Asian Development Bank, small and medium-sized enterprises (SMEs) account for 60% of the national labor forces across Asia Pacific, yet poor access to finance, in particular credit lines, is holding back these businesses. The health and strength of the SME sector is considered a key priority across the region, yet business development is often inhibited by an inability to access finance. Over recent years, alternative finance has developed into a viable funding option for entrepreneurs, start-ups and small and medium sized businesses across Asia.

This study reports alternative business funding, which includes volumes from investment and non-investment-based models, including P2P/Marketplace Business Lending, Balance Sheet Business Lending, Equity-based Crowdfunding, Invoice Trading, and Revenue-sharing Crowdfunding. In addition, portions of P2P/Marketplace Consumer Lending, P2P/Marketplace Property Lending, Real Estate Crowdfunding, and Reward-based Crowdfunding are utilized for business funding. While some models explicitly serve only businesses, the survey allowed platform respondents to indicate specific volumes and number of fundraisers that went to SMEs. Platform-specific business finance volumes and fundraisers could then be calculated in order to understand the reach of alternative finance among businesses in the Asia Pacific region.

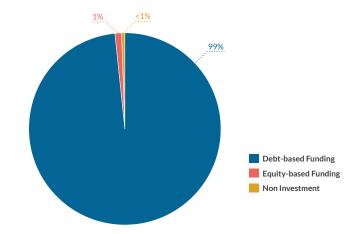
CHINA

Business specific alternative finance volume was US\$111.8 billion in 2017, accounting for 31% of China's overall alternative finance volume. Business finance increased, albeit at a slower pace, by 20% against the previous year's US\$93.53 billion. In all, 98% of business funding derived from Debt-based models (US\$110 billion), with just over 1% of funding from Equity-based models (\$1.2 billion). Volumes attributed to non-investment-based models was negligible (less than .5%).

Total Alternative Business Finance China 2016-2017 (\$billions)



Composition of Business Finance - Proportion of SMEs by Volume China 2017



ASIA PACIFIC

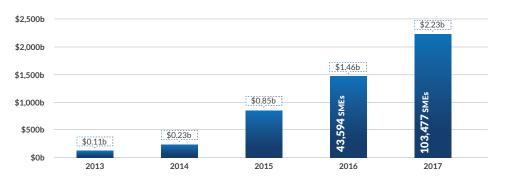
Over the last five years, online alternative finance has grown rapidly and has become an established means of financing for entrepreneurs, especially for SMEs across the Asia Pacific region. In fact, 61% of all alternative finance volume from the Asia Pacific went towards funding an SME in 2017.

In 2017, 103,476 businesses raised approximately US\$2.23 billion by utilizing online alternative finance platforms. The number of SMEs that utilized online alternative finance in 2017 grew by 137% year-on-year and the total volume raised grew by 52% (from US\$1.46 billion in 2016). Please refer to Appendix B for a country-level breakdown of Business-based Alternative Finance.⁸

A total of US\$1.81 billion, 81.4% of alternative business finance in the region, was generated for SMEs from debt-based models. A total of US\$385 million was generated through equity-based models, representing 17.3% of all funds raised for SMEs. The remaining 1.31% (corresponding to approximately US\$29 million) of business finance was raised on non-investment-based models such as Reward- or Donation-based Crowdfunding.

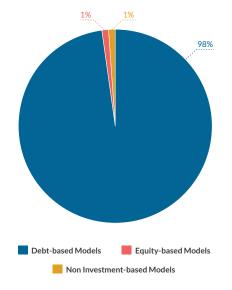
Out of the 103,476 SMEs that were funded in the region in 2017, most (101,207 businesses accounting for 98% of the total) raised funds via debt-based models. Equity-based and non-investment-based models provided finance for 718 (1%) and 1,551 (1%) SMEs, respectively. Although only counting for 1% of the market in terms of number of SMEs, the volume of funds provided by Equity-based models take 17% of the total APAC region (excluding China).

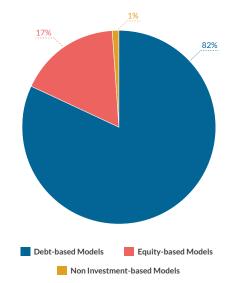
APAC (excl. China) Total Alternative Business Finance and Number of SMEs 2013-2017 (\$billions)



Composition of Business Finance - Number of SMEs 2017 APAC (excl. China)

Composition of Business Finance - Proportion of SMEs by Volume, 2017 APAC (excl. China)

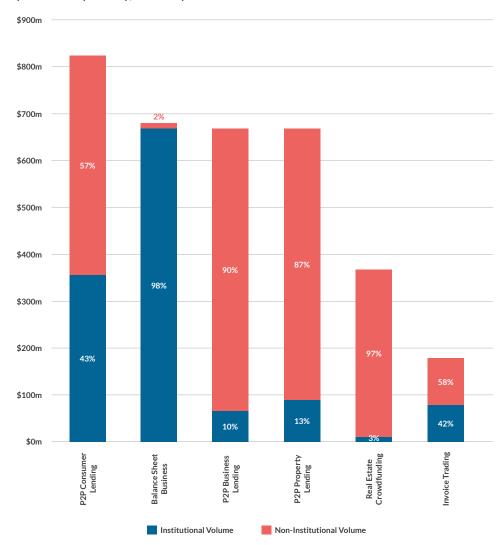




INSTITUTIONALIZATION

BY MODEL

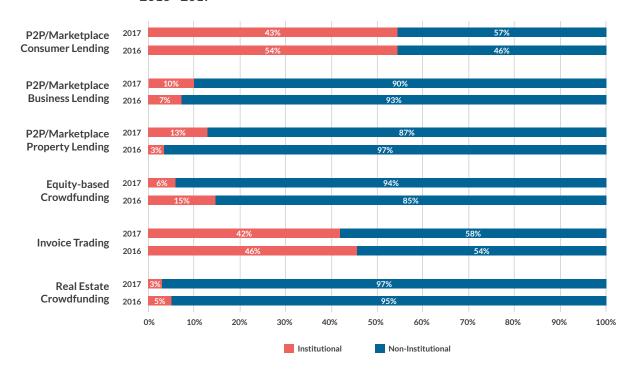
Funding Volume Derived From Institutional Investors by Key Models - APAC (excl. China) 2017 (\$millions)



In the Asia Pacific region, most investor activity was driven by individual investors rather than institutional investors. However, the level of institutionalization varies between models. In this year's study, we have observed how institutions engaged with alternative finance platforms. In addition to tracking the proportion of model volume derived from institutional investors, we hope to also shed light on the different ways that institutions engage and collaborate with alternative finance platforms at a firm level.

The Balance Sheet Business Lending model had the highest proportion of institutional funding with 98% (US\$ 668.87 million) of total funds attributed to institutional investors. Platforms operating this model also indicated considerable additional institutional engagement, with 67% of firms indicating the existence of a referral program, and 33% of firms noting a data exchange program in place with an institution.

Change in Proportion of Funding from Institutional Investors, APAC (excl. China) 2016 - 2017



P2P/Marketplace Consumer Lending had the second highest proportion of institutional funding (43%) in the region, with US\$ 357.9 million attributed to institutional investors. In 2016, however, the proportion of institutional investment was higher at 55% of the total. Despite the decline in institutional investor driven funding, collaboration with institutions was intrinsic to many platform operators:48% of firms indicated having a referral program in place, 14% denoted a data-exchange program, and 19% provided agent banking services to existing bank customers. Nearly 20% of all firms also indicated that a traditional finance institution was a shareholder to their company.

The Invoice Trading model received 42% of all volume from institutional investors, amounting to \$US 74 million in 2017. Akin to the P2P Consumer Lending model, this model also experienced a decline in institutional funding, down from 46% in 2016. In Invoice Trading, 67% of the platforms stated that they engage with an institutional partner through a referral agreement, while 22.2% have a partnership with a bank to function as an agent.

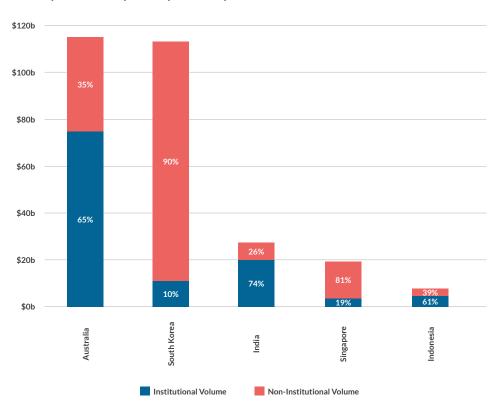
The remaining alternative finance models had much lower institutional participation. For example, Revenue-sharing/Profit-sharing had around 14% of funds coming from institutions, while P2P/Marketplace Property Lending had 13% (US\$ 87.96 million) and Business Lending 10% (US\$66.64 million). Between 2016 and 2017 Institutional participation grew in the latter two models. P2P Property Lending grew considerably from 3%, while P2P Business Lending increased from 7% in 2016. P2P Property Lending platforms engaged with an institutional partner predominantly through a referral agreement (71.4%), 28.6% through agent banking and 14.3% platforms for data exchange. For P2P Business Lending, engagement was mainly through a referral agreement (48.15%), data exchange (22.2%) and agent banking (22.2%).

Institutional participation in Equity-based Crowdfunding declined considerably from 15% in 2016 to 6% in 2017, contributing a total of US\$ 5.69 million to the model's volume. Under this model, the platform's institutional engagement was mostly through referral agreement (76.5%), followed by data exchange (29.4%), platform ownership (29.4%) and agent banking (17.6%).

Institutional investment in Real Estate Crowdfunding declined marginally from 5.1% in 2016 to 3% in 2017, with US\$ 11.35 million in overall funding in 2017. Reward-based Crowdfunding had 1.7% institutional funding, while Donation-based Crowdfunding had virtually no institutional funding.

BY COUNTRY

Funding Volume Derived from Institutional Investors by Key Countries - APAC (excl. China) 2017 (\$billions)



In the Asia Pacific region (excluding China), the highest level of institutionalization was recorded by platforms in India. Overall 74% of the total volume in 2017 came from institutional investors, contributing US\$ 198.4 million. Australia had the second largest percentage of institutional funding (65%) but had the highest volumes from institutional investors with US\$ 747.99 million. Indonesian platforms had the third highest percentage of institutional involvement, with 61% (US\$ 48.75 million) of their total volume coming from institutions.

The remaining countries had much lower levels of institutional participation. For example, Singapore had 19% of their volumes (US\$ 36.4 million) funded through institutions, while South Korea and Malaysia accounted for 10% each. In terms of volumes, South Korea recorded US\$ 111.7 million of institutional investment, while Malaysia had only US\$1.5 million for 2017. New Zealand-based platforms reported 5% institutional funding, contributing US\$ 13.2 million to their total volumes in 2017.

CHAPTER 2: MARKET DYNAMICS

INNOVATION IN CHINA

CHANGES TO BUSINESS MODELS AND PRODUCTS

Surveyed platforms were asked to indicate the level of innovation within both their business models and the products they offered.

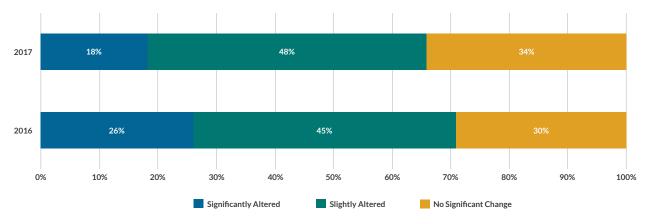
During this research, platforms indicated that model innovation had decreased due to overwhelming regulatory and market uncertainty, leading to an overall deterioration of marketplace. This, as a result, caused many platforms to transition away from alternative finance models and towards more traditional models.

With respect to Chinese-based respondents, the data collection was only sufficiently robust to have this discussion as related to the P2P/Marketplace Consumer Lending and P2P/Marketplace Business Lending models.

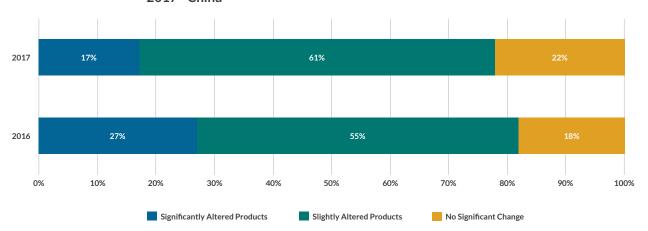
In 2017, 18% of P2P/Marketplace Consumer Lending platforms in China indicated 'significantly altering' their business model and 48% 'slightly altered' their business model, implying similar levels of innovation to last year. However, survey responses indicated that product innovation was less prevalent, with 22% of surveyed platforms making no changes to their product offerings and only 17% significantly modifying or introducing new products or services in 2017. This is unlike the previous year, where product innovation was more significant.

The status of model and product innovation as related to P2P Business Lending platforms was similar to that of the consumer lending space.

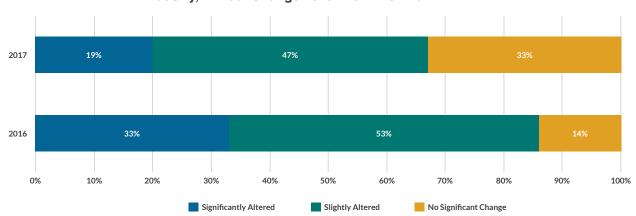
Changes to Business Model in P2P Consumer Lending Alternative Finance Industry, Annual Change, 2016 - 2017 - China



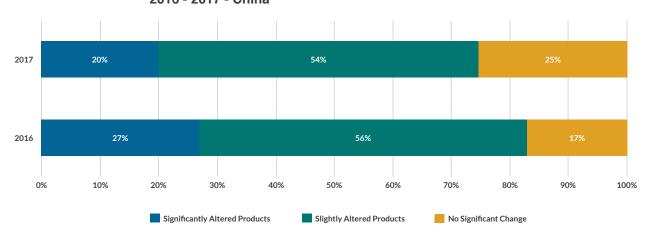
Product Offering Innovations P2P Consumer Lending, Annual Change 2016 - 2017 - China



Changes to Business Model in P2P Business Lending Alternative Finance Industry, Annual Change 2016 - 2017 - China



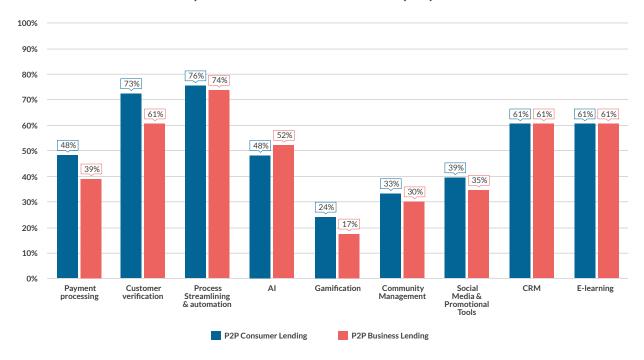
Product Offering Innovations P2P Business Lending, Annual Change 2016 - 2017 - China



RESEARCH & DEVELOPMENT

In this year's survey, respondents were asked to indicate the proportion of their operating budget that was designated to Research & Development (R&D) activities. Chinese platform respondents indicated that approximately 15% of their budget went towards R&D initiatives. Following this, platforms were asked to indicate which specific R&D initiatives their firm was actively pursuing. Platform innovation has focused on three principal areas, the main priority being efficiency enhancements, followed by customer service and customer experience improvements. Most alternative finance models reported high levels of investment in 'process streamlining and automation', as this was reported by 76% of P2P Consumer Lending Firms and 74% of P2P Business Lending firms. This was followed by 'Customer Verification' (73% for P2P Consumer lending and 61% for P2P Business Lending). This investment aims to resolve a key challenge across the Fintech industry relating to bottlenecks in KYC check-points.

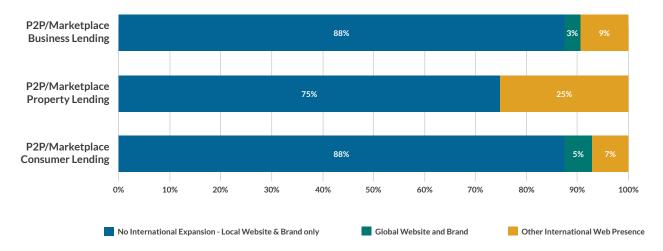
Actively Pursued R&D Initiatives in 2017 by Key Model - China



GLOBALIZATION AND EXPANSION STRATEGY IN CHINA

In China, the overwhelming majority of platforms do not have an internationalization strategy and rely only on a local website and brand. Some platforms – 9% of P2P/Marketplace Business Lending, 25% of P2P/Marketplace Property Lending and 7% of P2P/Marketplace Consumer Lending - have some sort of 'Other' international web presence. A minority – 3% of P2P/Marketplace Business Lending and 5% of P2P/Marketplace Consumer Lending - have a global website and brand. In general, this implies that Chinese platforms are predominantly focusing on the Chinese market, with limited interest in serving the rest of the Asia Pacific market.

Platform Internationalization Strategies by Model - China



INNOVATION IN ASIA PACIFIC

CHANGES TO BUSINESS MODELS AND PRODUCTS

In 2017, a significant portion of alternative finance platforms in the APAC region (excluding China) have explored innovating their business model or products in 2017.

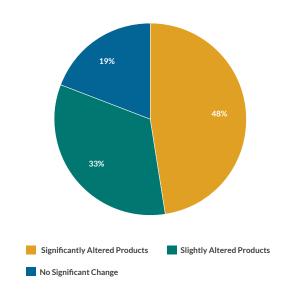
In terms of business model innovation, P2P/Marketplace Business Lending model had the highest percentage of platforms (34%) that had significantly modified their business model in 2017. P2P/Marketplace Consumer Lending (12%), P2P/Marketplace Property Lending and Invoice Trading all had a small percentage of platforms that had undergone significant changes. However, Equity-based Crowdfunding and Real Estate Crowdfunding reported no significant change to business model at all, though a large proportion of the platforms from both categories reported slight changes to their models (56% and 75%, respectively). P2P/Marketplace Consumer Lending (35%), P2P/Marketplace Business Lending (26%), P2P/Marketplace Property Lending (40%), and Invoice Trading (30%) all had a moderate level of platforms slightly modifying their business model in 2017. The remaining share of platforms made no significant changes to their model.¹⁰

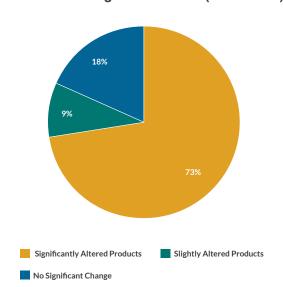
Most of the platforms, irrespective of model, focused on some sort of product innovation. Across all six of the models, 55% of platforms had made significant alterations to their products. Platforms in P2P/Marketplace Property Lending and P2P/Marketplace Business Lending indicated the highest level of significant alterations, with

75% and 73% respectively. An average of 20% had slightly altered their product, while on average 25% had no significant change made to their product in 2017.

