



# 3

## The Global Status of the Crowdfunding Industry

Tania Ziegler, Rotem Shneor, and Bryan Zheng Zhang

### Introduction

The advancing pace of technology-enabled innovation is rapidly transforming the financial services industry (Kotarva 2016; Zavolokina et al. 2016). Across the world, developments in financial technology (FinTech) are revolutionizing the way people interact with financial services—allowing faster payments, more secure transactions, user-friendly interfaces, and reducing costs. Crowdfunding represents one category of FinTech developments, addressing needs in capital raising through innovative and digital solutions (Haddad and Hornuf 2019). Specifically,

---

T. Ziegler (✉) • B. Z. Zhang

Cambridge Centre for Alternative Finance, Judge Business School, University of Cambridge, Cambridge, UK

e-mail: [t.ziegler@jbs.cam.ac.uk](mailto:t.ziegler@jbs.cam.ac.uk); [b.zhang@jbs.cam.ac.uk](mailto:b.zhang@jbs.cam.ac.uk)

R. Shneor

School of Business and Law, University of Agder, Kristiansand, Norway

e-mail: [rotem.shneor@uia.no](mailto:rotem.shneor@uia.no)

fund- and capital-raising crowdfunding, and its related activities, can potentially enable and widen financial access in previously underserved or unserved areas and populations, as well as offer new solutions in areas currently served by traditional financial institutions (Bruton et al. 2015; Lehner 2013).

This chapter will discuss several key international trends as related to crowdfunding market development, as well as provide some insights into the limited research done to date at the macro level attempting to explain such developments. Specifically, the facts and figures presented throughout the chapter are drawn from the research efforts undertaken by the Cambridge Centre for Alternative Finance (CCAF) and its partners culminating in a series of annual industry bench-marking reports. Hence, for full disclosure and avoidance of repetitive referencing, all statistics presented in the current chapter are adopted from the CCAF's recent reports covering the Americas (Ziegler et al. 2018a), the Asia-Pacific (Ziegler et al. 2018b), Europe (Ziegler et al. 2019), the UK (Zhang et al. 2018), and the Middle East and Africa (Ziegler et al. 2018c), unless otherwise indicated.

In the next sections we first present global trends, total volumes, as well as volumes by model. These findings are linked to some explanations that have been suggested in the limited research that has sought to explain macro-level developments. We then present market status at regional level for highlighting commonalities and differences across regions. Finally, we conclude with some implications for research and practice.

## **A Global Snapshot: Market Volumes and Growth**

The global alternative finance market volume is estimated based upon platform data collected from over 3000 unique platforms in 161 countries during the period 2015–2017. A crowdfunding platform is “an internet application bringing together project owners and their potential backers, as well as facilitating exchanges between them, according to a variety of business models” (Shneor and Flåten 2015, p. 188). All

platforms are restricted to online, peer-to-peer or crowd-led marketplaces that are open, at least partially, to individual backers and retail investors (the “crowd”). As such, it does not include what are known as ‘individual crowdfunding’ initiatives (Belleflamme et al. 2013), which are individual- or organization-specific fundraising campaigns carried outside the control and oversight by a formal crowdfunding platform.

The total global alternative finance volume has grown from \$11.06 billion in 2013 to \$418.52 billion in 2017. Overall, while growth rates are gradually slowing down on an annual basis, total volumes have increased substantially. The slowing of growth rates may signal maturation, at least among early adopters of crowdfunding services, but is more likely to be associated with a growth trajectory that started with a very low absolute base and reached substantial volume in just five years. Figure 3.1 illustrates that despite the slowing of year-on-year growth rate, between 2016 and 2017 global crowdfunding market volume grew by 44% from \$290 billion to reach \$418 billion. The extent of future growth remains uncertain, but given the head room for growth in more advanced markets, as well as the fact that many developing and emerging markets are still considerably underdeveloped in terms of online capital raising, the global industry is likely to maintain momentum in coming years.

