

POLITECNICO DI TORINO

Master of Science in Engineering Management



Thesis of Master of Science

**“THE VENTURE CAPITAL INDUSTRY TRENDS IN THE US,
EUROPE AND REST OF THE WORLD”**

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Academic Year 2019-2020



Abstract

Venture capital (VC) can be defined as an investment support to entrepreneurial capabilities and their desire to turn basic ideas into products and services. Venture capital funds are able to build companies from the simplest form to a mature organization. Once a company funded by venture capital matures and becomes successful, venture funds generally exit by taking it public through an initial public offering (IPO) or by selling it to big companies. Exits allows the venture funds to be independent from the previous investment and invest in the next generation of companies. Despite the macroeconomic challenges in recent years, the global venture capital market is performing better than ever which VC deals about \$136.5 billion in 2019 to follow record-breaking total of \$140.2 billion in 2018. Additionally, deal volumes increased to 10,777 compared to 10,542 in 2018 to reach the highest count since 2016. 2019 and 2018 stand alone above \$100 billion and both overtake the highest two consecutive years 2018 by more than \$49 billion. Technology focused funds including artificial intelligence (AI), software, biotech and blockchain and smart transport are the main driving force for the growth over the past decade. United States (US) Venture Capital market, which is dominated by Silicon Valley, has the majority of the funds in the global venture capital market and it represents the most developed region for venture capital investment. Venture capital kept pace with record levels seen in 2018 (\$131 billion) and investors deployed nearly \$136.5 billion in 2019. Europe has continued to increase despite political uncertainty in the continent. Aggregate deal value in 2018 surpassed \$20bn for the first time. Among the European countries, the United Kingdom (UK) had a record year which sits behind the US and China with the VC performance in 2019. After Britain, Germany, France and Israel are coming as the most successful VC ecosystems in the Europe. Outside of US and Europe, Asia is the promising region which is generally lead by China which shows the highest rise in VC market. In 2018, the aggregate value of venture capital deals in Greater China (\$107bn) surpassed US deals (\$105bn). These are some of the key trends that are observed in the venture capital industry in recent years. This paper examined the current venture capital market trends and also, the expected future trends by considering the impact of COVID-19 outbreak on the related regional ecosystems around the globe.



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1. Introduction

The national economies all over the world are reshaped by continuous technological developments. Advanced technologies and innovative business models are the key elements for economic growth which improve the productivity and efficiency of companies. Therefore, governments are adjusting their national strategies and introducing incentives to support the innovation and development of innovative enterprises.

The consensus in economic literature states that, especially due to the debt financing, young innovative startups face financial constraints. These enterprises have high growth potential but also due to their high market and technology risk, they are susceptible to failure. Assessment for chance of success of young companies therefore gets challenging for lenders which leads to information asymmetries. As young innovative companies are lack of collateral and they have uncertain income cash flows, they are more likely to be exposed to credit rationing. Venture capital (VC) is an opportunity for young startups to overcome these challenges. Venture capital firms are professional managers of risk capital that participate to the increasing business value of the innovative and promising companies. Venture capitalists support startup business to grow faster, generate more employment and innovation and creates more value (Keuschnigg, 2004). Venture capitalists' role is to invest venture ideas which they selected according to the business plans proposed by entrepreneurs and therefore they can be viewed as 'gate keeper' for the emergence of new businesses (Marcus et al., 2013). Furthermore, by performing professional screening and monitoring process of investee firms, they mitigate information asymmetries.

VC companies employ highly skilled professionals who are the experts in the sectors of their investment targets. These expertises include existing technologies, competition and industry's economic environment. VC investors manage their portfolio companies 'hands-on': They usually sit on companies' board of directors and involved in daily operational life of firms. VC investors invest into companies in form of stages in which additional funding is contingent to the achievement of operational and financial objectives. 'Staging' process reduce information asymmetries and align the interests of the entrepreneurs of the company and venture capitalists.

VC is generally provided by VC funds, which rely on two types of actors:

- "Limited Partners" (LP) who contribute nearly all of a funds' capital. These investors are generally large financial institutions such as banks, pension funds and insurance companies, public institutions and family offices.
- "General Partners" (GP) own a VC firm who provide a marginal share of a funds' capital, but they are also fund's decision makers together with the management team. They make the investments and also monitor the companies (Fig.1).