Product Innovation - P2P/Marketplace Consumer Lending in 2017 APAC (excl. China)

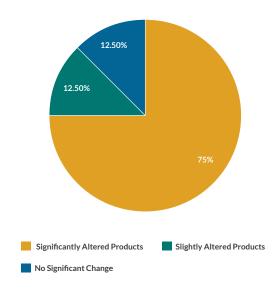
Product Innovation in P2P/Marketplace Business Lending in 2017 APAC (excl. China)

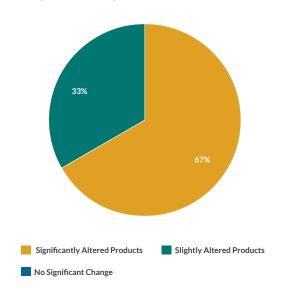




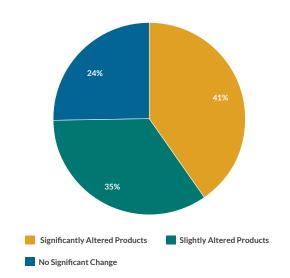
Product Innovation in P2P/Marketplace Property Lending in 2017 APAC (excl. China)

Product Innovation in Invoice Trading in 2017 APAC (excl. China)

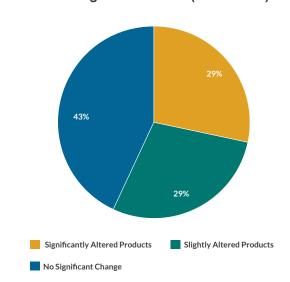




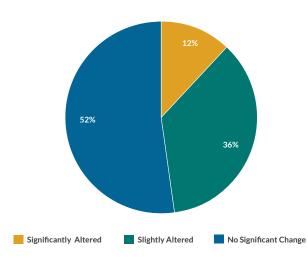
Product Innovation in Equity-based Crowdfunding in 2017 APAC (excl. China)



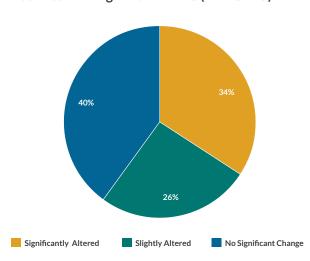
Product Innovation in Real Estate Crowdfunding in 2017 APAC (excl. China)



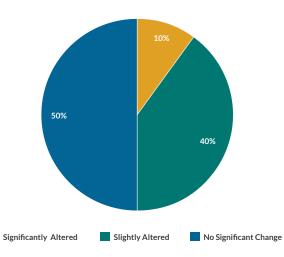
Changes to Business Model in P2P/Marketplace Consumer Lending in 2017 APAC (excl. China)



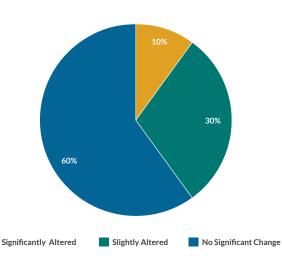
Changes to Business Model in P2P/Marketplace Business Lending in 2017 APAC (excl. China)



Changes to Business Model in P2P/Marketplace Property Lending in 2017 APAC (excl. China)

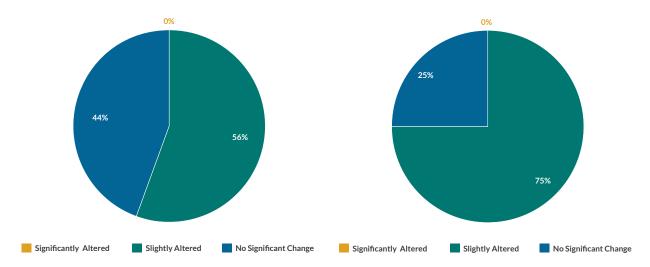


Changes to Business Model in Invoice Trading in 2017 APAC (excl. China)



Changes to Business Model in Equity-based Crowdfunding in 2017 APAC (excl. China)

Changes to Business Model in Real Estate Crowdfunding in 2017 APAC (excl. China)



RESEARCH & DEVELOPMENT

Throughout 2017, platforms have been actively pursuing innovation, with R&D amounting to the largest proportion (24%) of a platforms' budget in the APAC region.

Due to differences in the nature of the business models, R&D focuses for investment-based models, non-investment-based models, and debt models differed from each other in 2017.

Platform R&D for investment-based models concentrated on 'customer verification', 'process streaming and automation' and 'payment processing'. For non-investment-based models, namely Reward-based and Donation-based Crowdfunding models, the top-three areas of R&D focus were 'social media and promotion', 'e-learning', and 'payment processing'. Debt-based models put emphasis on 'process streaming and automation', 'Artificial Intelligence (AI)', and 'customer verification'.

Most alternative finance models reported that they have been actively pursuing 'customer verification' as a key R&D area. The models which placed most focus on this were the Reward-based Crowdfunding (81%), Revenue Sharing (80%), Equity-based Crowdfunding (74%) and Balance Sheet Consumer Lending (100%) models.

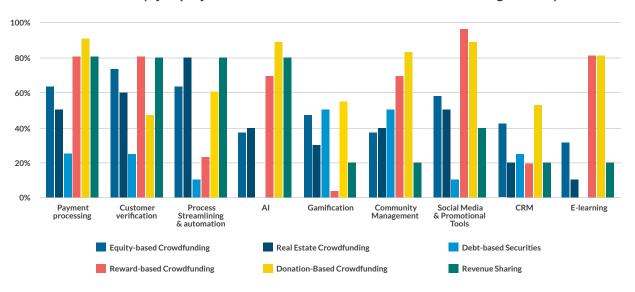
'Process streamlining, and automation' was also a crucial area where all models spent considerable R&D efforts. Revenue Sharing (80%), Real Estate Crowdfunding (80%), P2P Consumer Lending (83%), and Balance Sheet Business Lending (86%) are among the top alternative finance models with this R&D focus.

Investment and non-investment based models focused on 'Payment processing' far more than debt-based models. Donation-based Crowdfunding (91%), Reward-based Crowdfunding (81%), and Revenue Sharing (80%) models all had a high level of focus on payment processing. Equity-based Crowdfunding (63%), Real Estate Crowdfunding (50%), and Debt-based Securities (25%) also exhibited some level of interest in 'payment processing'. Debt-based models, on average, reported that 39% of platforms had a R&D focus on 'payment processing'. Among these, P2P/

Marketplace Business Lending (48%), Invoice Trading (46%), and P2P/Marketplace Consumer Lending (44%) had the highest level of focus.

Different alternative finance models put a various amount of focus on 'Al' in 2017. All platforms in Balance Sheet Consumer Lending have actively pursued R&D in 'Al'. However, none of the platforms in Debt-based Securities had done so in 2017.

APAC (excl. China) Actively Pursued R&D Initiatives in 2017 by Platforms (by Equity-based & Non Investment-based Crowdfunding Models)



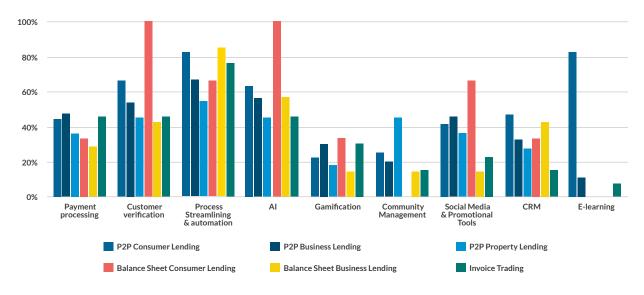
'E-learning' is the R&D initiative that had the most variation across models. Specifically, most of the platforms in non-investment-based models, mainly Reward-based Crowdfunding (81%) and Donation-based Crowdfunding (81%), made e-learning a key R&D focus. Investment-based models including Equity-based Crowdfunding (32%), Real Estate Crowdfunding (10%), Debt-based Securities (0%), and Revenue Sharing (20%) have focused much less on developing an 'e-learning' component. In terms of debt-based models, P2P/Marketplace Consumer Lending (83%) had a high level of focus on 'e-learning', while only 11% of P2P/Marketplace Business Lending models did the same. Notably, other debt-based models, namely P2P/Marketplace Property Lending, Balance Sheet Consumer Lending, and Balance Sheet Business Lending all reported that they had not pursued 'e-learning' in 2017.

'Gamification' and 'CRM' are two R&D initiatives that, in general, were less of a focus for APAC alternative finance platforms. on average only 37% of investment-based platforms, 29% of non-investment platforms, and 23% of debt-based platforms placed any focus on 'gamification'. Similar patterns were observed for 'CRM', whereby the average level of focus across models was 27% for investment-based models, 36% for non-investment-based models, and 33% for debt-based models.

Finally, 'community management' and 'media and promotion' are two areas with that non-investment-based platforms placed a heavy focus on while there is a relatively low level of interest for platforms in in investment- and debt-based models. For example, 89% of Donation-based Crowdfunding platforms and 96% of Reward-based

Crowdfunding platforms put an emphasis on 'media and promotion' in 2017. Similarly, 93% of Donation-based Crowdfunding platforms and 69% of the Reward-based crowdfunding platforms have pursued R&D into 'community management' in 2017.

APAC (excl. China) Actively Pursued R&D Initiatives in 2017 by Platforms (by Debt-based Models)



GLOBALIZATION AND EXPANSION STRATEGY IN ASIA PACIFIC

CROSS BORDER INFLOWS AND OUTFLOWS

In 2017, platforms from all models reported some level of crossborder inflows in support of local campaigns and outflows of local users' support for campaigns abroad. However, there were large variations across models in terms of levels of and year-on-year changes in dependence on cross-border capital flows.

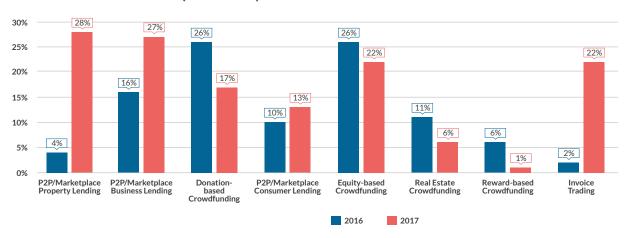
Invoice Trading and P2P/Marketplace Property Lending were the two models with the lowest proportion of cross-border inflows in terms of volume in 2016 (2% and 4%, respectively), whereas they reported the highest growth in 2017. P2P/Marketplace Property Lending had 28% of total volume from cross-border inflows in 2017, representing 671% annual growth. Invoice Trading also had significant growth and reported 22% of cross-border inflows in 2017, a 1030% growth from 2016. P2P/Marketplace Business Lending and P2P/Marketplace Consumer Lending had significant in 2017 as well, reporting that 27% and 13% of total volume coming from overseas.

In contrast, Reward-based Crowdfunding, Donation-Based Crowdfunding, Real Estate Crowdfunding and Equity-Based Crowdfunding saw a decline. Non-investment-based models, namely Reward-based Crowdfunding and Donation-based Crowdfunding, showed an 81% decrease (from 6% to only 1%) and a 37% decrease (from 26% to 17%) of fund inflows in 2017 compared with those in 2016, respectively. Real Estate Crowdfunding dropped from 11% to 6%, while Equity-based Crowdfunding dropped from 26% to 22%. Most of the models showed increased levels of cross-border outflows in 2017, despite decreases in Equity-based Crowdfunding and Real Estate Crowdfunding.

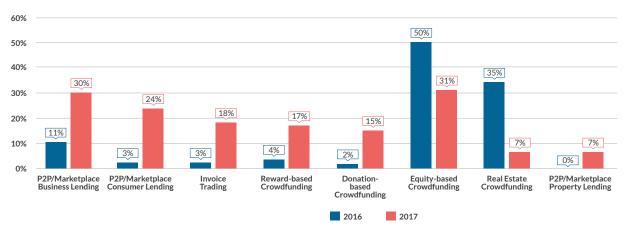
P2P/Marketplace Consumer Lending, Invoice Trading, Reward-based Crowdfunding, and Donation-based Crowdfunding started from low levels in 2016 but experienced significant growth in 2017. P2P/Marketplace Business Lending further increased its reliance on capital outflows from 11% to 30%. Notably, 2017 was the first year that P2P/Marketplace Property Lending had capital outflows, with 7% of total volume invested internationally.

Equity-based Crowdfunding, was still the model with the highest proportion of outflows in 2017 despite a decreasing from 50% to 31%. Real Estate Crowdfunding had significantly decreased dependence on cross-border outflows, with an 81% decrease (from 35% to 7%) from 2016 to 2017.

Cross-border Inflows by Proportion of Volume by Model (2016-2017) APAC (excl. China)



Cross-border Outflows by Proportion of Volume by Model (2016-2017) APAC (excl. China)



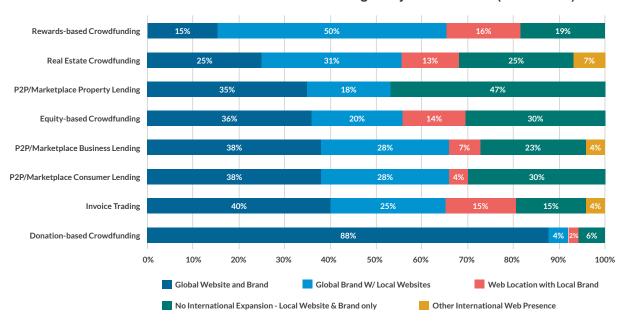
GLOBALIZATION STRATEGY - ASIA PACIFIC

With the convenience and transparency provided by digital platforms in the alternative finance sector, it is evident that platforms are concentrating more on strengthening their global presence and capturing further global market share by building international brands and having international websites. In fact, approximately 25% of surveyed firms responded to the survey in more than one Asia Pacific country, with most of these platforms actively operating in up to three countries.

A large proportion of platforms in APAC (excluding China) reported to have both a global website and a global brand. Donation-based Crowdfunding had the highest level of globalization, with 88% of all platforms both a global website and brand in 2017. While still Reward-based Crowdfunding, with only 15% of platforms having both a global website and brand. The remaining platforms - Invoice Trading (40%), P2P/Marketplace Consumer Lending (38%), P2P/Marketplace Business Lending (36%), Equity-based Crowdfunding (36%), P2P/Marketplace Property Lending (35%), and Real Estate Crowdfunding (25%) - all had moderate level of platforms with global websites and a global brand.

Almost half of P2P Property Lending platforms (47%) responded that they had no international presence (i.e. with local websites and local brand only). P2P Consumer Lending (30%) and Equity-based Crowdfunding (30%) also reported a substantial proportion of platforms with only local presences.

Platform Internationalization Strategies by Model: APAC (excl. China) 2017



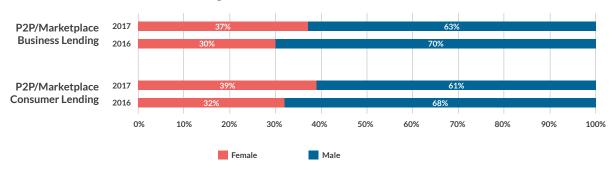
FINANCIAL INCLUSION - CHINA

GENDER AS A MEASURE OF FINANCIAL INCLUSION

Alternative finance can play a significant role in increasing financial inclusion and in bridging systemic gender gaps in both the provision and receipt of funding. For the past three years, this study has tracked female participation in order to better understand the demographics and user case-study of female funders and fundraisers. Both the benchmarking and funder surveys enquire as to female participation, to allow for ongoing and further analysis of this topic.

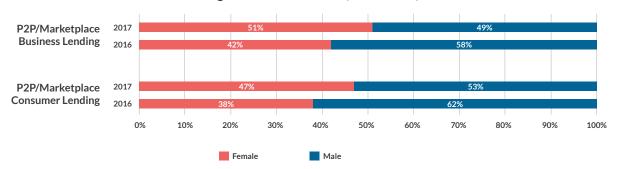
For both P2P/Marketplace Business Lending and P2P/Marketplace Consumer Lending in China, the proportion of female fundraisers and funders has increased against the previous year. In 2017 the female borrower rate for P2P/Marketplace Consumer Lending was 39% compared to 32% in 2016. For P2P/Marketplace Business Lending, the female borrower rate rose from 30% in 2016 to 37% in 2017.

China - Percentage of Female Fundraisers (2016-2017)



With respect to female funder participation within P2P Consumer Lending, 47% of active lenders in 2017 were female compared to 38% in 2016. P2P/Marketplace Business Lending denoted quite a high level of female lending, increasing from 42% in 2016 to 51% in 2017. This figure is quite significant as it indicates that alternative finance has significant potential for promoting female financial inclusion, especially as it relates to investor activity.

China - Percentage of Female Funders (2016-2017)

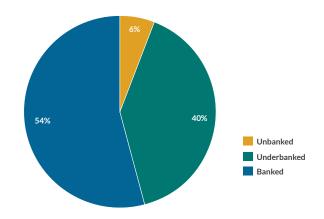


THE BANKED STATUS OF BORROWERS

It has often been hypothesized that Alternative Finance might promote financial inclusion. Specifically, debt-based models such as P2P/Marketplace Lending could be viewed as a proxy to traditional banking services with respect to access to credit.

In examining financial inclusion, debt-based platform respondents were asked to indicate the proportion of their borrower-customer base that was unbanked, underbanked and banked. Chinese borrowers were predominantly banked individuals (54%), compared to 40% who were underbanked, with inadequate access to credit from their existing banking relationship. Finally, the remaining 6% of borrowers were unbanked, meaning they had no access to traditional banking services.

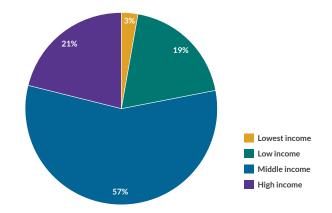
Banked Status of Borrowers (%) - China



INCOME STATUS OF FUNDERS

A robust conversation on financial inclusion should also include a discussion on access to investment vehicles. Survey respondents were therefore asked to indicate the income status of their funder customer base (i.e. lenders and investors). Overall, most lenders or investors in China were classified as 'middle income' (57%). The next highest category was 'high income', with 21% of funders. The remaining 22% was shared by low income (19%) and 'lowest income/bottom of the pyramid' (3%).

National Income Categorization by Funder Customerbase (%) - China



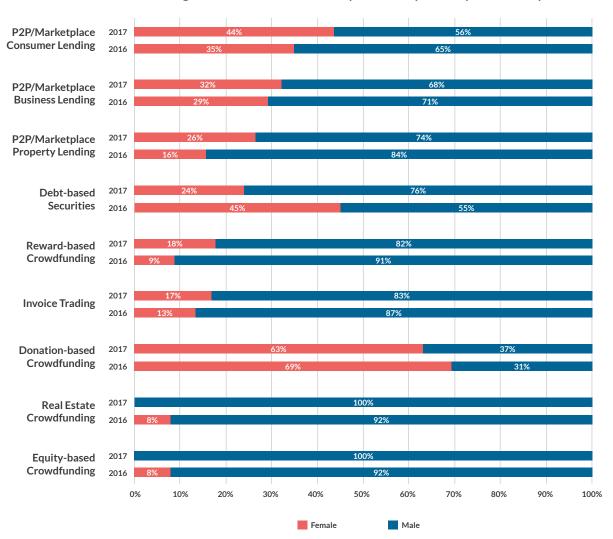
FINANCIAL INCLUSION - ASIA PACIFIC

GENDER AS A MEASURE OF FINANCIAL INCLUSION

In 2017, the participation of female fundraisers in the APAC alternative finance sector (excluding China) grew in five of the seven models. P2P/Marketplace Consumer Lending (44%), P2P/Marketplace Business Lending (32%), P2P/Marketplace Property Lending (26%), Reward-Based Crowdfunding (18%) and Invoice Trading (17%) all showed positive changes with respect to their female fundraiser rate between 2016 and 2017. In contrast, the Debt-Based Securities (24%) and Donation-based Crowdfunding (63%) models both saw an annual decrease in the level of female fundraiser participation. Due to an insufficient number of platform responses, the research team was unable to present the female fundraiser rate for Equity-based or Real Estate Crowdfunding.