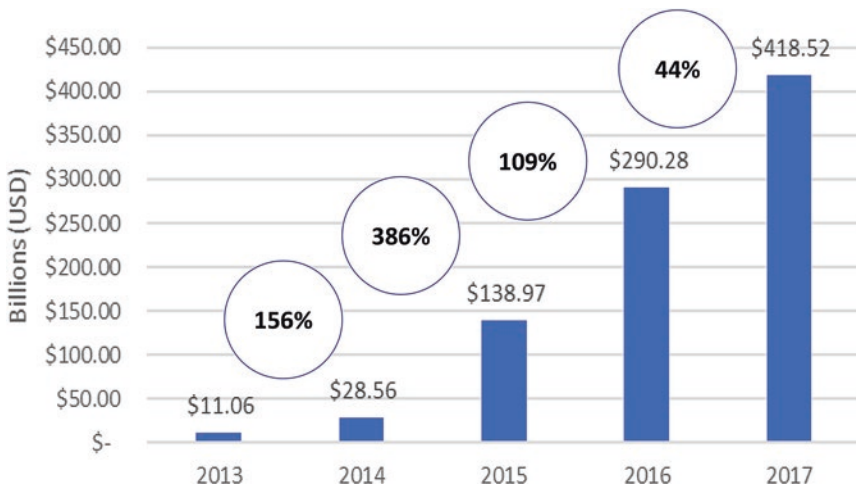
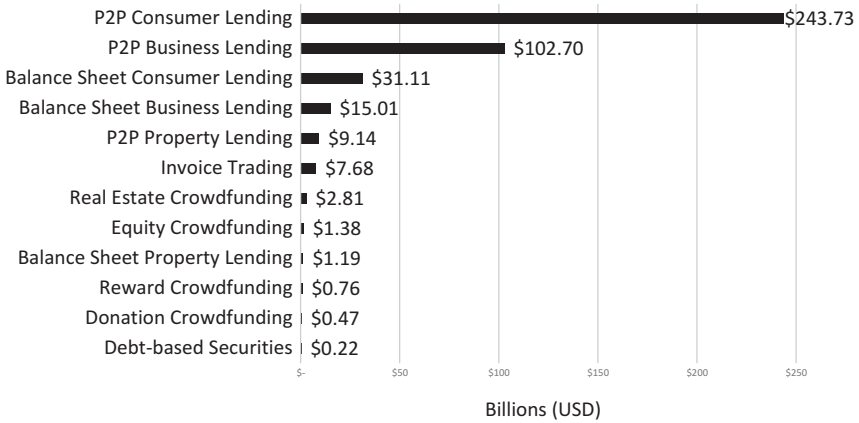


Fig. 3.1 Global volumes 2013–2017 (USD)



**Fig. 3.2** Global volumes by top models 2017 (USD)

When breaking overall volumes into the various crowdfunding models, substantial differences emerge among the models. Figure 3.2 presents the 2017 global volumes by model. In 2017, peer-to-peer (P2P) consumer lending emerged as the leading model with a volume of \$243.73 billion, accounting for 58% of global alternative finance volumes. This was closely followed by P2P business lending with \$102.7 billion. Indeed, since 2013, these two models have continued to rank first and second every year. Overall, when adding the \$9.14 billion associated with P2P property lending, the share of all P2P-lending models accounted for 85% of the total global crowdfunding volumes.

Furthermore, the popularity and pervasiveness of crowd lending are not limited to the P2P models. Since 2016, data shows increasing market activities in Balance Sheet lending models. In 2017, Balance Sheet consumer lending reached \$31.11 billion, Balance Sheet business lending recorded \$15.01 billion, and Balance Sheet property lending accounted for \$1.19 billion. These demonstrate considerable growth especially in jurisdictions that largely restrict investment from retail individuals for crowdfunding. In contrast to the more orthodox P2P-lending models, balance sheet lenders directly fund loans originated on their platforms and therefore assume the credit risk associated. They operate with an intermediation model that is more akin to bank lending, by financing

loans with equity and debt on their own balance sheet and, also like banks, periodically refinancing by securitizing pools of the loans they have funded. Unlike regulated bank lenders, however, these balance sheet lenders do not have access to deposits to fund their lending activity. When brought together, all P2P and Balance Sheet models jointly accounted for 96% of global crowdfunding volume in 2017, demonstrating that lending-based models dominate the global crowdfunding landscape.

The remaining volumes were accounted for by other investment models including invoice trading (1.8% of total volumes), real-estate investment crowdfunding (0.6% of total volumes), and equity crowdfunding (0.3% of total volumes). All investment crowdfunding models accounted for 99.8% of global volume. This stands in stark contrast to popular belief often associating crowdfunding with non-investment models such as reward and donation crowdfunding, which collectively only registered a little over \$1 billion, representing just 0.2% of total global crowdfunding volume (Fig. 3.3).