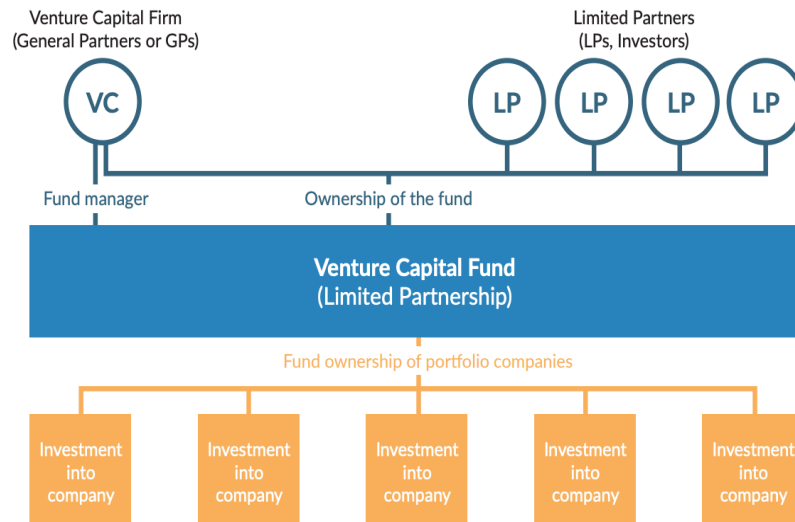


Figure 1: The Venture Capital Fund Structure

Startup companies go through different development stages which can be summarized as the following:

- The seed stage: Seed capital supports primary activities such as market and product research or business plan development. It comes mostly from the business owners, business angels and/or family and friends.
- The early and late venture stage: More capital is needed to develop and implement the business model. Mainly at this stage venture capitalists come into play. Successful companies start becoming profitable towards the end of this phase.
- The growth and scale-up stage: Companies that able to maintain success in earlier stage will increase revenue and profits. If there is an investment made by venture capitalists, in order to get return on their investment, they will start looking ways for exit (Fig.2).

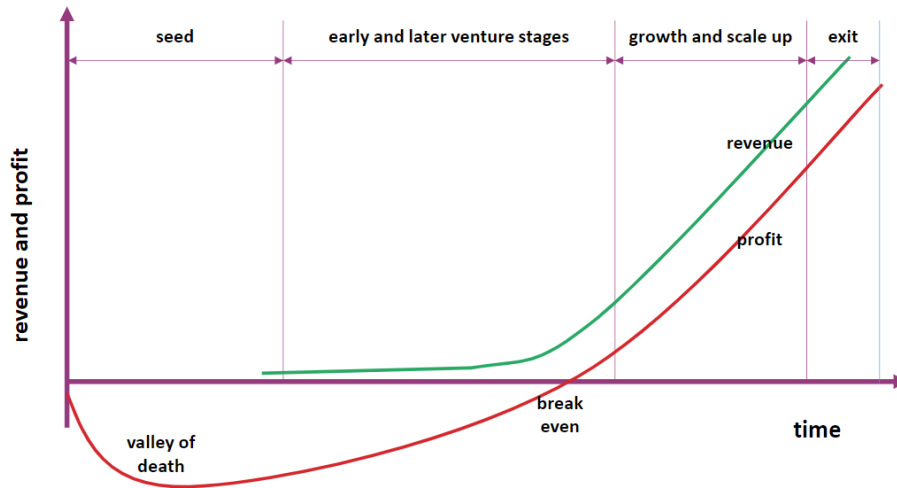


Figure 2: *Development Stages of Startup Companies*

VC funds generally have a classic investment pattern: they invest over a 3–5 year period, after the monitoring process of their portfolio, follow-on investments is made in the most promising companies. In order to generate a financial return, VC companies should divest in the final years of the investment term. Potential buyers of VC's investment portfolio are industrial companies which are pursuing to acquire and develop a new technology (exit via trade sale), public markets by listing on a stock Exchange (exit via IPO) and other funds (exit via secondary sale). However, due to the high level of risk involved, failure is the most common outcome for VC backed firms.

Some institutional venture capitalists co-exist with business angels. Angel investors are high net worth individuals who invest their personal resources in small startups or entrepreneurs in exchange for a ownership equity in the company. They provide their own management expertise to the investee companies. Business angels usually invest on the earliest stages of firms, invest smaller amounts and have other motives than financial returns such as create new businesses. Therefore, these investors are complementary to VC companies who bring new companies into a level that become attractive investments for venture capitalists. The diagram below

summarize the complete lifecycle of a VC fundraising with all the aspects mentioned before:

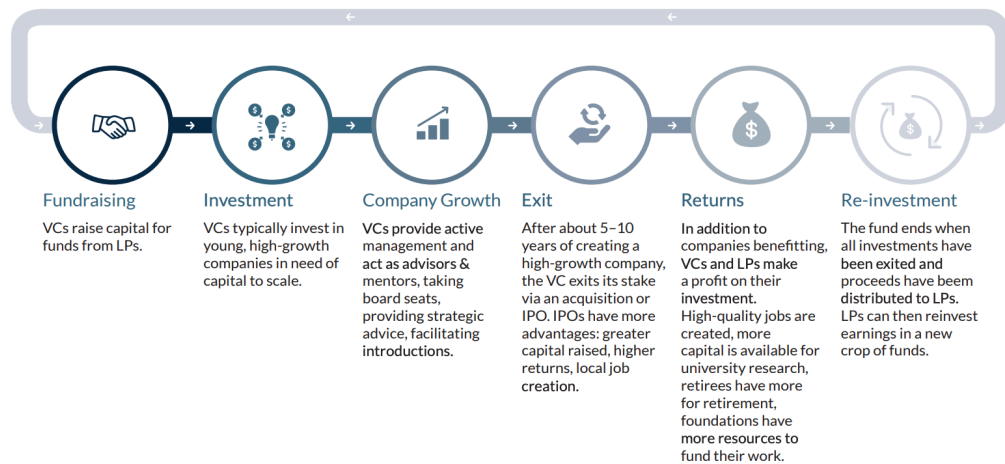


Figure 3: Lifecycle of Venture Capital Fundraising

KraemerEis et al., (2016), expressed that VC is not a “substitute for traditional, mainly bank-centred, SME financing instruments”; instead, it is a particular financial instrument for young innovative startups. VC funding is regarded as crucial element for the survival and improvement of companies who has a high growth potential. Also, venture capitalists have an ability to overcome ‘valley of death’ which represents the shortage of financial resources and the lack of business development knowledge that is unique to start-up projects. In order to overcome these challenges, in addition to fund-raising, venture capitalists provide several types of expertise and acces to their networks. The contribution of a VC firm can help to develop a good company reputation and enhance the confidence of other investors, starting a virtuous circle between venture capitalist investment and business performance. VC backed companies perform high growth in employment, productivity and sales. In addition, it is proven that there is a postitive correlation between VC activity and innovation at the industrial and country level.

At the macroeconomic level, growth of young companies results in increase growth and innovation, both in the countries where these firms are located and countries in which they and the VC firms operate. Especially international deals can accelerate this diffusion which accounts the third of the total number of deals worldwide.

Some of the most succesful companies in the world are the ones that are backed by VC firms (Fig.4). Uber raised about \$1.5 billion VC funding. First, they raised \$1.2bn from a group of mutual fund investors and managers and from Google Ventures, they raised \$258 million. By february 2015, Snaphcat raised an amount more than \$1.4 billion. Facebook's acquisition of Whatsapp for a \$22 billion in 2014 is still the largest private acquisition by a VC backed company. In 2004, Google had an IPO and just after one year, its investors have more than \$4.3 billion stake in the company. A Chinese company, Alibaba, raised around \$150 billion and break a record in the VC deals history due to its multibillion-dollar round. Twitter's IPO raised \$1.8 billion in 2013 and that valued the company at almost \$14.2 billion.

A unicorn is a term used in the venture capital industry to describe a privately held startup company with a value of over \$1 billion. Venture capital investor, Aileen Lee, was introduced the term in 2013 to represent rare tech startups which were valued at more than \$1 billion. The valuation of unicorns is obtained by VCs and investors who participated in the financing rounds of firms. The value is primarily based on the growth potential and expected development since all unicorns are startups. Valuing unicorns is a complex process that involves the development of long-term forecasts. The valuation process can get more complicated if the companies become the first business of their kind in an industry. Xiaomi (\$45 billion), Uber (\$40 billion) and Snapchat (\$16 billion) are the top three companies in terms of valuation of unicorns as the end of 2019 (Fig.5).



2. Global Venture Capital

The global venture capital market is continuously attracting billions of capital every year. Technology-focused funds have been the driving force behind the rise in venture capital fundraising over the past decade. Eight of the 10 largest venture capital funds closed in the past decade have a focus on technology. In 2019, the ongoing trade tensions between the US and China, the weakness of China's economy and the uncertainty related to the December general election in Britain caused a decrease in both deal size and deal count.

However, deals are getting larger and globally, the annual VC investment remained higher than every other year with \$301 billion in 2019 except 2018 in which the record-setting level of raised capital is observed with \$399 billion. However, the average deal size has consistently risen to \$12 million in 2019, from \$6 million in 2014. Also, the number of deals in 2019 stayed in relatively same level in 2018 which reach of an all time high values in global VC history. Later VC investment is the least efficient stage whereas early VC investment outperforms the angel&seed investment stage in 2018 and became the leading stage in quantitative terms (Fig. 6).