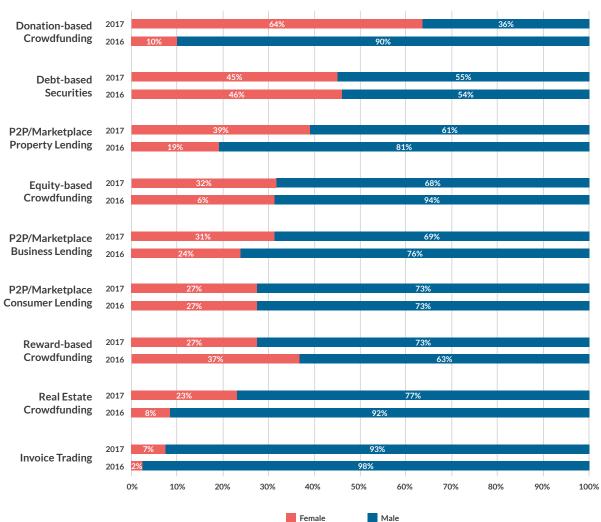
Nevertheless, Donation-based Crowdfunding had the highest proportion of both female fundraisers and funders at 63% and 64%, respectively. P2P/Marketplace Consumer Lending had the second highest proportion of female fundraisers (44%).

Percentage of Female Fundraisers (2016-2017) APAC (excl. China)



There were increases in the proportion of female funders across most alternative finance models between 2016 and 2017. The most evident growth was seen in Donation-Based Crowdfunding, where the proportion of female funders grew from 10% in 2016 to 64% in 2017, while Debt-Based Securities had the second highest proportion of funders (45%). Reward-Based Crowdfunding on the other hand showed a decrease in female funder participation (from 37% in 2016 to 27% in 2017). Invoice Trading models reported the lowest proportion of female funders. However, there was significant growth between 2016 (2%) and 2017 (7%).

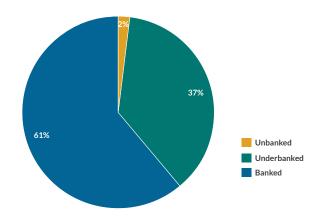
Percentage of Female Funders (2016-2017) APAC (excl. China)



THE BANKED STATUS OF BORROWERS

During our research, debt-based models across APAC (excluding China) were asked about the banked status of their fundraisers. Overall, the majority of borrowers (61%) were banked, 37% were underbanked, while a small proportion (2%) were unbanked.

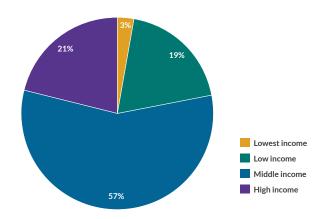
Banked Status of Borrowers (%) APAC (excl. China)



INCOME STATUS OF FUNDERS

Understanding how sensitive funders are with respect to investment returns and losses is critical to assessing the market stability. Most funders (89%) belong to the high-income (43%) or middle-income group (46%). However, the remaining 11% were made up of either low income (9%) or lowest income (2%) funders.

National Income Categorization by Funder Customerbase (%) APAC (excl. China)



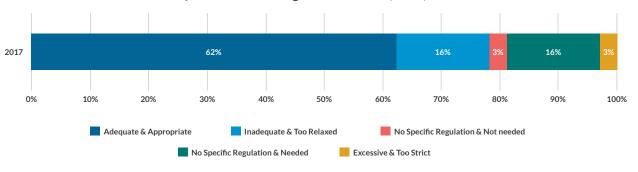
RISKS AND REGULATION

PERCEPTIONS TOWARDS EXISTING REGULATION - CHINA

Our global benchmarking survey asks platform to indicate their perceptions towards the regulatory environment in their respective jurisdictions. Yet, during our data collection, it became apparent that a significant proportion of Chinese-based platform respondents would not be reachable or willing to respond to this specific question.

So, whilst platform-based regulatory perceptions are presented, it is important to note that this is only based upon the responses of 82 firms, most of which have been only marginally impacted by recent regulatory crackdowns across the country. In this context, 62% of respondents indicated that the existing regulatory regime as it related to their operations were adequate and appropriate, while 16% felt that regulation was inadequate and too relaxed. Another 16% noted that there was no specific regulatory regime with oversight to their platform activities and that regulation was needed. An additional 3% of firms noted that while there existed no specific regulation, it was not needed. Finally, the remaining 3% of firms felt that existing regulation as related to their activities was excessive and too strict.

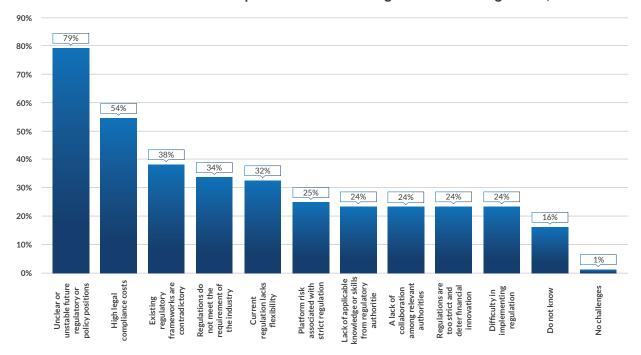
Perceptions towards Regulation - China (2017)



To supplement the above line of questioning, Chinese platforms were asked about key challenges regarding Fintech regulation in China. 79% of firms indicated that the future of the Chinese regulatory environment was 'unclear or unstable', with 54% of firms noting 'high legal compliance costs' as a significant challenge towards Fintech regulation. Chinese firms also indicated that they were spending approximately 5% of their operating budget on 'the scoping of regulatory requirements' and another 6% on obtaining regulatory authorization or licenses, with 3% of their operating budget on ongoing reporting.

Many platforms also thought that 'Existing regulatory frameworks are contradictory' (38%), that 'Regulations do not meet the requirement of the industry' (34%) and that 'Current regulation lacks flexibility' (32%).

Platform Perception towards Challenges in Fintech Regulation, China



PERCEPTIONS TOWARDS KEY RISK FACTORS - CHINA

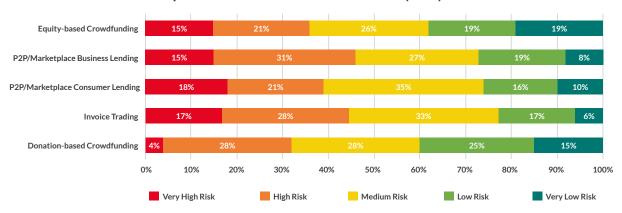
Platforms were asked to rate five different factors based upon the perceived level of risk to their platform's operations. These risk factors included fraud, increase in default rates, collapse of well-known platforms due to malpractice, cybersecurity breach and changes in national regulation.

A 'Notable increases in default' and 'Regulatory Changes' were considered the top risks – with 46% and 45% of all platforms, respectively, viewing them as a high or very high risk. Fraud continued to be viewed as the largest 'very high' risk at 18%, with an additional 21% of platforms viewing it as high risk. This is not surprising given the high levels of documented fraud across the P2P/Marketplace Lending arena in China, which has subsequently created reputational hazard for current active platforms. Perceived risk across these three factors remains relatively high, with most alternative finance platforms indicating higher perceptions of risk in 2017 compared to the previous year.

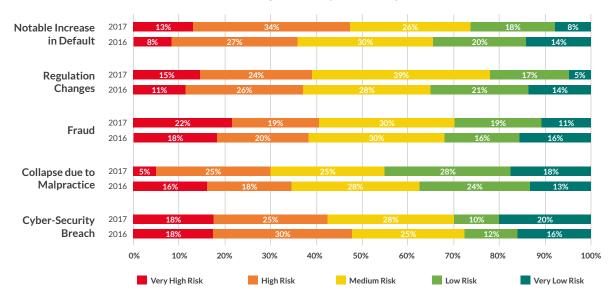
Overall, the perceived risks are similar when only observed for P2P/Marketplace Business Lending and P2P/Marketplace Consumer Lending. For P2P/Marketplace Business Lending, the perceived risk was slightly higher for 'Regulatory Changes' and 'Notable Increases in Default', but for the most part tracked similarly between models.

Due to the high concern of cyber-attack, fraud and default, platforms in China spend 8% of their budget on cyber-security, in addition to 8% on general IT expenses.

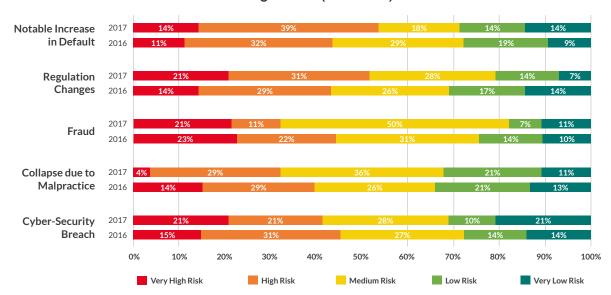
Perceptions towards Risk Factors - China (2017)



Comparison of Perceptions towards key Risk Factors, P2P Consumer Lending - China (2016-2017)



Comparison of Perceptions towards key Risk Factors, P2P Business Lending - China (2016-2017)



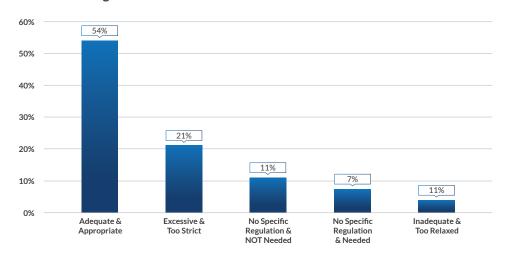
PERCEPTIONS TOWARDS EXISTING REGULATION - ASIA PACIFIC

Platforms in the APAC region (excluding China) on average allocated 5% of their budget towards scoping regulatory requirements in 2017. When assessing platform perceptions towards regulation throughout APAC, significant variety is observed by models and country.

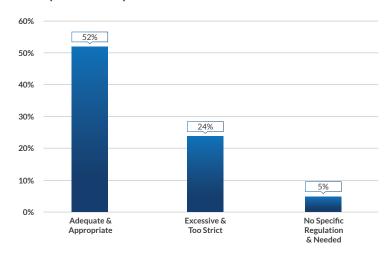
In terms of loan-based models (i.e. P2P/Marketplace Lending models) at an aggregated level, more than half (54%) of the platforms perceive extant regulatory frameworks as 'adequate and appropriate' to their platform activities, while 21% deemed regulations as excessive and too strict. A total of 18% of platforms noted that there was no specific regulatory regime with oversight to their platform activities, although this is further sub-divided, into 11% viewing specific regulation as not needed and 7% viewing specific regulation as needed. Only 4% perceived current regulation as inadequate and too relaxed.

Turning to investment-based models (i.e. Equity-based Crowdfunding), similar patterns of perceptions were found. Specifically, 52% of surveyed platforms considered existing regulations as adequate and appropriate, 24% as excessive and too strict, while the remaining 5% indicated that no specific regulations existed as related to their activity but felt that regulation were needed.

Perceptions towards Regulation - Loan-based Models 2017 APAC Excluding China



Perception towards Regulation - Investment-based Models 2017 APAC (excl. China)



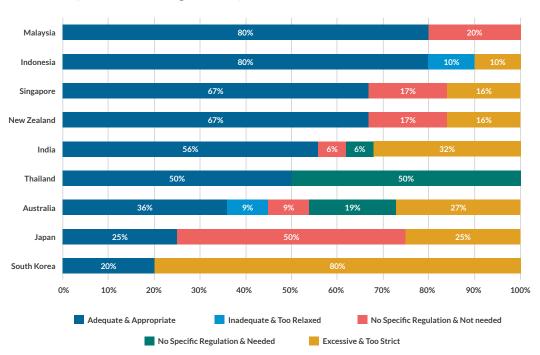
Among all of the surveyed APAC countries (excluding China), Malaysia was the country where platforms were most satisfied with their regulatory regime. A total of 80% of platforms in Malaysia view regulation to be adequate and appropriate; the remaining 20% of platforms report that no specific regulation existed and was not needed.

In contrast, a majority (80%) of platforms in South Korea consider their regulations to be excessive and too strict. Half of Japanese platforms felt that no specific regulations existed as applicable to their activity, but that regulation was not needed. 25% of Japanese firms felt that regulation was adequate and appropriate to their activities, and the remaining 25% viewed regulation as excessive and too strict.

Australia was the country with the least consensus regarding platform perceptions, with 36% of platforms viewing existing regulations as adequate and appropriate, 9% as inadequate and too relaxed, 19% as no specific and needed, 9% as no specific and not needed, and 27% as excessive and too strict.

Other countries, including Indonesia, Singapore, New Zealand, and India all show satisfactory sentiment towards regulation, with the majority of platforms feeling that their regulatory regime was adequate and appropriate.

Perception towards Regulation by APAC Countries 2017



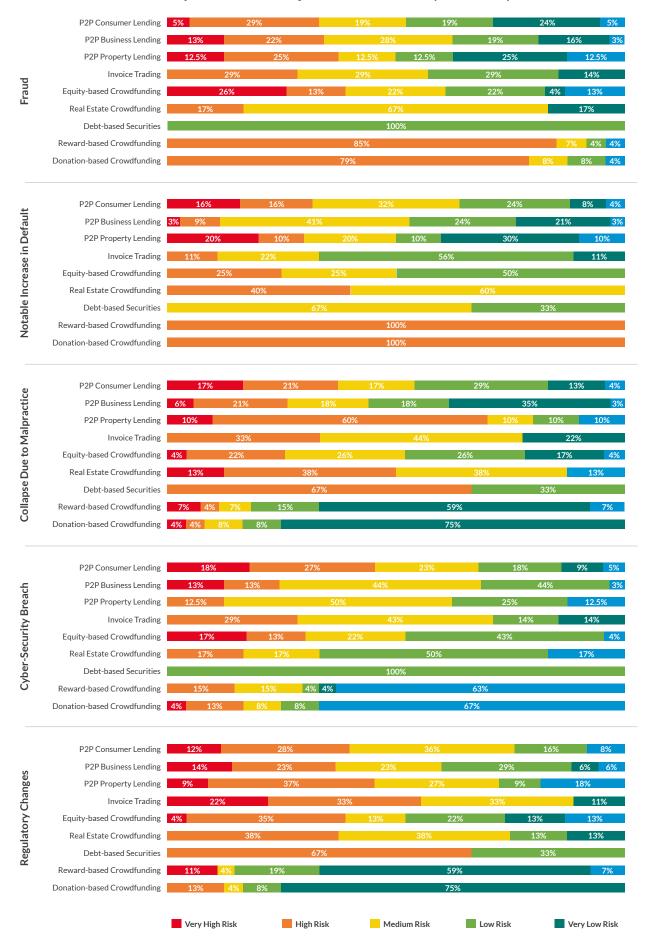
PERCEPTIONS TOWARDS KEY RISK FACTORS - ASIA PACIFIC

When examining risks as perceived by APAC platforms, two types were widely perceived as the greatest concern across alternative finance models – Fraud and Cyber-Security Breach, with 48% and 38% of all platforms perceiving these factors as having "very high to high risk", respectively. Looking at risk perceptions across different models, a strong concern towards a certain type of risk is typically driven by a substantially high level in one or two models, instead of a reflection of congruence across models.

Serious concerns regarding fraud were the most strongly articulated by non-investment-based models. Specifically, 79% and 85% of platforms operating Donation-Based and Reward-Based Crowdfunding models considered fraud as "high risk", compared to all surveyed platforms in Debt-Based Securities considered it as "low risk".

On average platforms spent 16% of their budget on cyber-security and 23% on general IT costs in 2017. The strong concern of a Cyber-security breach was primarily represented by Balance Sheet Business Lending platforms, which 60% rate this as "high risk". Nevertheless, for other models such as Debt-Based Securities and Balance Sheet Consumer Lending, none of the surveyed platforms perceived a cyber-security breach as high risk. All surveyed platforms in Debt-Based Securities rated it as "low risk", 67% of Balance Sheet Consumer Lending platforms report "medium risk", and the rest all consider it a "low risk". Further, cyber-security risks were not relevant to consider for a significant proportion of platforms from non-investment platforms.

Perceptions towards key Risk Factors APAC (excl. China) 2017



Among other risk factors, Debt-Based Securities platforms were the most vulnerable towards regulatory changes, with 67% platforms rating it as "high risk". P2P Property Lending follows, with around 45% platforms perceiving it as "very high risk" to "high risk". Non-investment-based platforms again showed the least concern towards regulatory changes.

Notable increases in default was the most severe concern for non-investment-based platforms, with all surveyed platforms rating it as "high risk" in both models. Invoice Trading and Equity-Based Crowdfunding were more immune to viewing default as a risk - with 67% of the Invoice Trading platforms and 50% of the Equity-Based Crowdfunding platforms rating it as "low risk" to "very low risk".

Finally, the collapse of well-known platforms due to malpractice was widely viewed as a concern in P2P/Marketplace Property Lending (70% of respondents), Debt-Based Securities (67%) and Real Estate Crowdfunding (51%), respectively, rating it as "very high risk" to "high risk". Most Donation-Based (75%) and Reward-Based Crowdfunding platforms (59%), in contrast, felt it to be the lowest threat.

CHAPTER 3: CHINA'S ALTERNATIVE FINANCE INDUSTRY IN 2017

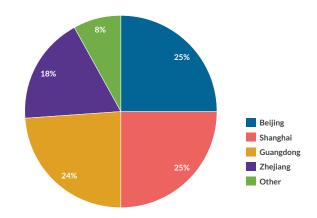
This section is contributed by collaborators from Zhejiang University and the relevant data analysis is from Zhejiang University database.

2017 CHINESE MARKET UPDATE

China's alternative finance industry, which has been booming in recent years, is facing challenges to its' sustainability against the background of economic downturn, tightened liquidity and stricter financial regulations. Consequently, the alternative finance industry in China, especially the marketplace lending sector, is facing pressure and undergoing rapid changes. In 2017, China's marketplace lending industry, which is still the world's largest in volume, demonstrated some of the inherent risks in the sector including the lack of credit and risk controls, the lack of industry standards and best practices, as well as regulatory uncertainties.

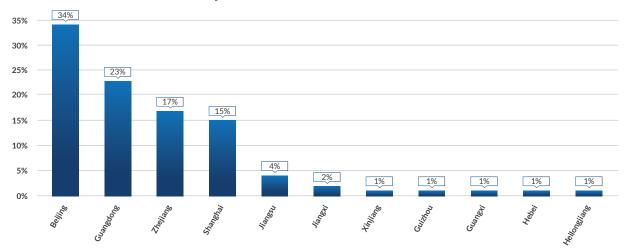
Consequently, China's marketplace lending industry experienced a slowed pace of growth in 2017 in contrast to previous years, especially among the largest peer-to-peer and marketplace lenders. Across the Chinese market, there were 44 platforms with a turnover of 10 billion yuan or more, and these larger platforms accounted for 66.30% of total market volume. In terms of geographical concentration, platforms in Beijing, Shanghai, Guangdong and Zhejiang contributed 91.89% of the marketplace lending volume in 2017. 89% of the largest 100 marketplace lending platforms were based in Beijing (34), Guangdong (23), Zhejiang (17) and Shanghai (15).