Great differences are also observed when breaking global volumes down geographically both at regional and country levels. Here, while volumes of crowdfunding transactions are recorded in some 161 countries, three countries dominated the scene by accounting for 97% of the

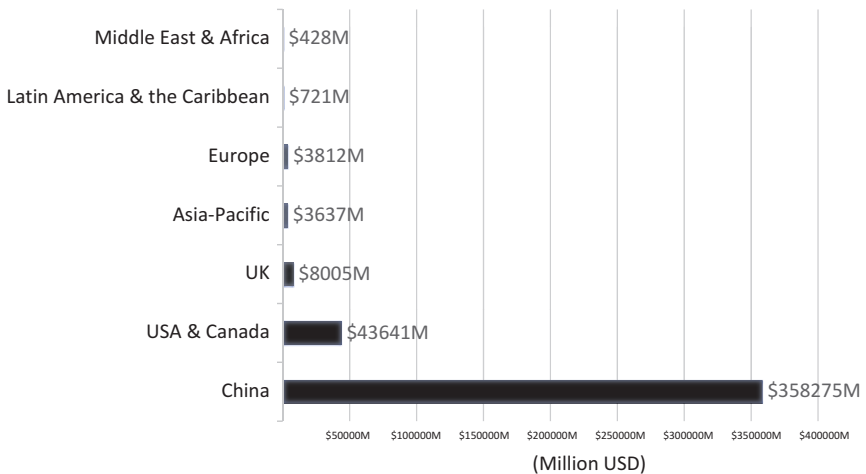


Fig. 3.3 Total 2017 volumes by region (million USD). (Source: Ziegler et al. 2020)

entire global crowdfunding volumes. These three countries are China, the United States, and the UK, representing the regional leaders for the Asia-Pacific region, the Americas and Europe respectively. China is the single largest contributor across all years observed. In 2017, China generated \$358.275 billion, representing 86% of the 2017 global figure. The United States and Canada accounted for \$43.641 billion (or 10%), and the United Kingdom \$8.01 billion (2%) of the 2017 global crowdfunding volume respectively.

In addition to the three global leaders, other important markets are identified and ranked by their respective 2017 volumes as listed in Table 3.1. When we exclude the top three performers, this group includes 14 jurisdictions from Europe, 8 from the Asia-Pacific region, 4 from the Americas, and only 1 from the Middle East and Africa region among the global top 30. This includes both developed (e.g. Canada, Australia, Germany, Netherlands, and Japan) and emerging economies (e.g. India, Brazil, and Indonesia), G8 countries (e.g. France, and Italy) and smaller economies (e.g. Estonia, Latvia, and Georgia), countries that have pioneered the concept of online crowdfunding (e.g. the UK and the United States) as well as relative newcomers to the crowdfunding scene (e.g. Poland and Chile).

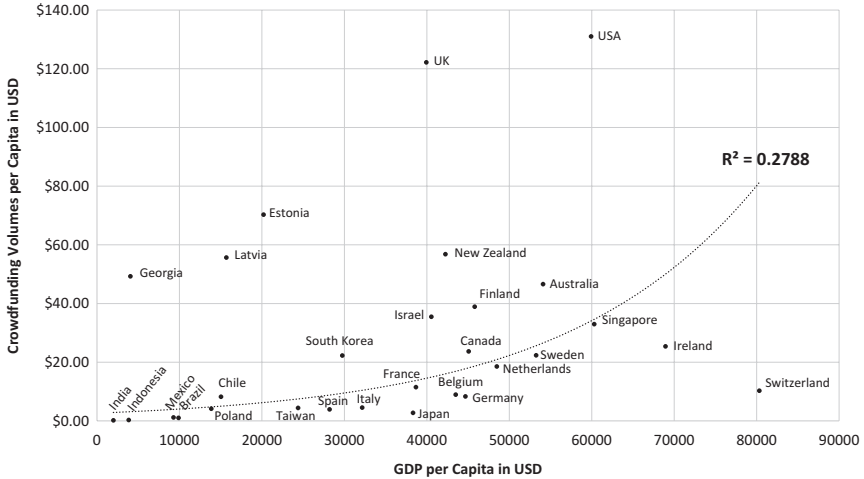
However, when examining the 2017 volumes per capita, one can identify a strong correlation between economic development (represented by GDP per capita) and crowdfunding market volumes per capita, indicating that the greater levels of economic development tend to be associated with larger per capita crowdfunding volumes. Figure 3.4 presents this significant correlation among the leading markets (excluding China as a considerable outlier). Such analysis identifies strong market performers such as Estonia, Latvia and Georgia that may represent small open economies that have endorsed crowdfunding and other forms of alternative finance as part of wider market liberalization and economic digitization efforts, and where such services may meet capital needs in markets not fully fulfilled by traditional financial institutions. Other strong performers that have more mature financial markets are countries such as New Zealand, Australia, Finland, Israel, and South Korea. The list also includes countries such as Switzerland, Germany, and Japan which all have well developed financial markets, as well as emerging markets such as India,