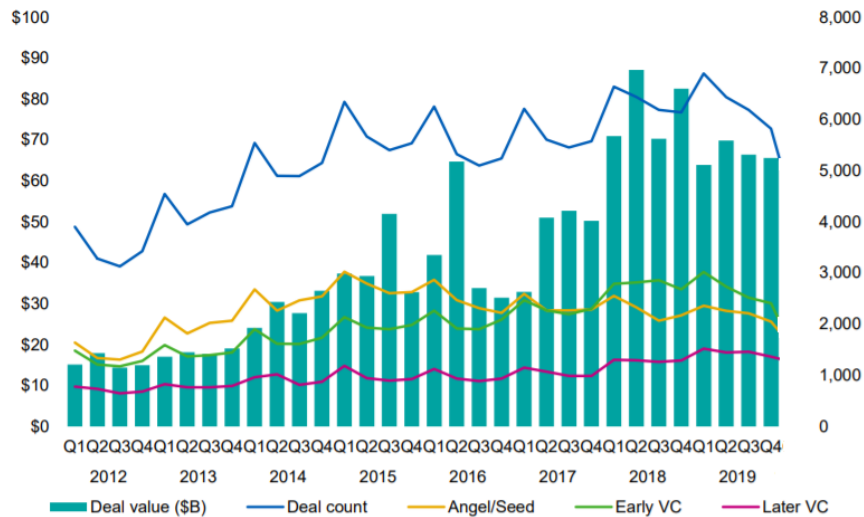


Figure 6: Global Venture Financing Between 2012-2019

In 2019, 543 closed venture funds recorded for a \$81.8 billion in committed capital which is the second highest capital raised amount after 2018 (\$100.5 billion). Historically, the capital raised represents a healthy VC market despite the fund count which is among the lowest annual since 2013 (Fig.7). Fund sizes have tilted larger, mostly in response to the reshaped economics of the entire global venture cycle in the past decade. More importantly, the larger funds and the \$230 billion that has been invested to VC funds in the past three years alone signify the promising future for the continuity of investing cycle to spinning onward.

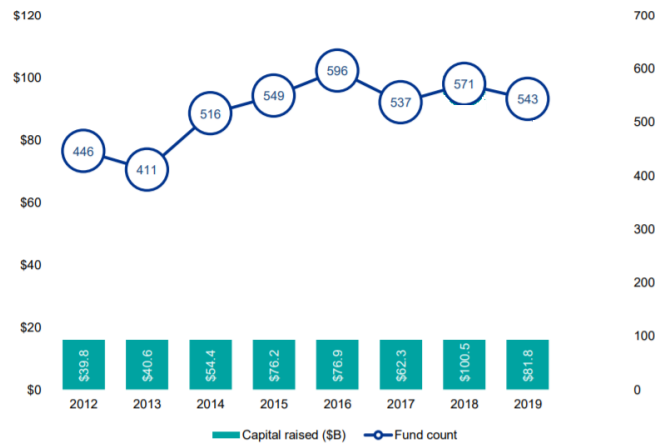


Figure 7: Fundraising in Global Venture Capital Industry Between 2012-2019

Since the beginning of the venture capital market, US is the longstanding center of the VC market which accounts for more than half of the VC investment in 2019. Despite the continuous growth in the number of US-based institutions, there is also a growth in the number of active investors around the world as a result of emergence of various ecosystems. With the increasing VC ecosystems, US's share in global VC market is decreased from 55 % in 2013 to 50% in 2019. Asia VC ecosystem is one of the driving forces for the expansion of the venture capital market around the globe. The number Asia-based institutions is doubled over the past five years. China is developed an attractive hub for startups in recent years, with more capital being deployed in venture capital and had a huge contribution to the growth of the VC industry in the continent (Fig.8). For a long time, Europe was a less known ecosystem which is overshadowed by the US and China. Although it displayed a slower rate of growth in recent years, the deal count rise continuously after 2009 (Fig.9). However the increase is minuscule in comparison with that of the US and China.

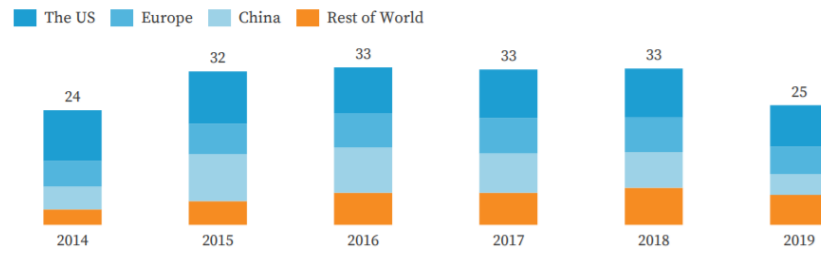


Figure 8: Global Venture Capital Deal Count (,000)

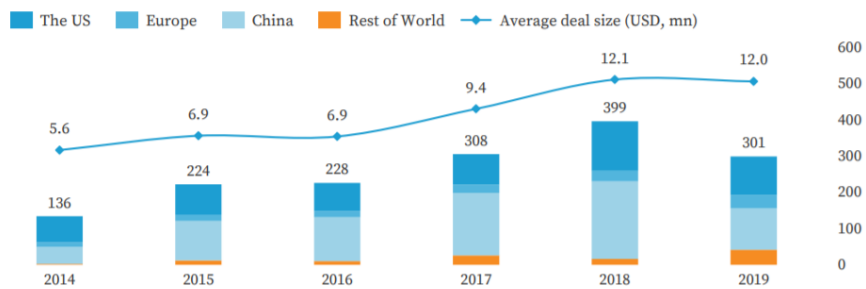
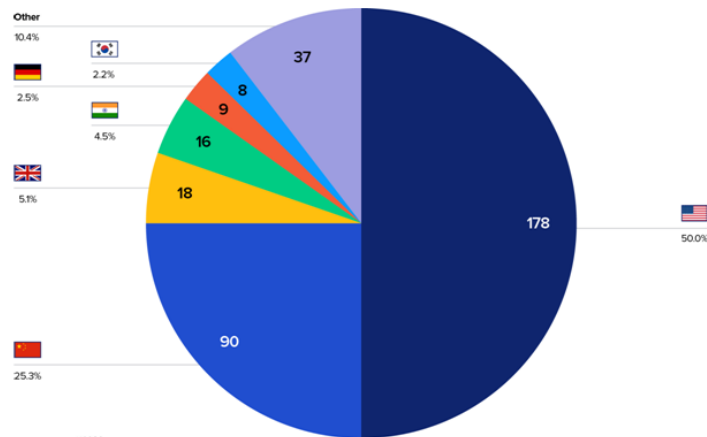