Figure 1: Total Transaction Volume - Regional Distribution of Marketplace Lending Platforms in 2017 (%)



Data source: AIF, JZT data

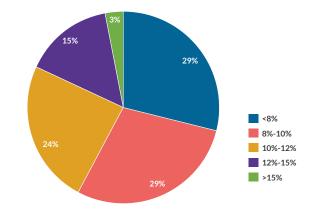
Figure 2: Geographical Distribution of the Top 100 Marketplace Lending Platforms by Province



Data source: AIF, JZT data

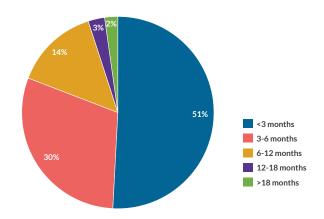
Zhejiang University's market data illustrates that the average interest rate charged by marketplace lending platforms across all models is around 9.45%. The average interest rate charged by over half of platforms was between 8% and 12%, with only 3.25% of platforms in our database charging an average interest rate of over 15% (the highest rate being 20.66%). Shorter term borrowing remains the norm in the Chinese market, with 80.6% of platforms facilitating loans with an average maturity of less than 6 months. The average investment amount by a typical lender in a platform loan is between 10-30 thousand yuan (accounting for 52.77% of total platform investment), whereas the average loan amount is typically between 100-400 thousand yuan.

Figure 3: Average Interest Rate Distribution of Marketplace Lending Platforms in 2017



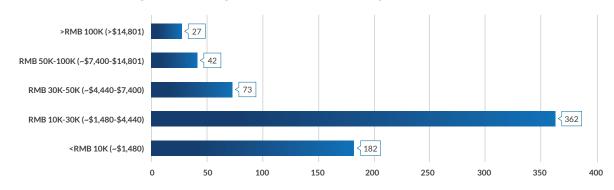
Data source: AIF, JZT data

Figure 4: Average Loan Term of Marketplace Lending Platforms in 2017



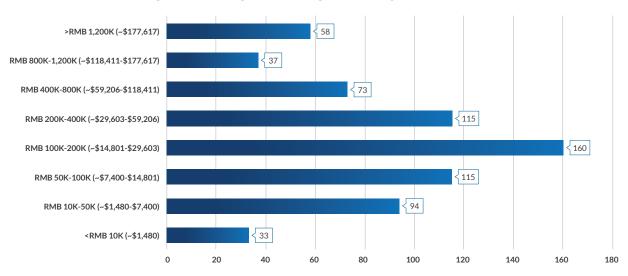
Data source: AIF, JZT data

Figure 5: Average Investment Amount by Platform in 2017



Data source: AIF, JZT data

Figure 6: Average Borrowing Amount by Platforms in 2017



Data source: AIF, JZT data

In an environment where regulation and supervisory oversight was either missing or inadequate, business models such as payday and largely unregulated 'campus loans' for students developed rapidly in China. Characterized by small loan amounts and shorter terms, campus and payday loans exceeded 1 trillion yuan in 2017,

which was about six times than that of the 2016 volume.¹¹ Under these business practices, borrowers can accrue significant debt without the realistic prospect of repaying their loan. Consequently, debt collections activities would often follow, sometimes even involving violence. In order to prevent the risks of these activities from escalating, the Chinese supervisory authorities abruptly stopped campus loans and have strictly supervised payday loans. Regulatory measures included the establishment of a clear upper limit for borrowing costs and improvements to financial education.

THE DEVELOPMENT OF THE REGULATORY ENVIRONMENT IN 2017

To tackle the regulatory risks in the Chinese marketplace lending sector, 2017 saw the announcement and implementation of numerous market cooling and more stringent regulations. In 2017, the formation of China's marketplace lending supervision '1+3' system (i.e. 'one method, three guidelines') sought to put an adequate regulatory structure in place that is fit for purpose. The objective of this '1+3' system was to monitor, manage, and mitigate industry risks. On August 24, 2016, the China Banking Regulatory Commission jointly issued the *Interim Measures for* the Management of Marketplace Lending Information Intermediary Business Activities, which established the marketplace lending industry supervision system and business rules. Since then, the China Banking Regulatory Commission has successively issued the Guidelines for the Registration and Registration of Marketplace Lending Information Intermediaries, the Guidelines for the Deposit and Management of Marketplace Lending Funds, and the Interim Measures for the Management of Business Activities of Marketplace Lending Information Intermediaries.

Efforts have also been made at the local regulatory level to establish regulations which are in accord with national industry developments, whilst factoring in regional variations. Among them, Beijing, Shanghai, Guangdong, Shenzhen, Fujian provinces have responded to the call of the national regulatory authorities and have begun to develop workable regulatory frameworks

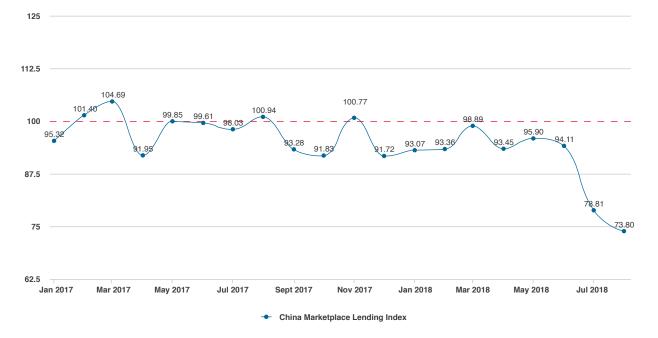
Industry self-regulation plays an invaluable role in reducing the regulatory burden and cost, eliminating the information asymmetry between the market subject and the regulatory body and in improving professionalism and market standardization. The National Internet Finance Association (NIFA), has issued a number of standards, information disclosures, self-regulation guidance and risk warnings. As of 30 July 2018, there were 119 marketplace lending platforms that were members of NIFA and therefore subject to supervision by the association. On the other hand, various regional industry associations have been established, which have influenced the development of local industries and played a pivotal role in ensuring legal compliance, as well as improving the management of platforms and the educational resources available to consumers.

With the proposed regulatory changes, Chinese marketplace lenders have begun to collaborate with banks. As at the end of 2017, the number of Chinese marketplace lending platforms that had established a fund depositary relationship with a bank stood at 715, equating to 28.4% of such platforms.

THE LATEST MARKET DEVELOPMENTS AND LOOKING AHEAD IN 2018

Between June and July 2018, many platforms in China's marketplace lending industry experienced frequent "storms" and negative market sentiment began to spread, causing some liquidity risk in the process. According to the *China Marketplace Lending Index* posted by AIF (Figure 10) the market lending volume and market efficiency declined sharply between July and August 2018, indicating a dramatic contraction in China's marketplace lending industry.

Figure 10: China Marketplace Lending Index from September 2017 to August 2018



(Resource: AIF, JZT Data)

By the end of August 2018, the number of active platforms in the industry had decreased to 1595 from its height of over 6,000 and the total amount of principal repayment was 903.284 billion yuan. The cumulative number of investors involved in problem platforms was about 1.322 million (including repeat investors) and the balance of associated loans was about 96.05 billion yuan.

The 'storms' among marketplace lending platforms was caused by both macro and micro factors. In terms of the macro conditions, China's economy was facing downward pressure in 2018 and the credit markets tightened. As a result, investors were much more hesitant to invest in online marketplace lending reducing capital flow and liquidity in the industry. Some of the platform operators were found to be fraudulent and a large number of platforms collapsed. On the other hand, some opportunistic borrowers who incurred significant risk through speculative borrowing are taking advantage of the crisis in the marketplace lending by maliciously evading debt repayments, which further added to the market's woes.

In the context of industry turmoil, authorities have accelerated the process of improving the regulatory system and launched numerous initiatives to accelerate filing, standardize orderly exits and comprehensively implement inspections. For instance, the National Internet Financial Risk Special Remediation Office (NIFRSRO) put forward clear requirements for the special rectification of network lending risks, allowing platforms that meet the standards be filed in a timely manner. On August 8, the NIFRSRO issued the "Notice on Submitting the Information of Marketplace Lending Platform Borrowers Evading Deb" to combat malicious escape debts. On August 12, the NIFRSRO proposed "Ten Measures to Deal with Marketplace Lending Risks", including regulating marketplace lending institutions on exit and combat malicious exiting from marketplace-lending platforms, as well as to protect investor rights.

Industry associations such as the NIFA have also played their role by issuing a notice on the inspection of marketplace lending institutions and in doing so initiated self-inspection of its member institutions. The NIFA also issued at notice to preventing fictitious borrowing projects and malicious fraudulent loans on marketplace lending institutions. At the local level, local Internet Finance associations actively assist in supervision through organizing local platforms to conduct self-discipline inspections, issue self-discipline declarations and strengthen investor education to stabilize the industry, which enhances public confidence. For example, the Zhejiang Internet Finance Association carried out the "Original Clearance" industry action, and jointly issued the "Industrial Self-Discipline Declaration" to the public.

Due to the risk of contagion, traditional financial institutions have been actively involved in supporting platforms in order to prevent a further escalation of risk. The China Insurance Regulatory Commission held a meeting in August 2018 to ask the four major asset management companies (AMC) to help resolve the risk of the marketplace lending platform collapses. A week later, Great Wall Asset Management Co., Ltd., one of the four major AMCs, took the lead in setting up working groups in Shanghai, Zhejiang, Guangdong, Beijing and other regions to coordinate the promotion of marketplace lending risk management.

At present, China's marketplace lending industry has gradually stabilised, but the marketplace lending industry still stands at a crossroads. Academic institutions can play their part by continuing to collect data and provide the most up-to-date and reliable analysis to inform evidence-based regulation and policymaking.

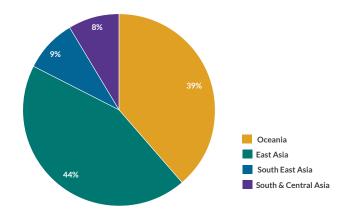
CHAPTER 4: SUMMARY OF ASIA PACIFIC REGIONS

The following chapter provides a detailed review of key models and trends from the leading countries and regional groups across the Asia Pacific (excluding China). Each section includes a review of overall market volumes and the key models that are driving them, followed by a discussion on regulation. It should be noted, commentary was only possible for countries or models with sufficiently robust data.

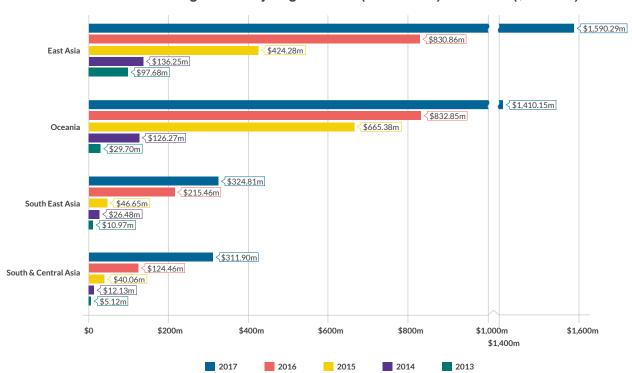
A SNAPSHOT OF KEY REGIONS

For the purpose of this report, the Asia Pacific will be divided into four sub-regions: East Asia, Oceania, South East Asia and South & Central Asia. In 2017, East Asia captured 44% of the total market share, surpassing Oceania (39%) which was the regional leader in 2016. South East and South & Central Asia both accounted for 9% of the market share.

National income categorization by funder customerbase (%) APAC (excl. China)

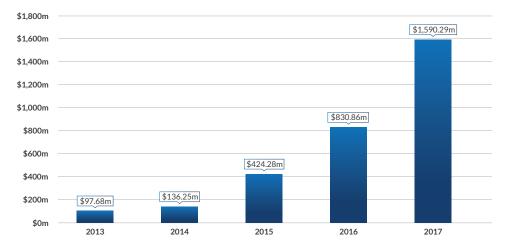


Trading Volume by Region APAC (Excl. China) 2013-2017 (\$millions)

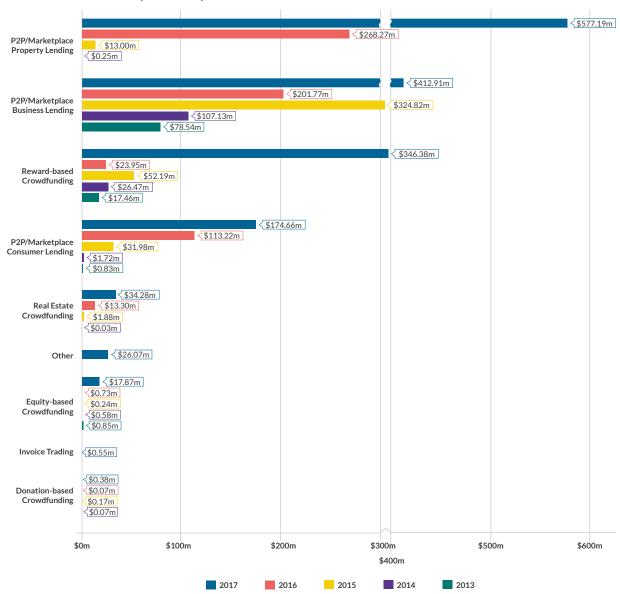


EAST ASIA

East Asia Total Alternative Finance Market (Excl. China) 2013-2017 (\$millions)



East Asia Alternative Finance Market by Model (excl. China) 2013-2017, (\$millions)



East Asia is the largest region in the Asia Pacific (excluding China) and is comprised of South Korea, Japan, Chinese Taipei, Hong Kong, North Korea, and Mongolia. China, given its significant differences in alternative finance, has been examined separately in Chapter 3.

The region's total market volume accounted for US\$830.85 million in 2016 and grew to US\$1.50 billion in 2017. While the growth rate has slowed between 2016-2017 to 91% from 96% in 2015-2016 and 211% in 2014-2015, East Asia still remains one of leading alternative finance markets globally, and comparable, continuous growth is expected for 2018.

On a model-by-model basis, P2P/Marketplace Property Lending accounted for the largest proportion of funding in East Asia, with a total of US\$577.18 million raised in 2017. This accounted for 36.9% of the total alternative finance market in the sub-region. The second largest alternative finance model was P2P/Marketplace Business Lending with US\$412.91 million raised in 2017.

Taken together, debt-based alternative finance models' share of total market activity in East Asia decreased in 2017 to 74.47% from 95% in 2016. This is likely due to the emergence of Real Estate Crowdfunding, which totaled US\$346.38 million in 2017 - a sizable increase from the US\$13.3 million in 2016.

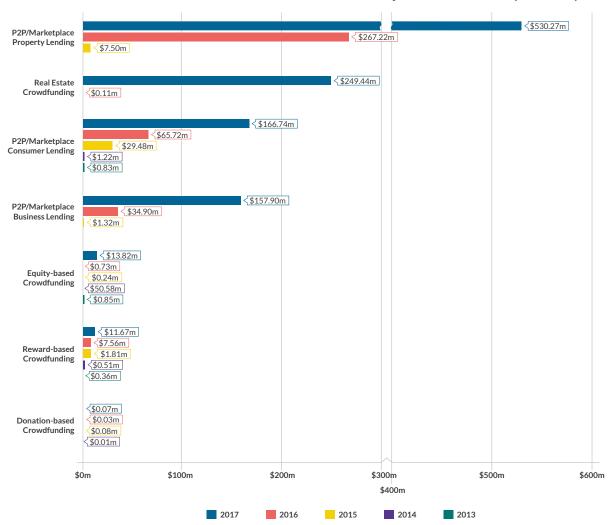
Small levels of market activity were recorded for other models such as Reward-Based Crowdfunding with US\$34.28 million, Equity-based Crowdfunding with US\$17.87 million and Invoice Trading and Donation-based Crowdfunding both with less than US\$1 million in 2017.

SOUTH KOREA

South Korea Total Alternative Finance Market 2013-2017 (\$millions)



South Korea Alternative Finance Market by Model 2013-2017 (\$millions)



In 2017, South Korea emerged as the largest alternative finance market within East Asia, excluding China, by a considerable margin with a total volume of US\$1.12 billion. This was an increase of 200% over the total of US\$376.3 million raised in 2016. A driver of this dramatic expansion was an increase in the number and diversity of platforms. As data and the experience of leading platforms have accumulated, various financial institutions, including domestic commercial banks, have begun to pay attention to the alternative finance market. Some banks are proactively responding to the changes by investing in the alternative finance platforms or launching joint ventures.¹³

Online alternative finance has continued to grow rapidly in South Korea. This growth has been substantial when compared with the US\$2 million reported in 2013. In 2017, the largest contribution of volume by model in South Korea was through P2P/Marketplace Property Lending, accounting for over US\$530.27 million (up from US\$267.22 million in 2016). The second largest segment was Real Estate Crowdfunding, which has grown to over US\$249.43 million, up substantially from the US\$0.1 million reported in 2016. The third largest segment was P2P/Marketplace Consumer Lending with a total of US\$166.74 million, up from US\$65.72 million the year before. This was followed by P2P/Marketplace Business Lending,

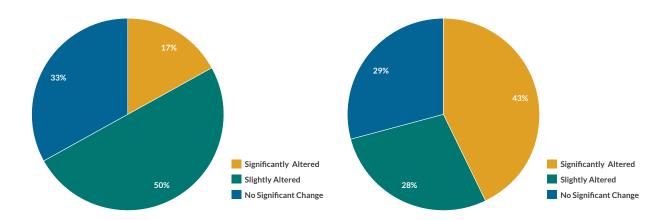
which reported US\$157.9 million, Equity-based Crowdfunding with US\$13.82 million and Reward-based Crowdfunding with US\$11.67 million.

South Korea's P2P/Marketplace Lending market has been on the rise, although there is some ambiguity regarding its legal status and fraud cases have been repeatedly reported. If the legal ambiguity of the market were resolved, the market will continue to expand further, with the addition of institutional investors. Additionally, Crowdfunding in South Korea has expanded into new areas. In particular, with legislative support in 2016, Equity-based Crowdfunding began to fund a wide range of start-ups and smaller firms. Is

In terms of business model innovation, just 17% of surveyed platforms across all types of alternative finance stated they had significantly altered their business model in the past year, while 50% of platforms reported slightly altering their business models. A total of 33% of the surveyed platforms stated they had not changed their business model.

Changes to Business Model - South Korea in 2017

Product Innovation - South Korea in 2017



In terms of innovation in the products alternative finance platforms offer in South Korea, 43% of surveyed platforms stated they had significantly altered their product offering, while 28% had slightly altered their products in the past year. Only 29% of surveyed platforms in South Korea had made no change to their products in the past year.

South Korea's Alternative Finance Regulatory Environment

Alternative finance platforms, especially P2P/Marketplace Lending firms, are largely unregulated in South Korea. ¹⁶ The Financial Services Commission (FSC) indirectly supervises them by regulating the registration of P2P/Marketplace Lending firms' lending subsidiaries. Currently, they are classified as moneylenders but the FSC plans to supervise them more strictly by assigning them a new category in accordance to two related bills pending in the National Assembly. ¹⁷ Both pieces of legislation define P2P/Marketplace Lending as an independent financial industry. If the legislation is enacted and thus legal ambiguity is resolved, however, it will help make the P2P/Marketplace Lending market more transparent and increase its stability.

Regarding the crowdfunding market, South Korea revised the Capital Market Law in July 2015 to design the basic structure of Equity-based Crowdfunding systems and launched it in January 2016. With the latest successful development of the systems, the FSC relaxed the current rules to establish crowdfunding as an effective financing option across all sectors through the amendment of the Capital Market Law in September 2017. 19

P2P/Marketplace Lending

With regards to the South Korean P2P/Marketplace Lending market, the Korean P2P Financial Association was founded in mid-2016 with 22 founding members²⁰ and there currently are around 60 corporate members of the association.²¹ In general, the Korean P2P Finance Association has sought to play a significant role in preparing and influencing the lending guidelines of the Korean financial authorities though close communication with the industry.