**Table 3.1** Top thirty national markets by volume in 2017

Rank	Region	Country	Total volume (in USD)	Volumes per Capita (in USD)
1	China (Asia)	China	\$358,275,377,038.89	\$258.08
2	Americas	United States	\$42,773,174,202.50	\$131.02
3	UK (Europe)	United Kingdom	\$8,004,783,637.55	\$122.19
4	Asia	Australia	\$1,148,515,565.00	\$46.61
5	Asia	South Korea	\$1,129,918,098.00	\$22.28
6	Americas	Canada	\$867,577,549.42	\$23.69
7	Europe	France	\$747,274,513.52	\$11.51
8	Europe	Germany	\$672,751,878.90	\$8.34
9	Asia	Japan	\$348,650,302.00	\$2.77
10	Europe	Netherlands	\$316,287,611.90	\$18.57
11	Middle East	Israel	\$295,455,044.29	\$35.50
12	Europe	Italy	\$271,919,936.14	\$4.55
13	Asia	India	\$268,579,820.00	\$0.20
14	Asia	New Zealand	\$261,621,933.00	\$56.81
15	Europe	Finland	\$222,314,696.19	\$38.92
16	Europe	Sweden	\$221,890,190.29	\$22.37
17	Americas	Brazil	\$216,357,244.21	\$1.02
18	Europe	Georgia	\$195,784,289.95	\$49.28
19	Asia	Singapore	\$190,821,714.00	\$32.99
20	Europe	Spain	\$181,620,894.27	\$3.94
21	Europe	Poland	\$160,967,488.70	\$4.17
22	Americas	Mexico	\$153,756,417.15	\$1.18
23	Americas	Chile	\$150,695,263.44	\$8.23
24	Europe	Ireland	\$120,666,518.06	\$25.41
25	Europe	Latvia	\$108,236,669.08	\$55.66
26	Asia	Taiwan	\$103,502,237.00	\$4.42
27	Europe	Belgium	\$102,704,518.28	\$8.97
28	Europe	Estonia	\$91,794,107.14	\$70.30
29	Europe	Switzerland	\$87,114,373.27	\$10.30
30	Asia	Indonesia	\$80,114,824.00	\$0.30

Indonesia, Mexico, and Brazil, where crowdfunding and other forms of online alternative finance are expected to grow more substantively given that financing gaps in these jurisdictions are not well served by incumbents.

Why are some countries more developed in crowdfunding than others?—The limited research to date has pointed to several influential factors. Dushnitsky et al. (2016) found that levels of new crowdfunding



**Fig. 3.4** Crowdfunding per capita volumes by GDP per capita 2017—Lead markets

platform creation in the early days of the industry in Europe were positively associated with population size. It was also positively associated with new business ownership levels and the share of platforms operated by a financial operator, but only in the case of reward, donation, and equity platforms (not with respect to creation of lending platforms). The strength of legal rights in terms of borrower and lender protection was found to be positively associated with lending platform formation, but negatively associated with donation and equity platform formation. Economic development was only positively associated with the formation of reward platforms.

Hadded and Hornuf’s (2019) analysis of FinTech start-up formation level by country, using the Crunchbase database, showed that it is positively associated with economic development, availability of venture capital, ease of access to loans, availability of labour, good IT infrastructure as captured by number of secure servers, and mobile infrastructure as represented by mobile subscription numbers. In addition, specifically with respect to start-up formation in the financing category (e.g. crowdfunding), the study also finds a positive association with severity of in-country impact from the global financial crisis, less stringent financial



regulation, and the strength of legal rights (as represented by the extent of borrower and lender protection).

Finally, a study by Rau (2019), using the CCAF database, shows that national volumes of crowdfunding are positively associated with the rule of law in the country, its quality of regulation, control of corruption, presence of explicit or bespoke crowdfunding regulations, ease of setting up business, and financial profitability of existing financial intermediaries (e.g. the banking sector). Interestingly, neither levels of social trust in strangers nor the adventure seeking tendency of the populace were significantly associated with national crowdfunding volumes.

The following section presents trends in the main national and regional markets. First, since the top three national markets, namely—China, the United States, and the UK, jointly represent 97% of the global market volumes, they are analysed separately. This is followed by a presentation of regional-trends in the three major regions, namely—the Asia-Pacific region, Europe and Latin Americas.

## China

China is by far the global market leader, alone accounting for 85% of the 2017 global volumes. It is dominated by P2P consumer-lending activities, responsible for 63% of the total national market volume, and when the Balance Sheet consumer-lending activities are included, the consumer-lending proportion grows to 67% of China's total volume in 2017. Business-lending platforms also play a significant role in the Chinese crowdfunding ecosystem. All consumer and business-lending activities across models (both P2P and Balance Sheet) accounted for 98% of the entire national market volume. In this sense, there is a considerable lack of model diversity in China, with the remaining volume heavily concentrated in property lending or equity crowdfunding.