Figure 9: Global Venture Capital Deal Size (\$ million)

The spread of successful startups in different geographic areas keeps widening. In 2015, only 9 countries are home to unicorns, while in 2019, the number is 26, despite the USA and China still being home to over 75% of them (Fig.10). As a matter of fact, in Europe alone, 20 countries became home to VC-backed unicorns. Also, when we the valuations of the unicorns in the World examined, China-based company, Xiamoi, has the highest unicorn value with \$ 45 billion of all times.



Countries within the 37 "other" category include Australia, Brazil, Canada, Colombia, Estonia, France, Hong Kong, Indonesia, Israel, Japan, Luxembourg, Malta, Nigeria, Philippines, Portugal, Singapore, South Africa, Spain, Sweden, and Switzerland

Figure 10: Geographic Distribution of Unicorns

VC investors, in general, seek to generate big returns from sectors with low capital requirements and require small investments due to the fact that VC investment are risky. That leads to a focus on certain industries such as ICT, biotechnology and healthcare. At a sector level, fintech, autotech, biotech, mobility and logistics and food delivery are the hottest areas of investment among the others (Fig.11). Sectors such as energy and primary industries are sectors with typically higher capital requirements attract a relatively smaller amount of venture capital investments.

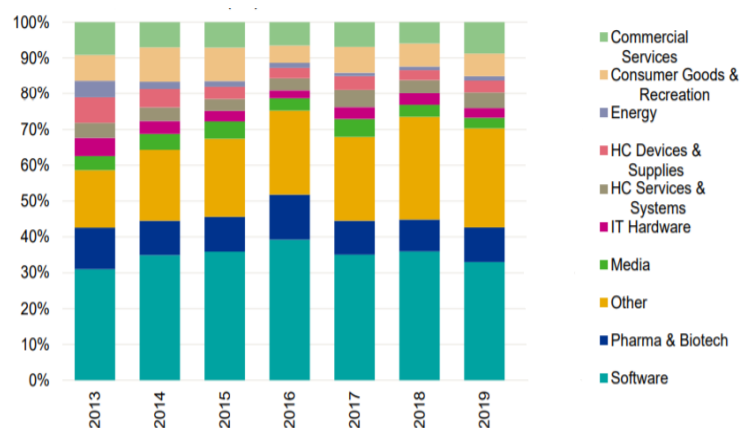


Figure 11: Global Financing Trends to VC-backed Companies by Sector, VC invested (\$ billion)

At a technology level, deeptech, automation, artificial intelligence and B2B solutions received significant interest from VC investors. In 2019, the aggregate number of VC investments in software and biotech exceeds 55% of total investment, while other fields including B2C (Business to consumer), B2B (business to business) and financial services receive around 25% of global VC investments (Fig.12).

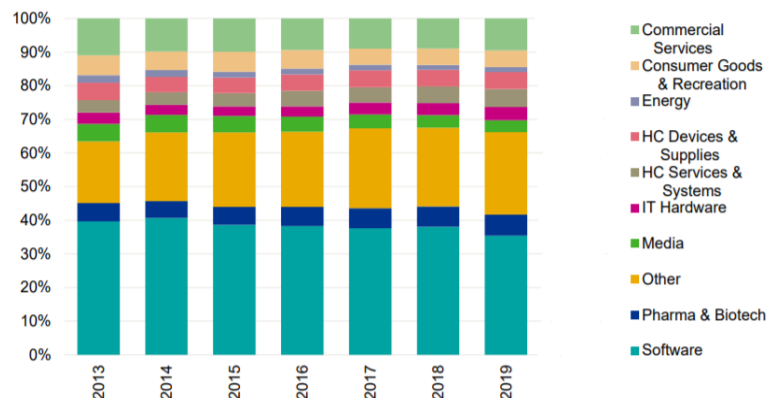


Figure 12: Global Financing Trends to VC-backed Companies by Sector, Number of Closed Deals

3. The US Venture Capital Market

Venture capital is founded and developed by Harvard Business School professor Georger Doriot who is considered as the “Father of Venture Capital”. In 1946, he founded the American Research and Development Corporation (ARDC) and raised a fund of \$3.5 million to invest in companies that commercialized technologies during World War II. Dariot invested \$200,000 for an X-ray technology for cancer treatment and in 1955, the company went public with a gain of \$1.8 million.