Over recent years there were no bespoke regulations developed for P2P/Marketplace Lending activity in South Korea. As a result, P2P/Marketplace Lending businesses fell under the scope of the Credit Business Act.²² To this extent, the Act requires P2P lending businesses to register with the Korean Financial Commission (FSC) as a credit business even though many of P2P/Marketplace Lending firms represented by the Korean P2P Finance Association do not perceive themselves as primarily credit businesses.

At the beginning of 2017, the Financial Supervisory Service (FSS) issued the "P2P Lending Guidelines" which aim to protect investors in P2P/Marketplace investment²³. The guidelines apply to the financial companies that conduct lending business as a P2P/Marketplace Lending intermediary. The guidelines set requirements for P2P/Marketplace Lending businesses such as the public announcement of related information, fund management as well as a limitation of investment.

To regulate such activity, the FSC has set a limit of 10 million won - just under US\$9,000 per P2P company per year - for ordinary individual investors and has limited the investment amount to one investor to one borrower at 5 million won (around US\$4,500).²⁴ The regulators said this approach was taken to protect investors.

Consequently, at the beginning of 2018, the Association proposed that the FSC to increase the limitation to 100 million won per year. ²⁵ This included a proposal to raise the ceiling to 400 million won in some cases. Along with the proposal submitted to the FSC, the Association has also been working with the new guidelines which aim to protect consumers through setting a higher standard for P2P/Marketplace Lending firms. The new guidelines include various matters such as requirements for P2P companies to disclose information, for instance, the total volume of loans, loan balances and default rates every month. ²⁶

Equity-based Crowdfunding

The Amendment of the Financial Investment Services and Capital Markets Act (the FSCMA) passed in the South Korean Parliament and came into effect at the beginning of 2016.²⁷ The FSCMA prescribes an investment limit for ordinary investors of approximately US\$1,800 per business and not to exceed around US\$4,500 per year. This is different from the case of other types of investors such as 'incomeaccredited investors' whose investment cannot exceed US\$9,000

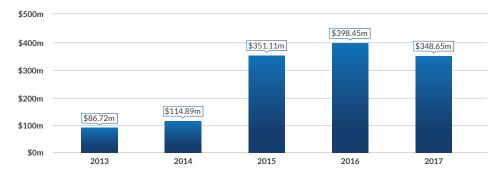
per company and about US\$18,000 per year. There is no limitation set for designated 'professional investors'. In addition to the limitation of investment, the FSCMA sets a requirement that the crowdfunded securities must be deposited at the Korean Securities Deposit and locked for a year. The FSCMA includes a further requirement for the issuing companies - including that the firms must have been trading for less than seven years and a limitation on the amount that they can raise.

Regulatory Sandbox

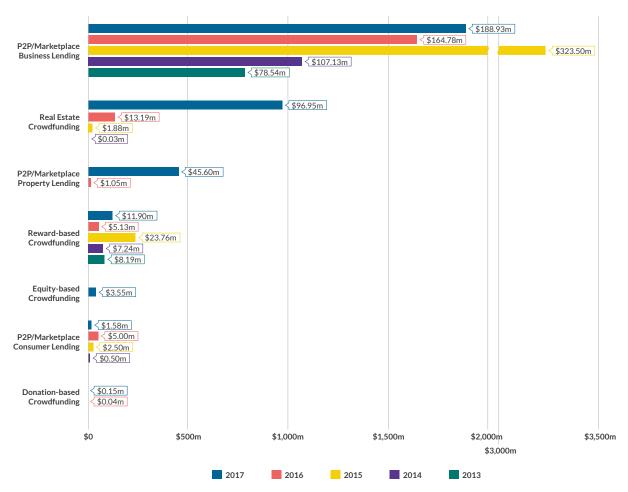
JAPAN

There are other related initiatives that have been proposed and launched by the government as well as regulators in 2018. The initiatives include the launch of Regulatory Sandbox to lower regulations and stimulate development of innovation in various industries. In 2018, the National Assembly of Korea passed a bill that grants a regulatory sandbox for new businesses in the information and communication technology sector to achieve the aforementioned objective²⁸. To this end, the bill aims to amend the Special Act on Promotion and Vitalization of Convergence of Information and Communications Technology. The Sandbox period is primarily set as a two years period that can have a one-time extension. The Ministry of Science of South Korea believes that the Sandbox will allow businesses to test their innovation and technologies in the real market. This can benefit both businesses and the government – as it can observe the activities of the Sandbox's participants in order to improve existing regulations.

Japan Total Alternative Finance Market 2013-2017 (\$millions)



Japan Alternative Finance Market by Model 2013-2017 (\$millions)



On a country-by-country basis within East Asia, Japan reported the second largest funding volume behind South Korea with a total of US\$348.65 million raised in 2017. This was down 12% compared to 2016. It should be noted that, until this year, Japan took the lead in terms of total transaction volume within the region since 2013.

This was largely due to the decline in volume in Balance Sheet Business Lending and Revenue-sharing/Profit-sharing Crowdfunding as well as P2P/Marketplace Consumer Lending activity over the course of 2017, which fell by 68.43% from US\$5 million in 2016 to US\$1.57 million in 2017.

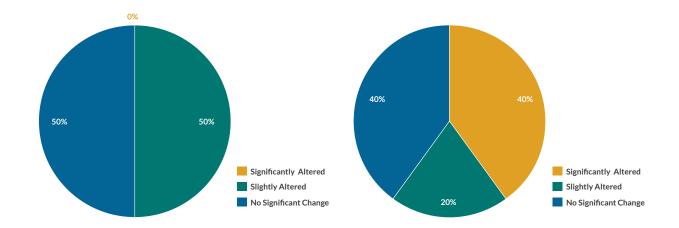
Looking at the breakdown of each individual alternative finance model in Japan, P2P/Marketplace Business Lending accounts for the bulk of market activity with US\$188.9. The second largest alternative finance model was Real Estate Crowdfunding which raised US\$96.84 million in 2017 – a 634% increase year-on-year. P2P/Marketplace Property Lending was the third largest model in Japan with US\$45.6 million in 2017 - up from US\$1 million in 2016.

In terms of business model innovation, half of surveyed platforms across all models stated they had slightly altered their business model in the past year. The other half of surveyed platforms stated they had not significantly changed their business model.

In terms of innovation in the products alternative finance platforms offer in Japan, 40% of surveyed platforms stated they had significantly altered their product offering while 20% had slightly altered their products in the past year. The remaining 40% of surveyed platforms in Japan had not significantly changed their products.

Changes to Business Model - Japan in 2017

Product Innovation - Japan in 2017



Japan's Alternative Finance Regulatory Environment

Regulatory Sandbox

In June 2018, the Act on Special Measures for Productivity Improvement came into force. The act provides provisions to: establish a regulatory sandbox initiative, encourage Internet of Things investment with regards to data sharing or collaboration, as well as encourage SMEs to invest in business facilities.²⁹

Consultation under the Regulatory Sandbox initiative was also opened in June 2018. This was to provide consultation for businesses interested in conducting experiments for a new business model that may involve the use of new technologies or innovations.³⁰

P2P Lending

In Japan, businesses that need to offer P2P/Marketplace Lending services must comply with the registration requirements for both: a Money Lender under the Money Lending Business Act (to lend money); and as a Type II Financial Instruments Business Operator under the FIEA (to solicit investment from investors in the form of a collective investment scheme).

Currently, there are no specific regulations that specifically regulate P2P/Marketplace Lending. However, the authorities that regulate Money Lenders are giving guidance to P2P/Marketplace Lending companies to not disclose information of the borrowers to investors, potentially to prevent evasion of the Money Lending Business Act. Additionally, according to information provided by the Bank of Japan (BOJ) legal arrangements in Japan for P2P lending, such as specific purpose companies and specific purpose trusts, can be used strengthen investor protection. The desired result is building public trust in the P2P lending market in the country.³¹

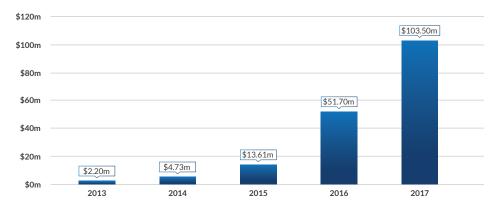
In 2018, late payments on interest and principal become a problem for P2P platforms when it was time to make distributions to investors³². This is because P2P businesses are legally considered as money lending businesses. As a result, borrower information does not have to be published, which makes it difficult for investors to access sufficient information about their borrowers.³³ As a result, the FSA stated that they will allow lending platforms to disclose general information about borrowers. Additionally, the Securities and Exchange Surveillance Commission also recently suggested the FSC impose penalties on a handful of platforms for the misuse of funds by borrowers.³⁴

Equity-based Crowdfunding

Starting in 2015, the rules regarding financial instrument business operators were amended to allow Type I Financial Instruments Business Operators under the Financial Instruments and Exchange Act (FIEA) to solicit investment in unlisted shares provided that the total offering amount is less than JPY 100 million (~US\$915,000) annually and the investment amount of each investor is JPY 500,000 (~US\$4,500) or less. Further, the regulatory burden was lifted as Equity-based Crowdfunding platforms can be registered as a "Type I Small-Amount E-soliciting Business Operator". However, in the years following the amendment equity-based crowdfunding has been virtually non-existent in Japan. At the beginning of 2018, there is an expectation that equity crowdfunding in Japan is set to grow five-fold by the end of 2018.

CHINESE TAIPEI

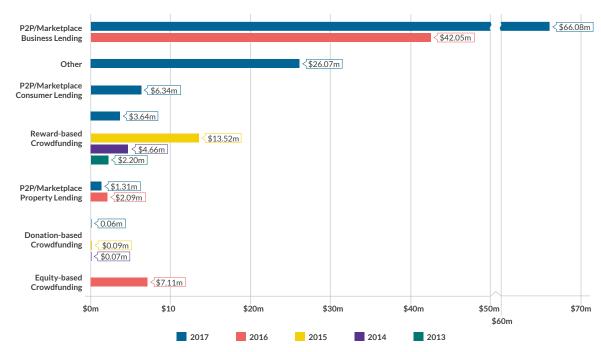
Chinese Taipei Total Alternative Finance Market 2013-2017 (\$millions)



Chinese Taipei was the third largest alternative finance market in the East Asia region, raising a total of US\$103.5 million in 2017. This was an increase of 100% over the total of US\$51.69 million raised in 2016. The growth rate between 2016 and 2017 has decelerated from the 280% between 2015 and 2016.³⁶

A key driver of this was the increase of P2P/Marketplace Business Lending activity, which increased from US\$42.49 million in 2016 to US\$66.07 million in 2017.

Chinese Taipei Alternative Finance Market by Model 2013-2017 (\$millions)



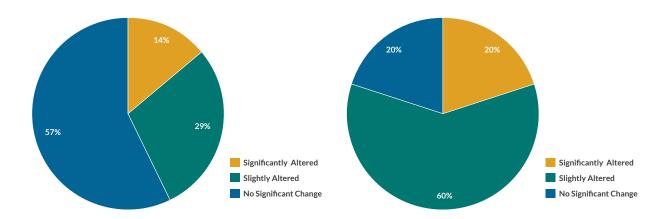
The second largest model was P2P/Marketplace Consumer Lending at just under US\$6.33 million in 2017. This was followed by Reward-based Crowdfunding, which reported US\$3.63 million, P2P/Marketplace Property Lending with US\$1.31 million, and Donation-based Crowdfunding with US\$0.05 million.

In terms of business model innovation, just 14% of surveyed platforms across all types of alternative finance stated they had significantly altered their business model in the past year, while 29% of platforms reported slightly altering their business models. The remaining 57% of surveyed platforms stated they had not changed their business model.

In terms of innovation to the products, 20% of surveyed platforms across all types of alternative finance stated they had significantly altered their product offering while 60% had slightly altered their products in the past year. Only 20% of surveyed platforms in Chinese Taipei had made no change to their products in the past year.

Changes to Business Model - Chinese Taipei in 2017

Product Innovation - Chinese Taipei in 2017



Chinese Taipei's Alternative Finance Regulatory Environment

Regulatory Sandbox

In recent years, there have been many initiatives launched by the authorities in Chinese Taipei to support the use of technology and innovation in financial services. Notable examples are the issuance of the Fintech Development Strategy White Paper in May 2016 by the FSC which reflected key directions for Fintech development in Chinese Taipei, the proposal and approval of the Draft of the Statute for the Fintech Development Experiment (Fintech Innovation Act) (金融科技創新實驗條例) in January 2017 and December 2017, respectively, and the approval of the Self-regulation Guidelines Governing Business Cooperation Between Member Banks of Bankers Association of the Republic of China and P2P Lending Platform Operators at the end of 2017.

Additionally, under the Fintech Innovation Act in April 2018, the FSC plans to set up an initiative similar to the "Regulatory Sandbox" initiative in the UK to allow businesses to test their Fintech. The FSC Sandbox also focuses on creating a safe environment for technologies/innovations. This reflects the active role of the national government, as the act is considered as the first financial regulatory sandbox law.³⁷

This initiative is different from ones in other jurisdictions as it was launched through subordinate regulations. To be more specific, the FSC Sandbox offered a regulatory exemption for businesses with approval from the FSC. The act also stipulated that the Sandbox period is set to be an 18-month period that could be extended to up to 36 months. After the end of the period, the special committee established by the Act will need to submit a report to the Legislative Yuan, detailing what was learned from the Sandbox, as well as what regulations might need to be changed.

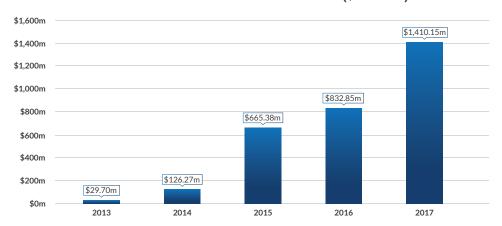
Consequently, the first test of the FSC Sandbox is expected to begin on 5 December this year. The first experiment involves KGI Bank (凱基銀行) and Chunghwa Telecom Co (中華電信) both of which applied for the Sandbox in August 2018.38

Equity-based Crowdfunding

Among the other Fintech-related initiatives launched by Chinese Taipeiese government to support small-sized innovation companies, the government created the 'Go Incubation Board for Startup and Acceleration' ("GISA Board") in January 2014, run by the GreTai Securities Market (or Taipei Exchange). Its purpose is to play a similar role to a crowdfunding platform and to help small business and startups raise capital. As a result of the strict requirements in Chinese Taipei to be a securities broker under the Security and Exchange Act (SEA), in order to allow Equity-based Crowdfunding platforms to operate legally in Chinese Taipei, the Chinese Taipeiese FSC granted an exemption for private Equity-based Crowdfunding platforms without amending the SEA as it did to the GISA Board in 2014; the regulations governing the public GISA Board (the GISA Regulations) and private platforms (the Private Portal Regulations) in Chinese Taipei were based on the JOBS Act but adapted to local conditions. Chinese Taipei's Equity-based Crowdfunding regulations have placed much more emphasis on investor protection than on capital formation.

OCEANIA

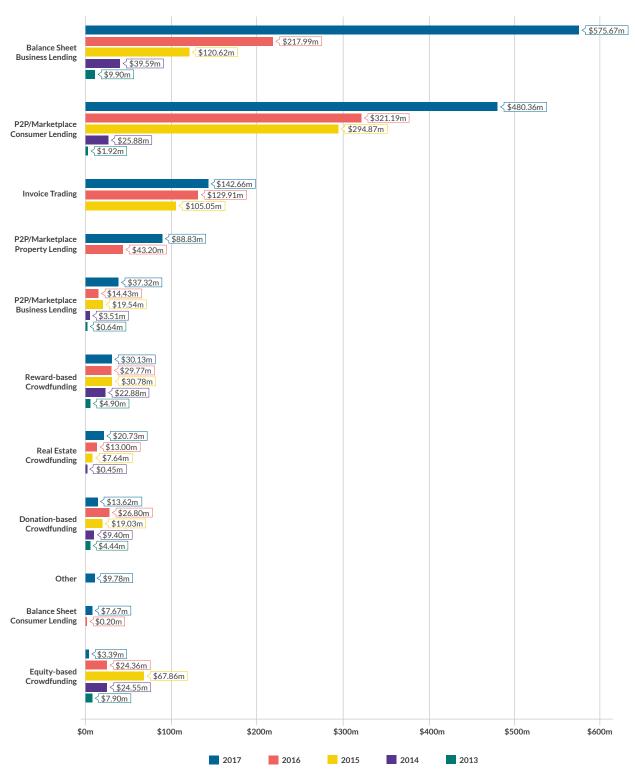
Oceania Total Alternative Finance Market 2013-2017 (\$millions)



Within Oceania, survey responses were received from Australia, New Zealand, Vanuatu, and Tokelau. In total, US\$832.84 million was raised within these four countries in 2016 and grew to US\$1.41 billion in 2017. This represented yearly growth of 69%, which was up from 25% in 2016. Australia, accounted for the vast majority of recorded activity in this timeframe, with almost 81.45% of the total market volume, followed by New Zealand and Vanuatu by a considerable distance.

In terms of alternative finance models, the majority of market activity was originated from Balance Sheet Business Lending, accruing a total of US\$575.66 million in 2017. This accounts for approximately 40.82% of the total market share for alternative finance in the region. Following closely behind with approximately 34.06% of the market share was P2P/Marketplace Consumer Lending, which raised US\$480.36 million. Invoice Trading had the third largest market share with 10.12% and raised US\$142.65 million for projects in the same period.

Oceania Alternative Finance Market by Model 2013-2017 (\$millions)

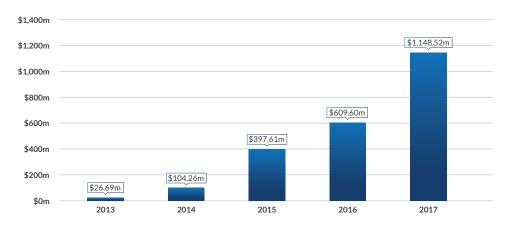


Market volume was also recorded for other models such as P2P/Marketplace Property Lending with US\$88.82 million, P2P/Marketplace Business Lending with US\$37.31 million, Reward-based Crowdfunding with US\$30.13 million, Real Estate Crowdfunding with US\$20.73 million, Donation-based Crowdfunding with US\$13.62 million. Balance Sheet Consumer Lending and Equity-based Crowdfunding were both less than US\$10 million in 2017.

Equity-based Crowdfunding in 2013 raised US\$7.9 million and accounted for 26.6% as second largest alternative finance model within the region. However, this declined to 19.5% in 2014. The market share continued to decline, falling to 10.2% in 2015, 2.9% in 2016, and 0.2% in 2017 to US\$3.3 million. This is likely due to the emergence of loan-based alternative finance, such as Balance Sheet Business Lending and P2P/Marketplace Consumer Lending – which totaled 74.9% in 2017, which was up from 39.8% in 2013.

AUSTRALIA

Australia Total Alternative Finance Market 2013-2017 (\$millions)



Australia was the largest country in terms of total alternative finance market volume in Asia Pacific region excluding China and followed closely by South Korea. Australia reported the largest funding volume, with over US\$1.14 billion raised and an average growth rate of 88% in 2017 – up from US\$609.59 million in 2016.