The prominence of crowd-lending activities in China may stem from continued uncertainty and lagged implementation of Chinese crowdfunding regulation. At present, there is no clear regulatory body at national level responsible for regulating an supervising equity crowdfunding activities (BOP Consulting 2017). Regulatory clarity and

framework were lacking for the P2P-lending sector, which has witnessed increasing scrutiny and challenges in recent years. Late in 2016, the China Banking Regulatory Commission issued interim rules for regulating the P2P lending industry, in an effort to curtail credit risk (Chorzempa 2018). Unlike the orthodox P2P-lending model, where the platform serves as an informed intermediary, in many instances across China platforms were acting more like deposit takers with creation of a ‘capital pool’, with retail investors effectively lending to the platform rather than funding specific loans or loan-parts.

In an effort to properly regulate this sector, Chinese regulators created a ‘1+3 system’ (e.g. one method, three guidelines) to monitor, manage and mitigate industry risks (Ziegler et al. 2018b). As a result of strengthened oversight, the Chinese P2P industry has begun to grapple with liquidity problems, credit risk issues and reconciling new best-practices. Additionally, as regulation has developed, the Chinese marketplace lenders have started to collaborate with traditional banks to a greater extent through partnerships, with 28% having a fund depository relationship with a bank by the end of 2017 (BOP Consulting 2017). Accordingly, it is likely that the 2018 market data will reflect the changing dynamics in China, where volumes are likely to temporarily decline with increasing regulatory oversight.

## Unites States of America

In the United States, Balance Sheet consumer lending and P2P consumer lending garnered first and second places respectively in 2017, which together made up 70% of the US market volume. Despite the significant concentration in these two models, the remaining 30% of the market share is far more diversified when compared to China. In the United States, a greater diversity within the crowdfunding industry is manifested by significant volumes of business-lending models, real estate and property-focused activities, equity crowdfunding, and non-investment activities such as reward crowdfunding. Indeed, all fourteen models included in the CCAF reports’ taxonomy were present in the United States.

The crowdfunding industry ecosystem in the United States has been shaped significantly by its regulatory frameworks. Specifically, US firms

are heavily reliant upon institutional investment, with strict guidelines on marketing and promotions towards retail (unaccredited/accredited) investors. The Jobs Act, the over-arching regulation dictating this landscape, was very much geared towards a broker/intermediary model (Ziegler et al. 2017). As a result, it is not surprising that models which rely upon institutional investment make up a greater proportion of this alternative finance landscape, while models which are more suited towards retail investors (such as Equity Crowdfunding) have seen slower paced growth.

Similarly, a major trend entrenched in the United States, but also evident globally, is the increasing proportion of volume funded by institutional investors via alternative financing platforms. Institutional investors include but are not limited to banks, pension funds, mutual funds, asset management firms, family offices and VC/PE firms. In the United States, 88% of market volume originated from institutional investors—a total of \$37.6 billion in 2017. Though the dominance of institutional investment varies by model type, it was most prominent in P2P consumer lending (\$14.21 billion, or 97% of the model's total volume), Balance Sheet consumer lending (88% or \$11.98 billion) and P2P business lending (76% or \$1.1 billion) (Ziegler et al. 2018a).

## United Kingdom

The crowdfunding landscape in the United Kingdom is markedly different in composition when compared to China and the United States. P2P business lending is the dominant model in the UK, closely followed by P2P consumer lending. Unlike the United States, Balance Sheet lending activities were significantly lower, and are often blended with other activities on a platform. Typically, a firm can operate a predominantly P2P model with a component that relies upon balance sheet funding.

The UK P2P-lending arena has seen an increase in institutionalization in recent years, though not to the same degree as in the United States. While retail investment remained the main driving force of alternative finance volumes in 2017, 40% of the P2P business-lending volume came

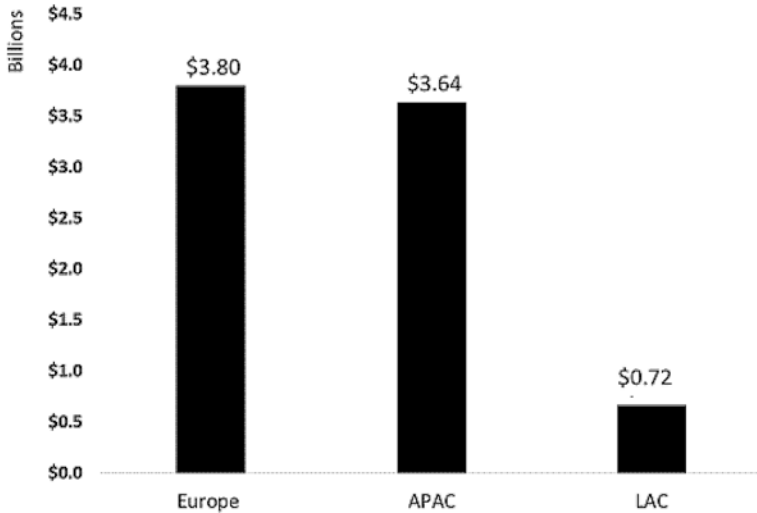
from institutional investors, a sharp increase from the 28% in 2016. The corresponding figure for P2P consumer lending was 39%.