The US is the origin of the venture capital which is the main reason for the region to be the longstanding hub of the venture capital market and so-called the ‘home of the VC” with the large ecosystem of GPs and LPs. Silicon Valley, which is dominated by San Francisco’s tech elite,

has been a magnet for investors and entrepreneurs across the world and bringing billions of dollars into the US economy. The continuous transactions from the world to the US ecosystems leads to the healthy and vibrant US venture capital and also, to the rise of mega funds (with over \$500 million to invest). These mega funds are resulted in much larger deals. In 2018, a record of 22 US mega funds closed and over the share of deals valued at \$100 million is more than tripled over the past two years. However, on the other side, there is a flow of venture capital activity which is moving out of Silicon Valley due to the increasing operation costs. The cost of living in the Silicon Valley area is among the highest in the world. Also, with the heightened competition for talent both locally and abroad, it is getting more challenging to attract talents in the Valley.

3.1 Fundraising Activity

US venture funds raised \$46.3 billion in 2019 with reaching the second highest annual value in the past decade which is below the \$58 billion raised in 2018. However, the number of funds raised dropped to the lowest level since 2014 (Fig 13.). These statistics shows that fund sizes are growing. VC funds are growing large with the annual median fund size reaching \$78.5 million in 2019 with an increase of 162 % over the last five years despite to the decline in fund count from 2018 levels. That growth also points to the emergence of mega-funds. Mega-funds over \$1 billion allow venture capitalists to support their most successful companies, particularly as those companies stay private longer. Mega-funds also enable investors to offer funding across all stages of a startup's life cycle which provides an advantage to differentiate firms in a competitive venture industry.

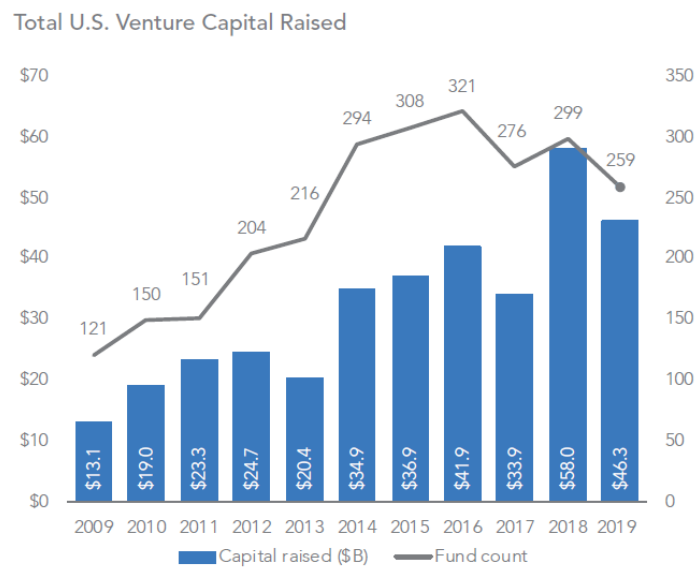


Figure 13: *The US Venture Fundraising*

3.2 Investment Activity

The US VC market is experiencing an era with high positivism which results in high investments that are setting new records. The strength of the US VC market is originated by the record number of deals which worth more than \$100 million, the rapidly increasing number in new unicorn births, and the expansion of capital. VC deal value in the US is increased during 2018, breaking the previous record of \$86 billion set in 2017, and climbing well above the \$130 billion for the first time. In 2019, the deal value reached of \$136 which the second highest value of all times. As for the count for investments, the number is approximately 12,000 reach an all-time high (Fig 14.).