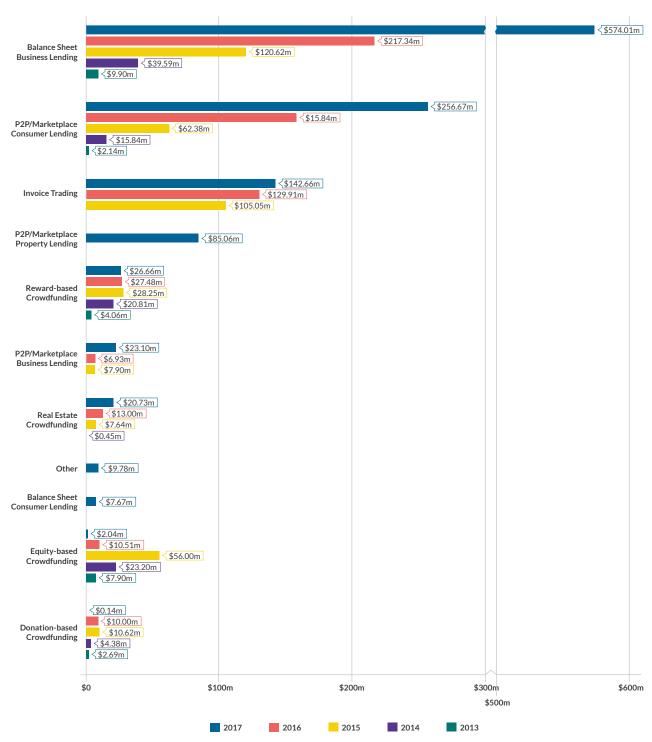
The largest share of market volume came from Balance Sheet Business Lending, accounting for over US\$574 million in 2017. P2P/ Marketplace Consumer Lending had the second largest market volume at US\$256 million. Invoice Trading was the next largest segment of the Australian alternative finance market and accounted for US\$142.65 million.

This was followed by P2P Property Lending, which reported US\$85.06 million, Reward-based Crowdfunding with US\$26.6 million, P2P/Marketplace Business Lending with US\$23.1 million, Real Estate Crowdfunding with US\$20.73 million. Balance Sheet Consumer Lending, Equity-based Crowdfunding, and Donation-based Crowdfunding all contributed less than US\$10 million in 2017.

Australian online alternative finance platforms have been able to adapt operational models and underwriting systems from overseas operators⁴⁰ as well as from local banks, and therefore attract much higher levels of institutional participation and funding. In terms of institutional participation rate, Australia was the highest country within the Asia Pacific region at 65%.

In terms of business model innovation, just 8% of surveyed alternative finance platforms in Australia stated they had significantly altered their business model in the past year, although 92% of platforms reported slightly altering their business models.

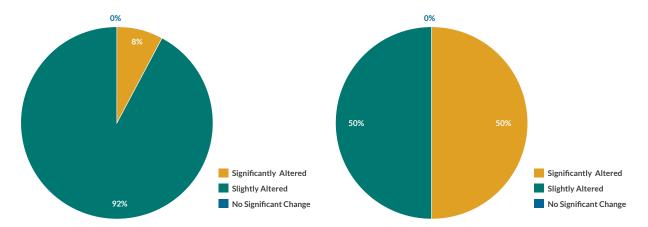
Australian Alternative Finance Market by Model 2013 -2017 (\$millions)



In terms of product innovation in Australia, half of surveyed platforms across all types of alternative finance stated they had significantly altered their product offering and another half had slightly altered their products in the past year.

Changes to Business Model - Australia in 2017

Product Innovation - Australia in 2017



Australia's Alternative Finance Regulatory Environment

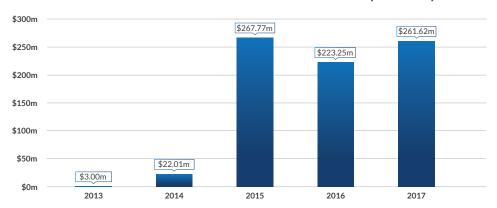
The Australian regulators are receptive for Fintech development. This can be seen from initiatives which were recently launched. The establishment of the Fintech advisory group, the ASIC's innovation hubs and the Australian Transaction Reports and Analytical Centre (AUSTRAC) reflect the active role of Australian government in developing Fintech. In brief, the ASIC Innovation hub is designed to assist Australian Fintech startups with consultation with regards to regulatory compliance⁴².

In addition, to demonstrate the regulatory response to Fintech in Australia the Australian Securities and Investment Commission (ASIC) released *Regulatory Guide 257* at the end of 2016, which is similar to the Regulatory Sandbox concept that established a Fintech license exemption. *Regulatory Guide 257* provides details for businesses in order to test their products without the required licenses (the Australian Financial Services License (AFSL) and the Australian Credit License (ACL)).

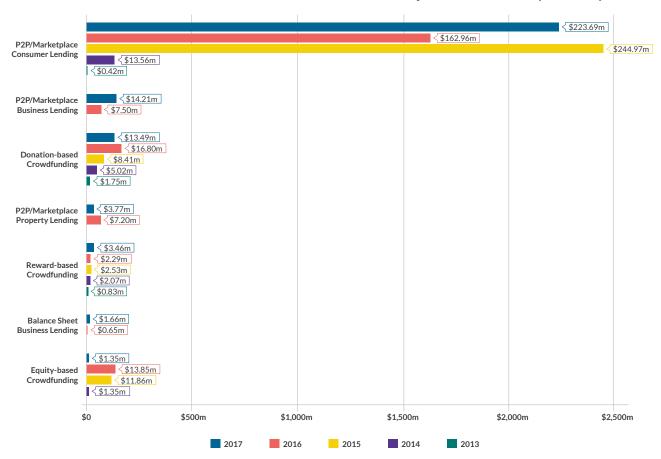
Apart from aforementioned regulatory responses, the Australian government has passed the Corporations Amendment (Crowdsourced Funding for Proprietary Companies) Bill 2017⁴³ to extend Crowdfunding legislation to proprietary companies. The bill became effective in October 2018.

NEW ZEALAND

New Zealand Total Alternative Finance Market 2013-2017 (\$millions)



New Zealand Alternative Finance Market by Model 2013-2017 (\$millions)



New Zealand is one of the smallest countries by population amongst the Asia Pacific countries surveyed. However, it reported the fifth highest volume in the Asia Pacific region excluding China, with over US\$261.62 million in funding generated in 2017, following Australia, South Korea, Japan and India.

New Zealand been one of the fastest growing alternative finance markets in the Asia Pacific region. In 2013, a total of US\$3 million was raised while in 2014, over US\$22 million was raised, equating to an annual growth rate of 633%. In 2015, a total of almost US\$268 million was raised, resulting in a dramatic 1117% year-on-year growth rate. However, the growth rate declined to -17% in 2016 but ticked up to 17% in 2017.

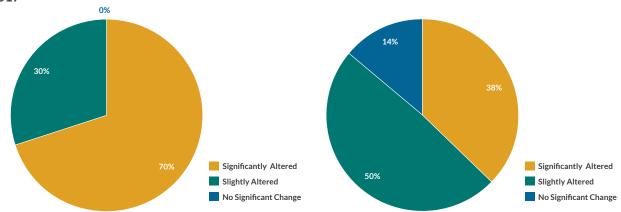
Ranked by the volume of each model, the majority of activity in New Zealand was within P2P/Marketplace Consumer Lending with US\$223.68 million raised in 2017. P2P/Marketplace Business Lending followed some way behind, with a total volume of US\$14.2 million in 2017. Donation-based Crowdfunding accounted for a total volume of US\$13.48 million. P2P/Marketplace Property Lending accounted for US\$3.7 million in 2017, Reward-based Crowdfunding with US\$3.45 million, Balance Sheet Business Lending with \$1.65 million, and Equity-based Crowdfunding with US \$1.35 million.

In terms of business model innovation, 70% of surveyed platforms across all types of alternative finance stated they had slightly altered their business model in the past year. The remaining 30% of surveyed platforms stated they had not changed their business model.

In terms of innovation to the products alternative finance platforms offered in New Zealand, 37.5% of surveyed platforms across all types of alternative finance stated they had significantly altered their product offering while 50% had slightly altered their products in the past year. Only 12.5% of surveyed platforms in New Zealand had made no change to their products in the past year.

Changes to Business Model - New Zealand in 2017

Product Innovation - New Zealand in 2017



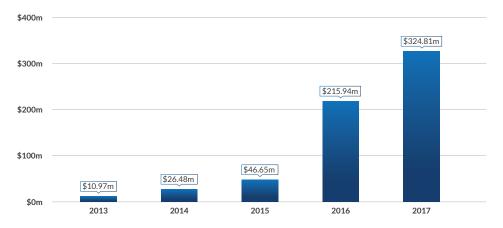
New Zealand's Alternative Finance Regulatory Environment

The Financial Markets Authority (FMA) is the main regulator of Fintechrelated activities in New Zealand. The first act that began to regulate Fintech activity in New Zealand was the Financial Markers Conduct Act 2013 (FMC Act) which was designed to promote innovation. To this extent, the Act allows Crowdfunding and P2P/Marketplace Lending platforms to operate under its licensing scheme.

A Regulatory Sandbox initiative was proposed in 2014. However, the FMA considered that the Sandbox was not required due to the flexible approach of the regulator. In 2017 the FMA created an Innovation Strategy Group (ISG) to monitor Fintech and emerging innovations systematically.⁴⁴

SOUTH EAST ASIA

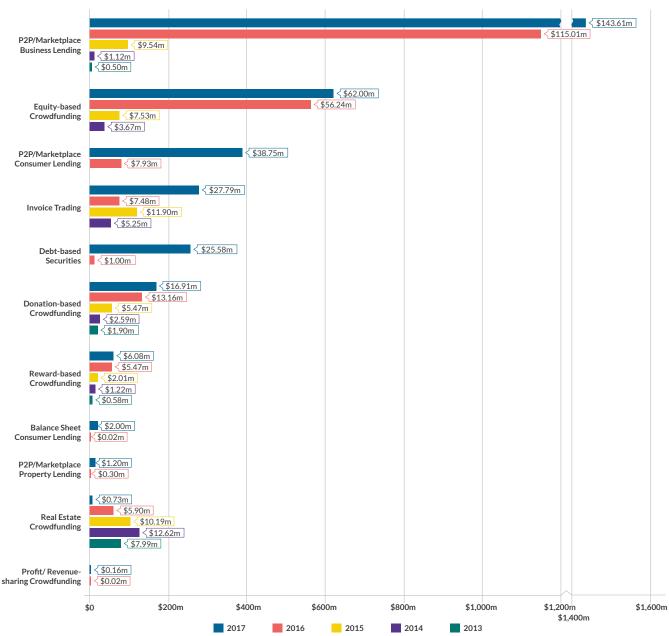
South East Asia Total Alternative Finance Market 2013-2017 (\$millions)



Survey responses in South-East Asia were received from the platforms operating in Singapore, Indonesia, Malaysia, Cambodia, Thailand, Vietnam, the Philippines, Laos, Myanmar and Timor-Leste. In 2017, this region contributed to US\$ 324.81 million to total volume, at a year-on-year growth rate of 50%, which was substantially lower than the growth rate of 363% during 2015-2016. Nearly US\$ 625 million of market volume has been raised in the region over the four-year period at an annual average growth of 158%.

The total online alternative finance volumes for the region were predominantly contributed by Singapore and Indonesia, accounting for 58.7% and 24.7% of total volumes respectively. The Philippines (5.9%), Malaysia (4.7%), Cambodia (2.6%), Vietnam (1.6%) and Thailand (1%) made comparatively low contributions to overall volume. Additionally, for the first time, market activity in Laos, Myanmar and Timor-Leste, was recorded in 2017 despite its limited level. As predicted in our last year report, a majority of the volume for Vietnam was from P2P/Marketplace Consumer Lending.

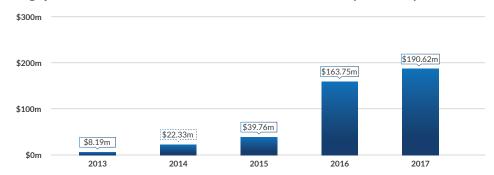
South East Asia Alternative Finance Market by Model 2013-2017 (\$millions)



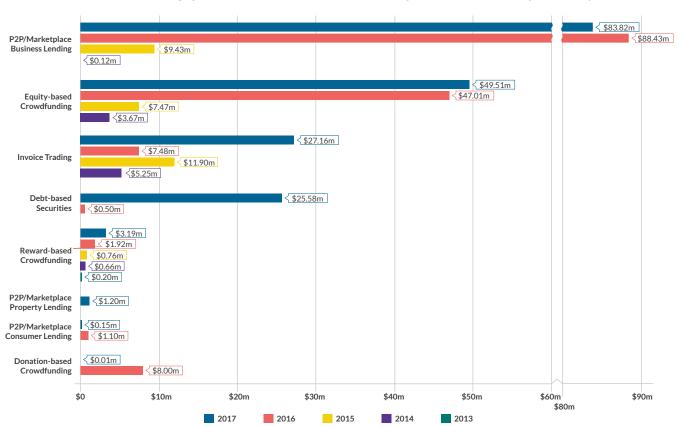
P2P/Marketplace Business Lending continued to be the leading model in South-East Asia with a total of US\$ 143.61 million, contributing 44% to the 2017 volume. However, annual growth decelerated year-on-year, which can principally be attributed to a decline in activity in Singapore. The second largest segment remained Equity-based Crowdfunding with US\$62 million, contributing 19% to total volume. The model grew 10% year-on-year between 2016 and 2017, relatively higher than the growth of the model in the overall APAC region excluding China. P2P/Marketplace Consumer Lending, Invoice Trading and Debentures all experienced considerable growth in the region, especially in Singapore for Invoice Trading and Debt-based Securities. However, non-investment-based models increased only marginally compared to their triple digit growth in 2016.

SINGAPORE

Singapore Total Alternative Finance Market 2013-2017 (\$millions)



Singapore Alternative Finance Market by Model 2013-2017 (\$millions)

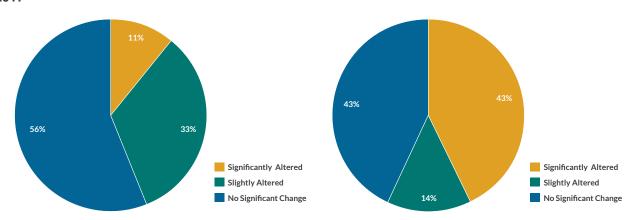


Singapore remained the market leader in South-East Asia, accounting for more than half of the region's online alternative finance market volume. The total online alternative finance activity in 2017 was over US\$190 million, a 16% increase year-on-year. This is a significantly reduced growth rate compared to 312% between 2015-2016. This slower growth relates to the decline in the activities for Donation-based Crowdfunding and P2P/Marketplace Consumer Lending.

Both P2P/Marketplace Business Lending and Equity-based Crowdfunding continued to dominate the nation's total volumes, accounting for nearly 70% of the activities (US\$83.82 million and US\$49.51 million respectively). In 2017 P2P/Marketplace Business Lending saw a slight decline of 5%, while Equity-based Crowdfunding increased by the same percentage. Invoice Trading and Debt-based Securities saw outstanding growth, contributing US\$52.74 million, representing 28% of total volume. While small in total volume, Reward-based Crowdfunding continued to grow steadily.

Changes to Business Model - Singapore in 2017

Product Innovation - Singapore in 2017



In 2017 the majority of platforms (56%) did not significantly alter their business model. Of the 44% that did modify their business model in some way, 33% only slightly altered it, while 11% significantly altered their overall model. With regard to product innovation, an equal percentage of platforms significantly altered their product offerings (43%) or made no significant changes (43%). The remaining 14% of platforms made slight changes to their products.

Singapore's Alternative Finance Regulatory Environment

Fintech has received increased attention from the Singaporean Government over the last few years. Of note, the Monetary Authority of Singapore (MAS) committed 225 million Singapore Dollars (around US\$166 million) to support the development of the Fintech industry in 2015⁴⁵. To date, the MAS has also signed memorandums of understanding with many authorities and organizations, including educational institutions, in other jurisdictions in order to support this development. The active role of the MAS can be seen from its vision related to the creation of a Smart Financial Centre⁴⁶. The scheme includes significant agendas for Fintech development, such as the creation of a collaborative Fintech ecosystem for Fintech players, authorities and research institutions.

Recent Developments

Singapore is currently the ASEAN Chair for Fintech development and it is seeking to lean on this leadership position to foster the sharing of Fintech innovations region-wide. In order to accelerate Fintech development in the region, Singapore is cooperating with the International Finance Corporation and the ASEAN Bankers Association (ABA) to establish the ASEAN Financial Innovation Network (AFIN), which will provide a platform for collaborative innovation for financial institutions and Fintech firms thus driving alternative finance platforms.⁴⁷

Since the announcement of AFIN, Singapore has been busy enabling Fintech collaborations across Southeast Asia. For instance, MAS has partnered with the Bank of Thailand and State Bank of Vietnam for Fintech innovation, involving P2P/Marketplace Lending and Equity-based Crowdfunding platforms.⁴⁸

To develop a transparent and conducive alternative finance environment, Singapore has created the Marketplace Lending Committee (MLS) which is made up of online lenders licensed by the MAS.⁴⁹ The MLS's initial tasks are to design and promote best practices, industry guidelines and codes of conduct in a collaborative and open manner. This is to encourage transparency between market participants.

Equity-based Crowdfunding

To facilitate the establishment of Equity-based Crowdfunding in Singapore, a consultation paper was issued by the Monetary Authority of Singapore (MAS) in February 2015 for a public hearing. The consultation paper included defined key aspects of what would be allowed in Equity-based Crowdfunding, including the types of investor that can invest in a crowdfunding project – primarily limiting it to accredited and institutional investors. The guidelines also prescribed the base capital requirement for the crowdfunding platforms, as well as other matters including advertising restrictions.

In 2016, the MAS amended the existing rules to make it easier for start-up companies and SMEs to access securities-based crowdfunding (SCF). The main objective of this initiative was to enhance financial inclusion and protect investors. The MAS also imposed measures to balance the interest of SMEs and investors. This included amending rules regarding pre-qualification for small offers (in connection with Section 272A of the Securities and Futures Act (Cap. 289)), the level of capital required, minimum operating risks for Securities-based Crowdfunding platforms, as well as the additional guidelines on advertising according to the Securities and Futures Act (Cap. 289).

In 2018, the MAS also issued circular no. CMI 27/2018 regarding due diligence conducted on issuers, management of defaults and disclosures to investors. At present, all licensed platforms as well as entities that intend to apply for the license must show the MAS that they can implement policies set out in the circular.⁵¹

P2P/Marketplace Lending

In general, there are no bespoke regulations for P2P/Marketplace Lending in Singapore. P2P/Marketplace Lending as an online money lending business is mainly regulated by the Moneylenders Act 2010 and the Moneylenders Rules 2009. The Act aims to strengthen consumer protection with regards to small loans⁵² and

places stringent limitations on moneylenders' business operations. In brief, the act requires moneylenders to hold a Moneylenders license with obligations and limitations for the licensee.⁵³

The MAS⁵⁴ also regulates the operation of P2P/Marketplace Lending via the Securities and Future Act (Cap. 289) (SFA) and the Financial Advisers Act (Cap. 110) (FAA). Particularly, under Section 239(3) of the SFA, an invitation to lend money to an entity is regarded as offering debentures under the SFA. Accordingly, this requires that the platform prepare and register a prospectus with MAS. However, there are exemptions for small offers and private placements in accordance with Section 227A and 227B of the SFA.