Furthermore, the UK also exemplifies a diverse ecosystem, with strong market activities for each of the models within the CCAF reports' taxonomy. Specifically, it is worth noting that in 2017 the UK had the highest volume of equity crowdfunding of any other country in the world valued at \$430 million.

The UK has been the pioneering country in Europe venturing into crowdfunding with the establishment of the world's first P2P-lending platform Zopa in 2005. Since then, it has led the European countries in crowdfunding activities and the advancement of regulatory reform in crowdfunding regulations (Gajda 2017). However, like many other aspects of the British economy, future development of the crowdfunding industry is likely to suffer from uncertainties related to the BREXIT process and pending agreement with the European Union, especially with respect to cross-border flows and international operations of platforms (*ibid.*).

## Asia-Pacific, Europe, and the Americas

When excluding the top three performing countries (i.e. China, the United States, and the UK), the annual market volume of Europe and the Asia-Pacific (APAC) region, were quite similar, while those of Latin America and the Caribbean (LAC) were much smaller in 2017. The APAC region grew by 81% in 2017 against the previous year, while Europe saw a 63% annual increase. Growth in the APAC was driven predominantly by two key countries, Australia (\$1.15 billion) and South Korea (\$1.13 billion), both of which crossed the \$1 billion thresholds in 2017. In contrast, there is no single mainland European country that has yet crossed the \$1 billion mark. For a fifth year in a row, France (\$747.27 million), Germany (\$672.75 million), and the Netherlands (\$316.28 million) ranked amongst the top three performing European countries. Though smaller, the LAC market has grown rapidly in a relatively short period of time, while achieving 111% year-on-year growth rate between 2016 and 2017. Here, the key national markets include Brazil (\$216.36



**Fig. 3.5** Regional volumes—Europe, Asia-Pacific, and Latin America & the Caribbean (USD). (Source: Ziegler et al. 2020)

million), Mexico (\$153.76 million) and Chile (\$150.70 million) (Fig. 3.5).

When reviewing the leading six crowdfunding models for each region, making up 90% or more of their respective markets, more regional dissimilarities are evident than similarities, as presented in Table 3.2. In all three regions, P2P Consumer lending is the top-ranking model, but that is where most similarities end.

Though retail investors still contributed the majority of total funding, the APAC region has seen a higher level of institutionalization in 2017 than previous years. Specifically, 98% of Balance Sheet business lending, 43% of the P2P consumer lending and 42% of the Invoice Trading model are driven by institutional investment. With respect to countries with the most active institutional investors, the Indian market took the lead with 74% of its annual funding coming from institutional investors in 2017, 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.

**Table 3.2** Top crowdfunding models by region

Europe		Asia Pacific		Latin America and Caribbean	
Model	Share (%)	Model	Share (%)	Model	Share (%)
P2P Consumer	41	P2P Consumer	23	P2P Consumer	25
Invoice Trading	16	BS Business	19	Invoice Trading	22
P2P Business	14	P2P Property	19	Balance Sheet Consumer lending	17
Real Estate CF	8	P2P Business	17	P2P Business	10
Equity CF	6	Real Estate CF	10	Balance Sheet Business lending	5
Reward CF	5	Invoice Trading	5	Donation CF	4

The European landscape is far more varied, with the representation of debt, equity and non-investment models among the six top ranked market segments. Far more retail investor-oriented, institutionalization has not yet taken root in Europe to the same degree that it has in Asia, or most other regions. P2P consumer lending, the largest single market segment in Europe, only saw 12% of its volume financed by institutional investors. Although the proportion of institutional investment is slightly higher for invoice trading (46%) and P2P business lending (24%), by and large most models were financed by retail investors. This is likely because regulations in most European countries include permissions related to solicitation of retail investors, however, marketing and promotions to retail investors are normally restricted by wealth and previous investment experience.