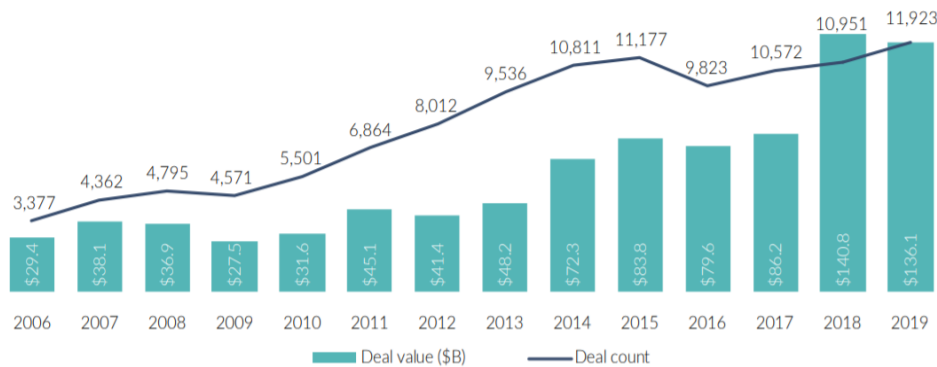


Figure 14: *Venture Financing in the US*

One factor contributing to the record deal value seen in recent years is the increasing maturity of companies at all stages, highlighted by an increase in early-stage mega deals. In total, 53 transactions completed which represents nearly 25% of all VC mega-deals raised in the year. Another factor that supports the strong deal value number is late-stage deal count which surpasses 2,500 for the first time ever in 2019, with nearly 2,600 deals totaling more than \$85 billion invested. In addition, this year registered the new record high for mega-deals at the late stage with 181 deals completed, up roughly 10% year-over-year. Deal count split by stage is steady compared to the prior year, with angel&seed accounting for 42% of deals, early stage making up 34%, and late stage contributing 24%. The past five years, however, draw another picture, angel/seed deal count is dropped by 17%, while early and late stage deal count is increased by 14% and 27%, respectively (Fig. 15).

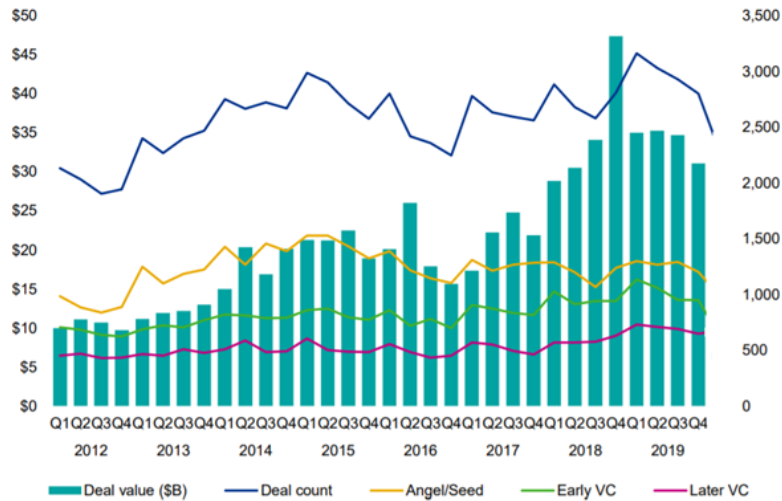


Figure 15: Venture Financing by Stage in the US

Corporate VCs are the most active among the nontraditional investor group, participating in around 1,800 deals during each of the past two years, compared to the roughly 3,000 deals in aggregate in which nontraditional investors have participated. Compared to other nontraditional investors, CVC performs more active in the early stage. Median CVC deal sizes at the early stage amounted at \$13.2 million in 2019, higher than deals with other nontraditional participation at this stage and nearly doubles the industry median (Fig.16) . Corporations enjoy the cash from the bull market and faced with startups challenging for market share have been eager to move capital toward startup investments, doubling the number of participants over the past

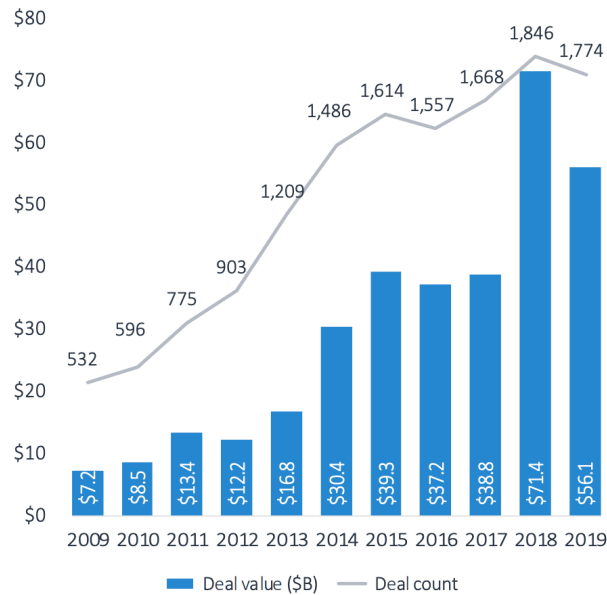


Figure 16: CVC Deal Activity in the US

3.3 Sector Analysis

Consumer centric solutions are the main focus for VC investors in the recent years. Although, B2B plays related to AI and automation continued to attract funding, VC deals activity is dominated by companies focused on transforming the consumer experience in some way or catering to the increasing demand for convenience. Software remains as the most attractive sector, but the deal share of software dropped below 40%. Healthtech and biotech are remained as clear winners in terms of VC investor interest during (Fig. 17).