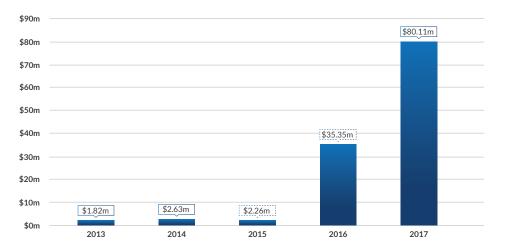
Overall, P2P/Marketplace Lending platforms involved in offering debentures or advising on the offering of debentures are subject to a capital market services (CMS) license requirement under the SFA. The requirements under the FAA will also be applied when giving advice to investors with regards to purchasing securities because it shall be considered as a financial advisory service in pursuant to the FAA Act.

Regulatory Sandbox

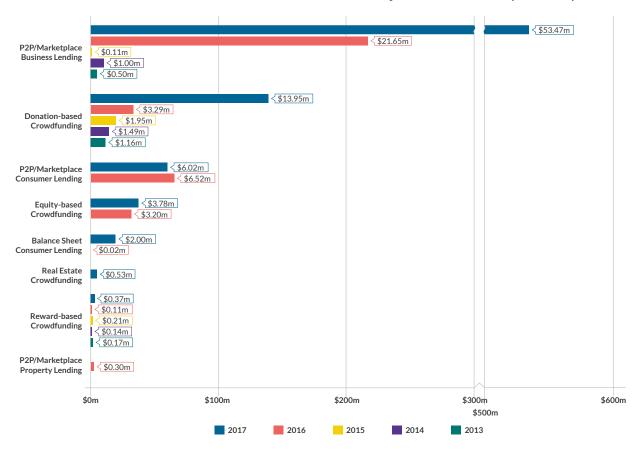
The MAS launched its Regulatory Sandbox guidelines at the end of 2016.⁵⁵ The Sandbox aims create a proper environment for Fintech firms to test their products or services by relaxing certain strict regulatory obligations. Along with this, the Fintech Innovation Lab - "Looking Glass @ MAS"⁵⁶ - has also been established. This can be considered as a supportive mechanism to allow MAS to experiment with Fintech solutions with the related stakeholders.

INDONESIA

Indonesia Total Alternative Finance Market 2013-2017 (\$millions)



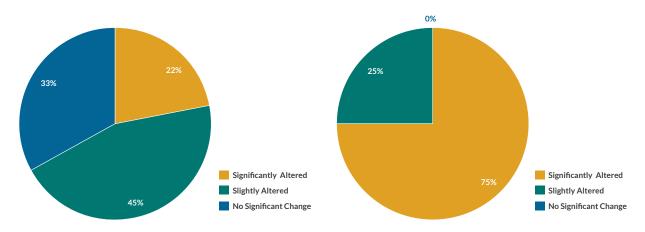
Indonesia Alternative Finance Market by Model 2013-2017 (\$millions)



The online alternative finance market in Indonesia continued to grow in 2017. Over US\$80 million was raised in 2017, with a year-on-year growth rate of 127%, which was much lower compared to the growth rate in 2016 (1462%). From 2013-2017, a total of US\$ 122.18 million in overall market volume has been recorded in the country. Notably, Indonesia had the highest number of participating platforms in the South East Asian region with 24 platforms.

P2P/Marketplace Business Lending, with US\$ 53.47 million (66.74%) remained the predominant contributor to the nation's volume. Donation-based Crowdfunding was the second largest model, with a market share of 17.41%, equating to US\$13.95 million. Both models experienced triple digit growth in 2017, while P2P/Marketplace Consumer Lending saw a decline in their activities, contributing only 7.51% (US\$ 6 million) of nation's total volume compared to 18% in 2016. Equity-based Crowdfunding and Balance Sheet Consumer Lending accounted for US\$ 3.8 million and US\$ 2 million total volume, respectively. Interestingly, the overall region's volume for Balance Sheet Consumer Lending came from Indonesia. Activities for Real Estate Crowdfunding were also recorded for the first time in the country.

Most platforms experimented with changes to their business model in Indonesia. Overall, 67% of platforms either slightly altered (45%) or significantly altered (22%) their business model. The remaining 33% made no change to their model. All platforms in Indonesia in 2017 made some sort of change in their product offerings; most platforms made significant changes (75%), while 25% made slight changes.



Indonesia's Alternative Finance Regulatory Environment

Equity-based Crowdfunding and P2P Lending

According to the Director of Fintech Regulations, Licensing and Supervisory of Indonesian Finance Authority (Otoritas Jasa Keuangan or OJK), Hendriskus Passagi, crowdfunding businesses can be classified into three categories in Indonesia, namely social crowdfunding, loan-based crowdfunding, and equity crowdfunding.⁵⁷ The core difference between equity-based crowdfunding and loan-based crowdfunding is the product that the investors received from the two, respectively shares from equity-based crowdfunding and interest from loan-based crowdfunding. Apart from the two, social crowdfunding is also recognized in Indonesia, which conducts crowdfunding for social causes.⁵⁸

To this extent, loan-based crowdfunding is also recognized as P2P/Marketplace Lending. This type of business has already been acknowledged and regulated by Indonesian Finance Authority (OJK) Regulation No. 77/POJK.01/2016 concerning Information Technology-Based Lending Services (LPMUBTI). Equity-based Crowdfunding has yet to be regulated in Indonesia.

Ir. Hoesen, the Executive head of the Capital Markets at OJK, stated that OJK is now currently observing the Equity-based Crowdfunding business model in order to regulate it.⁵⁹ OJK plans to issue regulations in the near future, however there is no information regarding the expected timeframe of when such regulation will be issued.⁶⁰

Regulatory Sandbox

Each of the Bank of Indonesia (BI) and OJK shall set out regulatory sandbox or trial programs for startups in technology-based finance company (Fintech). This program will be a tryout for Fintech products before being marketed to the society.

Until recently, only BI has established the regulation regarding regulatory sandbox. Such regulation is set out thought Board of Governor Members Regulation No.19/14/PADG/2017 concerning Regulatory Sandbox for Financial Technology. Concurrently, OJK is planning to issue similar regulation in order to be able to have the authority to conduct trial to Fintech company.

The difference in authority between the two is that BI has the authority to conduct trials with electronic payment systems (e-payment), while OJK has the authority to conduct trials with finance companies, such as crowdfunding and P2P lending.

In order to participate in the regulatory sandbox program, the Fintech company shall register itself to the regulator prior to such participation. Thereafter, the company shall follow several steps as part of the test. For example, test to internal condition, such as management profile and the reputation of the management, the novelty and benefit of the products, funding, and legal consultants. Further, the regulator will review the external aspect of the company, such as the competition and protection to the consumer, information, education, and settlement of consumers disputes.

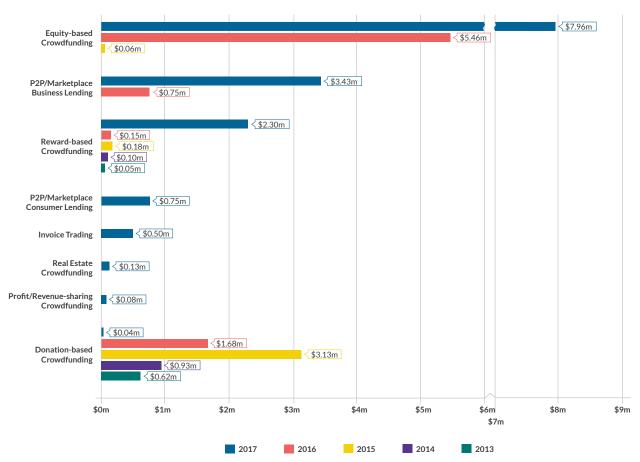
Through this regulatory sandbox process, the regulator will be able to acknowledge the condition of the management and the product offered by the Fintech company. After conducting the steps of the test, the regulator will be authorized to provide a statement of the worthiness of the company. Based on the Board of Governor Members Regulation No.19/14/PADG/2017, BI may set out certain time for the Fintech company to conduct a trial in the regulatory sandbox with the limitation of 12 months. After this time, BI will report the outcome of the test, with three potential results, namely 'succeed', 'not succeed' or 'other status' set out by BI. Thereafter, the succeeded financial company shall apply for a business license to BI.

MALAYSIA

Malaysia Total Alternative Finance Market 2013-2017 (\$millions)



Malaysia Alternative Finance Market by Model 2013-2017 (\$millions)



Malaysia's consistent and steady rate of online alternative finance market volume growth continued in 2017, raising a total of US\$15.18 million. Although this only accounted only for 4.7% of total market activity across South-East Asia, Malaysia's average year-on-year growth rate of 127% across four years highlights its steady growth. Over these five years, it has raised a total of US\$28.52 million.

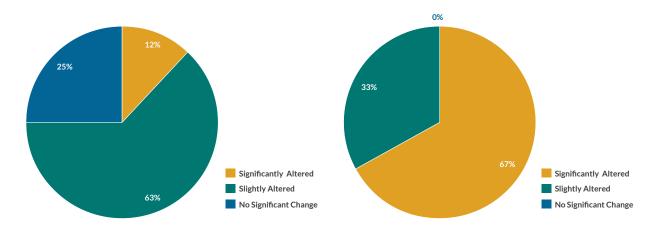
Unlike other regions, Equity-based Crowdfunding dominates Malaysia's alternative finance market with a total volume of US\$7.96 million in 2017, contributing over 50% of nation's online alternative market volume. However, this has decreased from 66% in 2016. The second largest model was P2P/Marketplace Business Lending with a total of US\$3.43 million, accounting for 22.6% of nation's volume, much higher than its 9% in 2016. The non-investmentbased models - Reward-based Crowdfunding and Donation-based Crowdfunding - had contrasting developments; whereas the former grew significantly from US\$0.15 million in 2016 to US\$2.3 million (15.2% of total volumes) in 2017, the latter lost almost all of their volume (a 97.8% decline compared to 2016). In 2017, activity was recorded in a total of eight different types of online alternative finance models, as compared to five the year before. The new models included P2P/Marketplace Consumer Lending and Invoice Trading which contributed 4.9% and 3.3% to the nation's volume, respectively.

In general, platforms in Malaysia in 2017 made alterations in their business model. Overall, 75% of platforms made either significant

(12%) or slight alterations (63%). The remaining 25% made no significant changes to their business model. With regard to product innovation, however, 100% of platforms made some sort of change to their product offering – with most (67%) making significant alterations to their product offering. The remaining 33% slightly changed their products.

Changes to Business Model - Malaysia in 2017

Product Innovation - Malaysia in 2017



Malaysia's Alternative Finance Regulatory Environment

There have been some great success stories in Malaysia's alternative finance sector. Both Equity-based Crowdfunding and P2P/Marketplace financing have had over 1200 successful campaigns so far which has raised around US\$ 31 million in total funding. Two thirds of this money was raised through P2P financing. By giving licenses to both Equity-based Crowdfunding and P2P/Marketplace operators, Malaysian regulators have also achieved greater financial inclusion in the country. In Equity-based Crowdfunding, more than 70% of the beneficiaries are women or are below age 35. More than 35% of the funders are also below 35. Additionally, 71% of P2P financing has been towards wholesale, retail and consumer products. ⁶²

With the launch of P2P/Marketplace and Equity-based Crowdfunding platforms, the Securities Commission (SC) of Malaysia has enabled businesses (mainly micro, small, and medium enterprises (MSMEs)) to benefit from wider accessibility to market-based financing avenues to meet their financing needs, as well as utilizing technology to enable greater investor participation. More recently, Malaysia added Real Estate Crowdfunding as a key priority for 2019 in their recently announced national budget. With the aim to facilitate homeownership, the introduction of property crowdfunding platforms will be regulated by the SC under a Crowdfunding framework and provide alternative financing options to first-time home buyers. Real Estate Crowdfunding will also give investors exposure to the property sector through smaller investment amounts.

Malaysia is also a home to Islamic and Muslim-focused Equity Crowdfunding platforms which are a driving force in Malaysia's alternative finance sector. The activities of these platforms range from micro-scholarships for education purpose to Islamic social finance and other humanitarian purposes.

P2P Lending and Equity-based Crowdfunding

In 2016 the SC introduced the regulatory framework for P2P/ Marketplace Lending, setting out the requirements and obligations for P2P/Marketplace operators in the revised Guidelines on Recognized Markets (Equity Crowdfunding/Peer-to-Peer Financing). The Guidelines provided requirements for operating in the industry, such as the definition of qualification. Qualification requires a minimum base of capital and specified duties for the operators, such as risk assessment. There is also an investment limit set in the guidelines for certain types of investors.

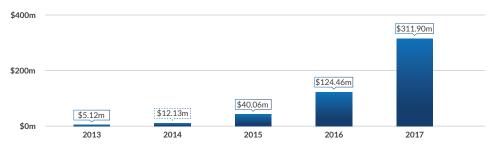
Equity-based Crowdfunding is a component of the Eleventh Malaysia Plan (2016-2020)⁶⁵ which aims to use this crowdfunding activity as an alternative way for fundraising, especially for start-up companies and SMEs. Accordingly, the SC issued a Public Consultation paper concerning the proposed regulatory framework for equity-based crowdfunding. This resulted is the Guidelines on Regulation of Markets under Section 34 of CMSA and the revised Guidelines on Recognized Markets (Equity Crowdfunding/Peer-to-Peer Financing) (the Guidelines) which became effective in May 2016.

As a result, platforms are required to comply with the stated obligations including due diligence standards and procedures. Furthermore, in accordance with these regulations, there is a fundraising limit that states fundraising cannot exceed RM3 million within any 12-month period, and the maximum amount that can be raised through an Equity-based Crowdfunding platform over this period is RM5 million (~US\$700,000). There are no restrictions on the amount of investment for sophisticated investors, but investment from angel and retail investors shall not exceed RM500,000 (~US\$117,000) and RM50,000 (~US\$11,700) within any 12-month period, respectively.

By mid-2018, the SC had registered seven Equity Crowdfunding platforms and six P2P/Marketplace Lending operators and these platforms have aided more than 300 micro, small, and medium enterprises (MSMEs).66 Through these platforms, these enterprises have successfully raised a total amount of RM118 million.67

SOUTH AND CENTRAL ASIA

South & Central Asia Total Alternative Finance Market 2013-2017 (\$millions)

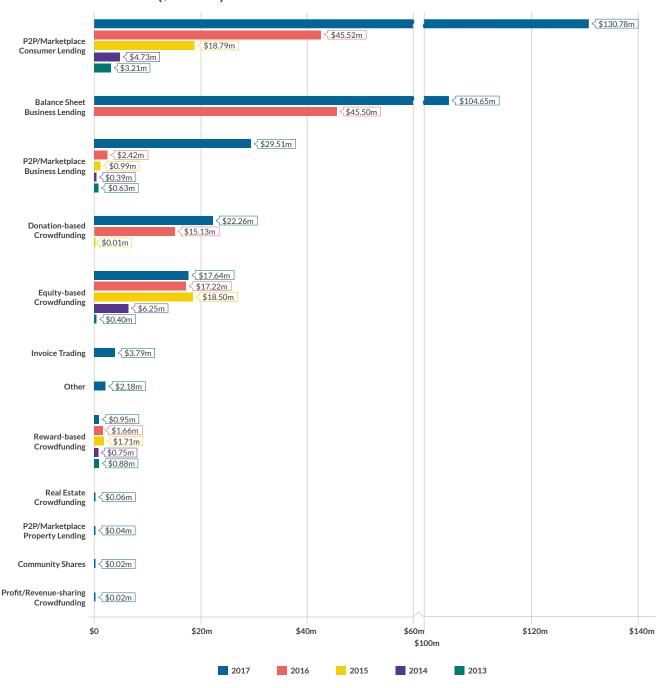


Within South & Central Asia, survey responses were received from platforms located in India, Pakistan, Nepal, Bangladesh, Kazakhstan, Tajikistan, Kyrgyzstan, Bhutan and Sri Lanka. Over US\$ 493 million has been raised in this region over a four-year period at an average annual growth rate of 182%. Of note, each

year experienced triple digit growth, with the highest rates of over 200% in 2014-2015 and 2015-2016. In 2017, the region grew by 151% equating to US\$ 311.90 million of total volume.

Once again, India dominated the region with the majority of the total volume, contributing 86.1% of the region's online alternative market volume in 2017. However, while the contribution was almost 99.8% in 2016, the decline is explained by the overall growth of market activity throughout the region.

South & Central Asia Alternative Finance Market by Model 2013-2017 (\$millions)

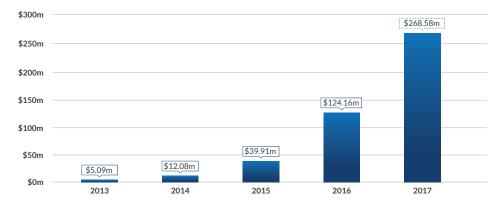


Market activity increased considerably in Kazakhstan and Pakistan, contributing close to 9% (US\$ 27.65 million) and 3% (US\$ 8.6 million) to the region's total volume, respectively. Ten platforms had indicated they were active in Pakistan, predominantly Donation-based Crowdfunding platforms. In Nepal, there were no recorded domestic-based alternative finance platforms, however there was a small amount of Reward- and Donation-based Crowdfunding activity recorded there. In Bangladesh, one platform provided a survey response and informed the research team that they had to cease operations due to challenges facing the sector domestically. For the remaining countries, this study gathered responses from platforms that were located outside that country but that reported market activity in the region.

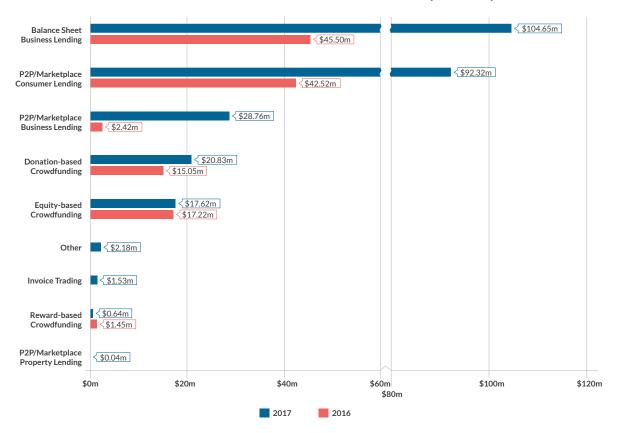
In terms of alternative finance models, P2P/Marketplace Consumer Lending was the largest segment across South & Central Asia in terms of market volume totaling US\$130.78 million (42% of market share) in 2017. The second largest model by total volume was Balance Sheet Business Lending, which reported US\$104.65 million (34% of total volume) in 2017. Both of these models therefore collectively contributed over three quarters of the region's total volume, and experienced triple digit growth between 2016 and 2017. P2P/Marketplace Business Lending had significantly increased its share in the region's volume, contributing close to 10% (US\$ 29.5 million), compared to 2% previously. While both Equity- and Donation-based Crowdfunding accounted for just under 15% of total market volume each in 2016, they contributed only 5.6% (US\$ 17.6 million) and 7.1% (US\$ 22.3 million) to total volumes in 2017, respectively. Activities for Invoice Trading, Real Estate Crowdfunding and P2P/Marketplace Property Lending were recorded for the first time in the region.

INDIA

India Total Alternative Finance Market 2013-2017 (\$millions)



India Total Alternative Finance Market 2013-2017 (\$millions)



India represented the largest proportion of recorded alternative finance activity in South & Central Asia, with a total of over US\$286.58 million in 2017, more than doubling its volume from 2016. The current year-on-year growth rate of 2016-17 was the lowest in the past four years at 116%. Over the past few years, India has reported growth rates of 211%, 230% and 137% during 2015-2016, 2014-2015 and 2013-14, respectively. Combined, this equates to US\$ 450 million in total volume over the four-year period. Additionally, this year a total of 46 platforms had indicated their activities in India for 2017.