Following the global trend, in LAC, P2P consumer lending is the largest model within the region and accounted for nearly a quarter of the regional market. Considerable number of platforms operate both P2P and Balance Sheet consumer-lending models. In Mexico, Balance Sheet consumer lending accounted for nearly 45% of the country's overall volume. While consumer lending is the largest model within the region, the overall landscape in LAC is marked by a variety of models, with a focus on business financing activities.

Business-focused funding activities have been viewed as a key priority when considering the usefulness of crowdfunding. Over the past few years, crowdfunding has grown to become a viable funding source for entrepreneurs and small and medium-sized enterprises (SMEs) globally. In 2017, crowdfunding market volume attributed to business financing amounted to \$153.2 billion globally, while showing an average annual growth rate of 155% since 2013. China, the United States and the UK provided the bulk of business funding, contributing 32%, 2%, and 1% respectively.

Though in absolute terms business volumes in LAC are dwarfed by comparable figures elsewhere, the dominance of alternative business funding is a key characteristic of the region. In LAC, \$565.7 million can be attributed to business-specific fundraises, accounting for nearly 80% of total volume across the region. The top three contributing countries towards business finance were Chile (\$150.6 million), Mexico (\$73 million), and Brazil (\$57 million). Not surprisingly, the majority of business-based alternative finance derived from debt models (92%), such as P2P business lending, invoice trading, etc. Interestingly, a significant proportion of consumer-driven volumes were attributed to business-borrowers too, typically in the form of sole-traders utilizing personal credit to fund their business (Ziegler et al. 2018a). Equity-driven models, such as equity crowdfunding, real-estate crowdfunding and profit-sharing accounted for 7% of all LAC business financing.

When considering the role of institutional investment, 51% of the regional volume was financed by institutional investors (\$330.9 million), with the highest levels of institutional investment recorded with respect to Balance Sheet consumer lending (75%, or \$84.36 million), invoice trading (73%, or \$112.70 million) and P2P consumer lending (47% or \$75.95 million).

## Conclusion

This chapter has provided a review of the recent status of the global crowdfunding industry while presenting key international trends, as well as presenting some insights from the limited research done at the macro level explaining such developments.

Overall, one can conclude that crowdfunding is no longer a ‘fringe’ activity but instead has moved into the mainstream. On a global level, growth while slowing down, still represents fast-paced development in comparison to most other industries and financial sectors. At the same time, this slowing of year-on-year growth may indicate initial signs towards market stabilization and consolidation. As incumbent firms begin to consolidate their positions within their respective markets, crowdfunding is gradually maturing, at least among early market movers and adopters.

Furthermore, the market dynamics presented earlier illustrated that crowd-lending models are the most popular form of crowdfunding across the globe. This is closely linked to growing efficiencies thanks to digitization driving greater access to finance and investment opportunities to an ever-larger pool of both lenders and borrowers. The combination of new online credit channels, easy-to-use interfaces and widened access, in parallel with continued scepticism towards traditional financial institutions and their ability and/or willingness to serve all segments of the business community, has created a market opportunity that has been seized by online platforms through a variety of crowd-lending models.

Finally, our review also shows that a thriving crowdfunding market may emerge in both developed economies and emerging markets, regardless of the size of the economy or history of crowdfunding adoption. Limited empirical research also suggests that appropriate regulations, good levels of IT infrastructure, and a generally well-functioning economy may present favourable conditions for the development of crowdfunding industry.

Accordingly, in terms of implications for practice, our findings suggest that countries can benefit from the diversification of financing channels. To achieve this, industry actors and government agencies should work



closely together in developing responsible, appropriate, and proportionate regulatory frameworks and policies that both support industry growth, as well as ensure consumer and investor protection, may they be fundraisers (i.e. investees, borrowers, sellers, donation collectors, etc.) or funders (i.e. investors, lenders, backers, buyers, donors, etc.).

When considering implications for research, it becomes clear that opportunities are abundant. There are very few earlier studies that aimed to capture and explain the macro-level growth of the crowdfunding industry, and those that are available mostly capture the industry's early days. Similar studies are necessary for capturing current market dynamics and reflect more mature market conditions. Researchers are encouraged to explore further which factors may impact the trajectory of market development in various settings and given different socio-economic conditions. Such studies may compare emerging and developed markets, as well as markets characterized by high levels of e-readiness and larger scale of digital economy versus those with more modest levels of both.

Future studies may also focus more on the role played by regulations and policies in market development. Insights from such studies can further enhance our understanding about necessary policy components that need to be in place in order to support technology-enabled financial innovation. Research may also expand our understanding of market dynamics by delving deeper into its specific market characteristics, including the extent of institutionalization, international scope of activity and dependencies, as well as default and failure rates at more granular levels.