Balance Sheet Business Lending continued to be main contributor to the nation's total online alternative market volume, accounting for 39%. This amounts to a total of US\$ 104.56 million in yearly volume. The next largest model in India was P2P/Marketplace Consumer Lending with a 34% market share. Both models recorded triple digit year-on-year growth in 2017. P2P/Marketplace Business Lending increased significantly in the country, from US\$ 2.4 million in 2016 to US\$ 28.8 million in 2017, accounting for over 10% of India's total volume. Equity-based Crowdfunding increased in volume very slightly (2% compared to 2016) and contributed US\$ 17.6 million.

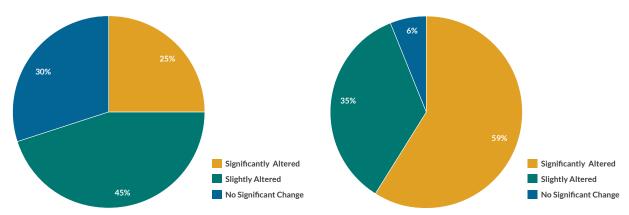
In 2017, volumes for Invoice Trading (US\$ 1.5 million) were recorded for the first time in India. The non-investment models, Donation- and Reward-based Crowdfunding developed differently in 2017. Donation-based Crowdfunding accounted for 7.8% India's total volume and grew at 38% year-on-year. Reward-based Crowdfunding, on the other hand, experienced a decline in overall volume – falling 56% to 0.5% of the total market share. Additionally,

P2P/Marketplace Property Lending activity was also recorded in India for the first time. This is notable, as the Real Estate (Regulation and Development) Act was passed in 2016 and focused on regulating and promoting the real estate sector in the country.

With regard to business model innovation, most Indian platforms at least slightly altered their business model. Overall, 70% of platforms either slightly (45%) or significantly (25%) altered their business model in 2017. 30% made no changes to their model. Product innovation in India was prevalent, with 94% of platforms changing the products that they offered. Most of these platforms changed their products significantly (59%), while 35% changed them slightly. Only 6% of platforms made no changes to their offerings.

Changes to Business Model - India in 2017

Product Innovation - India in 2017



India's Alternative Finance Regulatory Environment

Fintech innovations are of growing significance in India. The economy has continued to move towards digitalization, with various government initiatives like eKYC, eSign⁶⁸, DigiLocker⁶⁹, eNach or eMandate⁷⁰, India Stack⁷¹, BHIM (UPI)⁷², and Bharat BillPay⁷³. In February 2018, the Reserve Bank of India's report on Fintech and Digital Banking recommended the need to have a deeper understanding of the various Fintech products, their interaction with the financial sector and, thereby, the implications on the financial system, before regulating the space. The working group also recommended the introduction of an appropriate framework for a "Regulatory Sandbox/innovation hub", so that financial sector regulators could provide the requisite regulatory guidance and create new opportunities for consumers in the Indian market, similar to other regulatory jurisdictions.⁷⁴

Alternative lending is one of the fastest growing segments in the Fintech space in India, be it Consumer or Business Lending. Consumer Lending is leading a big shift⁷⁵ in the Indian market, utilizing the increasing number of smartphone users and offering customized loans. For Business Funding, there is still a considerable funding gap (credit gap)⁷⁶, especially regarding loans for micro, small and medium enterprises (MSMEs). Both non-banking financial companies (NBFCs) and Fintech lenders are expected to increase their footprint in these spaces moving forward.⁷⁷

Peer-to-Peer Lending in India

P2P/Marketplace Lending began in India in 2012 and there are now a multitude of such online lending platforms. In October 2017, the Reserve Bank of India (RBI) issued directions (NBFC-P2P Directions, 2017)⁷⁸ for the P2P/Marketplace Lending operators in India, setting out requirements and obligations. As per the notification of RBI, P2P/Marketplace Lending platforms would be treated as NBFCs. The direction makes it compulsory for a 'Company'⁷⁹ to obtain a 'Certificate of Registration' from RBI to commence or carry out the business of P2P/Marketplace Lending in India and they shall have a net owned fund of not less than INR twenty million or higher. As per the regulations, the platform cannot provide or arrange any credit enhancements or credit guarantees, and international flows of funds are not permitted.

For lenders, aggregate exposure to all borrowers at any point of time, across all P2P/Marketplace Lenders, is subject to a cap of INR one million. This is same for the borrowers as well, in terms of loans taken at any point of time, across all lenders. Overall, the exposure of a single lender to the same borrower shall not exceed INR 50,000. Additionally, the maturity of loans shall not exceed 36 months. Apart from the above, the platforms are also required to comply with obligations such as disclosure and reporting requirements, fair practice codes and data security. This regulation appears to have had a positive impact on the sector, with all the three forms of P2P/Marketplace Lending (Consumer, Property and Business) having substantial growth in 2017. Additionally, in order to have supervision over NBFC's, the RBI is expected to setup an online portal for reporting of cybersecurity incidents.⁸⁰

Equity-based Crowdfunding

Aside from the consultation paper in 2014, Equity-based Crowdfunding has remained a grey area awaiting further input from the Securities & Exchange Board of India (SEBI). While a number of platforms are operating in this space, there still is a lack of clarity on their authorization and legal status. As per the draft regulations, only 'accredited investors' were permitted to invest, while institutional investors had to own at least 5% of issued shares. The maximum number of individual investors was 200 (excluding QIBs and employees of the company) and only startups less than two years old are permitted to participate. Retail investors were restricted to investing between approximately US\$320 and US\$1000.

APPENDIX A

	\$358,275,377,039
Australia	\$1,148,515,565
South Korea	\$1,129,918,098
Japan	\$348,650,302
India	\$268,579,820
	d\$261,621,933
Singapore	\$190,621,714
Chinese Taip	oei\$103,502,237
Indonesia	\$80,114,824
Kazakhstan.	\$27,649,933

Philippines	\$19,287,804
Malaysia	\$15,176,603
Pakistan	\$8,571,762
Cambodia	
Hong Kong	\$8,178,499
Vietnam	\$5,245,550
Tajikistan	\$4,584,475
Thailand	\$3,338,368
Myanmar	\$1,618,506
Kyrgyzstan	\$1,437,296

Nepal	\$1,014,850
Timor-Leste	\$558,802
Laos	\$295,530
Sri Lanka	\$38,926
North Korea	\$25,764
Mongolia	\$19,015
Vanuatu	\$15,134
Bangladesh	
Bhutan	\$10,000

APPENDIX B

	BUSINESS VOLUME				
	TOTAL BUSINESS FUNDING	Debt-based	Equity-based	Non Investment-based	
APAC - Excluding China	\$2,226,652,109	1,812,341,544	\$385,252,329	\$29,058,237	
Oceania	\$814,915,215	\$805,634,216	\$3,387,261	\$5,893,739	
South East Asia	\$262,792,563	\$198,177,406	\$63,094,234	\$1,520,922	
South Asia	\$163,755,432	\$145,770,464	\$17,668,627	\$316,342	
Central Asia	\$25,223	\$-	\$-	\$25,223	
Australia	\$792,251,688	\$785,999,193	\$2,035,851	\$4,216,645	
South Korea	\$634,870,929	\$360,285,101	\$263,258,131	\$11,327,696	
Japan	\$278,042,311	\$234,531,459	\$37,344,075	\$6,166,777	
Singapore	\$188,564,420	\$137,757,867	\$49,710,000	\$1,096,553	
India	\$160,546,271	\$142,763,415	\$17,623,627	\$159,230	
Chinese Taipei	\$68,637,591	\$67,392,898	\$-	\$1,244,693	
Indonesia	\$57,903,348	\$53,466,699	\$4,304,100	\$132,549	
New Zealand	\$22,456,908	\$19,635,023	\$1,351,410	\$1,470,476	
Malaysia	\$12,273,631	\$3,929,602	\$8,160,507	\$183,521	
Hong Kong	\$3,510,824	\$550,000	\$500,000	\$2,460,824	
Pakistan	\$3,080,361	\$3,007,049	\$45,000	\$28,312	
Philippines	\$1,339,372	\$751,088	\$563,890	\$24,393	
Cambodia	\$1,155,949	\$1,152,454	\$-	\$3,495	
Thailand	\$979,721	\$603,315	\$355,737	\$20,669	
Vietnam	\$533,874	\$516,380	\$-	\$17,494	
Nepal	\$64,581	\$-	\$-	\$64,581	
Kazakhstan	\$8,804	\$-	\$-	\$8,804	

ENDNOTES

- 1. The total alternative finance volume is based upon the stock of funds delivered to fundraisers (ex. Borrowers, Issuers, Campaigners) in a given year, and within a specific jurisdiction. To this end, we are referring to the total amount of funds that was successfully raised and executed to end-users across Asia Pacific countries. If funds were raised in an Asia Pacific country, but not delivered to a fundraiser based within the region, that applicable volume is not included in this figure.
- 2. UK 2017 volume in GBP was £6.19 billion.
- 3. East Asia: South Korea, Japan, Chinese Taipei, Hong Kong, North Korea, Mongolia Oceania: Australia, New Zealand, Vanuatu
 South East Asia: Singapore, Indonesia, Philippines, Malaysia, Cambodia, Vietnam, Thailand, Myanmar, Timor-Leste, Laos
 South and Central Asia: India, Kazakhstan, Pakistan, Tajikistan, Kyrgyzstan, Nepal, Sri Lanka, Bangladesh, Bhutan
- 4. http://twbuyabroad.com/wb5/global-regional-comparison-and-disparities-2016/
- 5. Expanding Horizons, The 3rd European Alternative Finance Industry Benchmarking Report, CCAF, page no. 36
- 6. https://www.adb.org/news/unleashing-small-and-medium-sized-enterprises-asia-and-pacific-adb-evaluation
- 7. For reward-based crowdfunding platforms whose data was collected via web-scraping, a standard 35% allocation of financing and fundraisers was attributed to business finance.
- 8. See Appendix B
- Institutional Investors include but not limited to banks, pension funds, mutual funds, asset management firms, family offices and VC/PE firms.
- 10. P2P/Marketplace Consumer Lending (52%), P2P/Marketplace Business Lending (40%), P2P/Marketplace Property Lending (50%), Invoice Trading (60%), Equity-based Crowdfunding (44%), and Real Estate Crowdfunding (25%)
- 11. Data source: AIF, JZT data
- 12. Mainly refers to activities, such as suspected self-financing, fraud, platform collapse, poor contact, fictional subject matter and so on.
- 13. https://asia.nikkei.com/Business/Banking-Finance/Convenience-drives-growth-of-South-Korean-P2P-lenders
- 14. http://koreajoongangdaily.joins.com/news/article/article.aspx?aid=3050263
- 15. http://www.koreaherald.com/view.php?ud=20180124000821
- http://english.yonhapnews.co.kr/news/2018/09/17/0200000000A EN20180917005100320.html
- 17. https://asia.nikkei.com/Business/Banking-Finance/Convenience-drives-growth-of-South-Korean-P2P-lenders
- 18. http://www.koreaherald.com/view.php?ud=20180124000821

- 19. https://pulsenews.co.kr/view.php?year=2018&no=54742
- 20. https://www.unescap.org/sites/default/files/FFD%20in%20Asia Pacific%20-%20 Highlights%20Action%20Agenda.pdf
- 21. http://english.yonhapnews.co.kr/news/2018/09/17/0200000000A EN20180917005100320.html
- 22. http://www.iflr.com/Article/3547864/Accelerating-Koreas-Fintech-growth.html
- 23. https://iclg.com/practice-areas/Fintech-laws-and-regulations/korea
- 24. http://www.leeko.com/data2/newsletter/Newsletter%20-%20April%202017.htm
- 25. http://english.yonhapnews.co.kr/news/2018/01/18/020000000A EN20180118002400320.html
- ^{26.} http://koreabizwire.com/p2p-lending-associations-create-regulations-aimed-at-survival/122761
- 27. https://www.fsc.go.kr/downManager?bbsid=BBS0048&no=102161
- 28. http://www.koreaherald.com/view.php?ud=20180921000480
- 29. http://www.meti.go.jp/english/press/2018/0606_001.html
- 30. http://www.meti.go.jp/english/press/2018_06/0606_001_00.html
- 31. https://www.boj.or.jp/en/research/wps_rev/lab/lab17e06.htm/
- 32. https://asia.nikkei.com/Business/Business-Trends/Japan-s-peer-to-peer-lenders-get-burned-by-anonymous-borrowers
- 33. Ibid.
- 34 Ibid.
- https://asia.nikkei.com/Business/Markets/Equities/Equity-crowdfunding-in-Japan-poised-to-grow-fivefold-this-year
- 36. It should be noted, \$26 million have been attributed to 'other'. We are unable to present unique model level data as this might risk platform anonymity.
- 37. http://www.taipeitimes.com/News/Chinese Taipei/archives/2017/12/30/2003684893
- 38. http://www.taipeitimes.com/News/biz/archives/2018/09/19/2003700677
- 39. https://nccur.lib.nccu.edu.tw/bitstream/140.119/119138/1/302801.pdf
- 40. http://www.smh.com.au/busi-ness/ratesetter-targets-australi-an-savers-with-new-lending-web-site-20141111-11kf2m.html
- 41. http://www.crowdfundinsider.com/2015/11/77694-thincats-australia-nears-2-million-in-lending-after-one-year-of-operations/
- 42. https://asic.gov.au/for-business/your-business/innovation-hub/
- https://www.aph.gov.au/Parliamentary_Business/Bills_Legislation/Bills_Search_Results/Result?bld=r5984
- 44. https://asic.gov.au/about-asic/news-centre/find-a-media-release/2017-releases/17-350mr-the-fma-and-asic-confirm-trans-tasman-collaborative-approach-to-Fintech/
- 45. Singapore's Fintech vision draws interest, Nikkei Asian Review, http://asia.nikkei.com/magazine/20151008-SEACHANGE/Tech-Science/Singapore-s-Fintech-vision-drawsinterest
- 46. http://www.mas.gov.sg/Singapore-Financial-Centre/Smart-Financial-Centre.aspx
- 47. https://validus.sg/2018/10/singapore-the-tiny-city-state-leading-southeast-asias-Fintech-charge/
- 48. Ibid.

- 49. https://brands.dollarsandsense.sg/fundingsocieties/2018/06/22/singapore-Fintech-association-launches-new-marketplace-lending-committee/
- 50. MAS to Improve Access to Crowd-funding for Start-ups and SMEs, Monetary Authority of Singapore, http://www.mas.gov.sg/News-and-Publications/Media-Releases/2016/MAS-to-Improve-Access-to-Crowdfunding-for-Startups-and-SMEs.aspx
- http://www.mas.gov.sg/~/media/MAS/Regulations%20and%20Financial%20Stability/ Regulations%20Guidance%20and%20Licensing/Securities%20Futures%20and%20 Fund%20Management/Regulations%20Guidance%20and%20Licensing/Circulars/ CMI%2027%202018%20Controls%20and%20Disclosures%20to%20be%20 Implemented%20by%20Licensed%20Securities%20Based%20Crowdfunding%20 Operators.pdf
- 52. The Second Reading Speech by SMS Assoc Prof Ho Peng Kee on the Moneylenders (Amendment) Bill, Ministry of Law Singapore, https://www.mlaw.gov.sg/news/ parliamentaryspeeches-and-responses/second-reading-speech-by-smsassoc-prof-ho-peng-kee-on-the-moneylenders-amendment-bill. https://www.mlaw.gov.sg/news/
- 53. Moneylenders Act 2010 of Singapore, sec. 5(1).
- 54. Securities and Futures Act (Cap.289) Financial Advisers Act (Cap.110) Frequently Asked Questions (FAQs), Monetary Authority of Singapore, http://www.mas.gov.sg/~/ media/MAS/Regulations%20and%20Financial%20Stability/ Regulations%20 Guidance%20and%20Licensing/Securities%20 Futures%20and%20Fund%20 Management/Regulations%20 Guidance%20and%20Licensing/FAQs/FAQs%20 on%20 Lending%20based%20Crowdfunding.pdf
- http://www.mas.gov.sg/~/media/Smart%20Financial%20Centre/Sandbox/Fintech%20 Regulatory%20Sandbox%20Guidelines%2019Feb2018.pdf
- MAS establishes Fintech Innovation Lab, Monetary Authority of Singapore, http://www.mas.gov.sg/News-andPublications/Media-Releases/2016/MAS-establishes-FintechInnovation-Lab.aspx
- 57. http://kalimantan.bisnis.com/read/20180209/444/736604/Fintech-equity-crowdfunding-regulasi-masih-dinanti
- 58. Fintech Equity Crowdfunding: Regulation is Still Being Expected (Fintech Equity Crowdfunding: Regulasi Masih Dinanti), February 22, 2018, by Nindya Aldila, http://kalimantan.bisnis.com/read/20180209/444/736604/Fintech-equity-crowdfunding-regulasi-masih-dinanti
- 59. OJK is Still Observing Fintech Equity Crowdfunding Business: What is it? (OJK Pelajari Bisnis Fintech Equity Crowdfunding, Apa Itu?), March 13, 2018, by Ulfa Arieza, https://economy.okezone.com/read/2018/03/13/320/1872228/ojk-pelajari-bisnis-Fintech-equity-crowdfunding-apa-itu
- 60. Ibid.
- 61. https://www.sc.com.my/wp-content/uploads/eng/html/digital/Crowdfunding%20 Monitor %20Issue%2015 %20180618.pdf
- 62. Ibid.
- https://www.crowdfundinsider.com/2018/11/140863-malaysia-adds-property-crowdfunding-digital-tokens-exchanges-as-key-budget-priorities-for-2019/
- 64. https://www.sc.com.my/legislation-guidelines/recognizedmarkets/
- 65. http://www.epu.gov.my/en/rmk/eleventh-malaysia-plan-2016-2020
- https://www.sc.com.my/post_archive/sc-invites-applications-for-registration-asequity-crowdfunding-and-peer-to-peer-financing-operators/
- 67. Ibid.

- 68. https://en.wikipedia.org/wiki/ESign_(India)
- 69. https://digilocker.gov.in/
- 70. https://signdesk.com/emandate/what-is-emandate
- 71. http://indiastack.org/
- 72. https://www.bhimupi.org.in/
- 73. https://www.bharatbillpay.com/
- 74. https://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/ WGFR68AA1890D7334D8F8F72CC2399A27F4A.PDF
- 75. https://inc42.com/longform/nbfcs-and-Fintechs-are-leveraging-an-integrated-technology-approach-and-great-customer-service-to-corner-banks-in-the-lending-market/
- 76. https://www.pwc.in/assets/pdfs/publications/2017/Fintech-india-report-2017.pdf
- 77. https://www.livemint.com/Industry/ykq3Ik5000eHuvglcEeufM/NBFCs-grabbing-market-share-of-banks-says-BCG-report.html
- 78. https://www.rbi.org.in/Scripts/NotificationUser.aspx?Id=11137
- 79. No non-banking institution other than a company shall undertake the business of Peer to Peer Lending Platform
- https://rbidocs.rbi.org.in/rdocs/AnnualReport/ PDFs/0ANREPORT201718077745EC9A874DB38C991F580ED14242.PDF
- 81. https://www.sebi.gov.in/media/press-releases/aug-2016/sebi-cautions-investors_33094.html



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