Finally, as the industry matures, it becomes even more valuable to study the medium- to long-term impacts of crowdfunding activity on real economies. For instance, it would be particularly helpful to capture and measure the impact of the crowdfunding industry on economic development, innovation levels, employment, entrepreneurial venture activity and growth, as well as social impact in terms of access to finance for underserved or unserved social groups and geographical areas in various countries. Such insights are much needed for a better assessment of the crowdfunding industry and its socio-economic impact.

## References

- Belleflamme, P., Lambert, T., & Schwienbacher, A. (2013). Individual Crowdfunding Practices. *Venture Capital*, 15(4), 313–333.
- BOP Consulting. (2017). China UK Equity Crowdfunding Regulatory and Market Comparison Study. Retrieved from [http://bop.co.uk/assets/others/China\\_UK\\_Crowdfunding\\_Regulatory\\_and\\_Market\\_Report\\_Final\\_24072017.pdf](http://bop.co.uk/assets/others/China_UK_Crowdfunding_Regulatory_and_Market_Report_Final_24072017.pdf).
- Bruton, G., Khavul, S., Siegel, D., et al. (2015). New Financial Alternatives in Seeding Entrepreneurship: Microfinance, Crowdfunding, and Peer-to-Peer Innovations. *Entrepreneurship Theory and Practice*, 39(1), 9–26.
- Chorzempa, M. (2018). Massive P2P Failures in China: Underground Banks Going Under. *China Economic Watch* [Online]. Retrieved from <https://www.piie.com/blogs/china-economic-watch/massive-p2p-failures-china-underground-banks-going-under2019>.
- Dushnitsky, G., Guerini, M., Piva, E., et al. (2016). Crowdfunding in Europe: Determinants of Platform Creation Across Countries. *California Management Review*, 58(2), 44–71.
- Gajda, O. (Ed.). (2017). *Review of Crowdfunding Regulation: Interpretations of Existing Regulation Concerning Crowdfunding in Europe North America and Israel*. Brussels: European Crowdfunding Network AISBL.
- Haddad, C., & Hornuf, L. (2019). The Emergence of the Global Fintech Market: Economic and Technological Determinants. *Small Business Economics*, 53(1), 81–105.
- Kotarva, M. (2016). New Factors Including Changes in the Retail Banking Customer Relationship Management (CRM) and Their Exploration by the Fintech Industry. *Foundations of Management*, 9, 69–78.
- Lehner, O. M. (2013). Crowdfunding Social Ventures: A Model and Research Agenda. *Venture Capital*, 15(4), 289–311.
- Rau, R. (2019). Law, Trust, and the Development of Crowdfunding, 31 May 2019. Retrieved from <https://ssrn.com/abstract=2989056>.
- Shneor, R., & Flåten, B.-T. (2015). Opportunities for Entrepreneurial Development and Growth Through Online Communities, Collaboration, and Value Creating and Co-creating Activities. In H. R. Kaufmann & S. M. R. Shams (Eds.), *Entrepreneurial Challenges in the 21st Century*. Basingstoke: Palgrave Macmillan.
- Zavolokina, L., Dolata, M., & Schwabe, G. (2016). The FinTech Phenomenon: Antecedents of Financial Innovation Perceived by the Popular Press. *Financial Innovation*, 2(1), 16.

- Zhang, B., Ziegler, T., Mammadova, L., et al. (2018). *The 5th UK Alternative Finance Industry Report*. Cambridge: Cambridge Centre for Alternative Finance.
- Ziegler, T., Johanson, D., King, M., et al. (2018a). *Reaching New Heights: The 3rd Americas Alternative Finance Industry Report*. Cambridge: Cambridge Centre for Alternative Finance.
- Ziegler, T., Johanson, D., Zhang, B., et al. (2018b). *The 3rd Asia Pacific Region Alternative Finance Industry Report*. Cambridge: Cambridge Centre for Alternative Finance.
- Ziegler, T., Suresh, K., Garvey, K., et al. (2018c). *The 2nd Annual Middle East & Africa Alternative Finance Industry Report*. Cambridge: Cambridge Center for Alternative Finance.
- Ziegler, T., Reedy, E. J., Le, A., et al. (2017). *The 2nd Americas Alternative Finance Industry Report*. Cambridge: Cambridge Centre for Alternative Finance.
- Ziegler, T., Shneor, R., Wenzlaff, K., et al. (2019). *Shifting Paradigms—The 4th European Alternative Finance Benchmarking Report*. Cambridge: Cambridge Centre for Alternative Finance.
- Ziegler, T., Shneor, R., Wenzlaff, K., et al. (2020). *The Global Alternative Finance Benchmarking Report*. Cambridge, UK: Cambridge Centre for Alternative Finance.

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