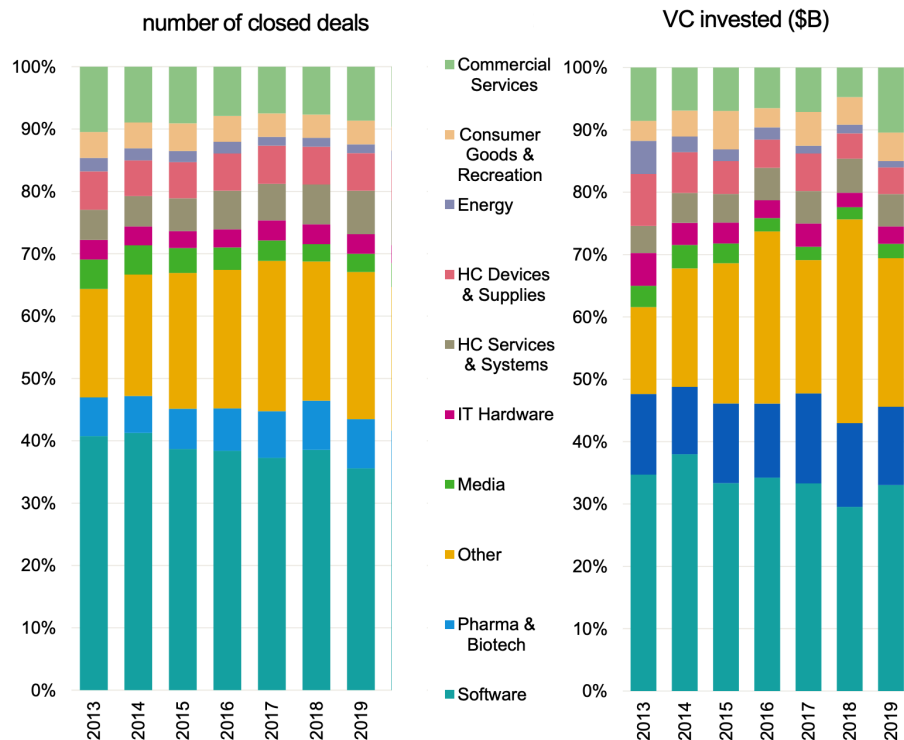


Figure 17: Venture Financing by Sector in the US

Fintech opportunities expanding scope and a trend expected to continue for the future. The fintech industry as a whole is very large, with growing opportunities for investment on both the customer and the enterprise side. One area of particular interest in 2019 is on the middleware layer of banking processes, whereby startups are providing banks with opportunities to expand their service offerings while banks are providing startups with opportunities to grow much faster than they would on their own. Investments in fintech companies continue to reach new records. The US set a new record for VC-backed fintech funding in 2019, with \$59.8 billion in investment compared to \$58 billion in 2018. Consumers are increasingly utilizing fintech applications and non-card payments to manage their savings and spending.. Fintech companies are also leveraging artificial intelligence to improve the consumer experience improve speed and efficiency and reduce the risks of fraud. The succes at implementing AI will determine the competitive advantage of the companies.

Increase in expensive chronic issues combined with an increase in healthcare costs lead to the growth of healthcare sector. The U.S. has a shortage of primary care doctors, while demand is increasing as age demographics and chronic diseases increasingly pressure the current healthcare model. These challenging issues highlight the need for improved care, as well as the huge opportunity for startups that can use data to identify and optimize around systemic inefficiencies.

In the absence of enough numbers mental health professionals, mobile has become the medium for society's renewed focus on personal wellness and mental health. There are now apps with the potential to transform a patient's device into a monitoring and therapeutic platform, transforming smartphones into a wellness ecosystem.

There has been a progress is made inside the lab too. The precision medicine is arrived in 2019, with genome-focused drug development. This is a new routine focus at drug companies big and small, and two FDA-approved gene therapies currently in market. In 2019, the deal value of VC-backed healthtech is amounted to \$7.6 billion and the total deal count to a number of 659 which are the numbers that set new record (Fig.18).

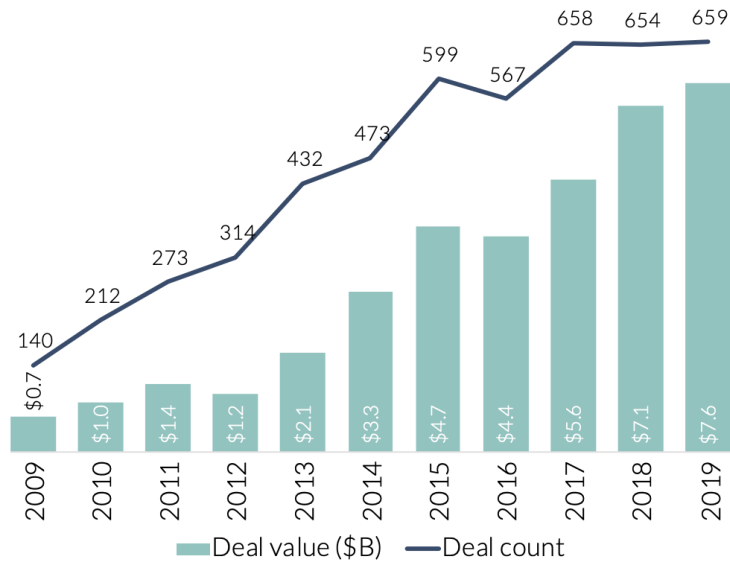


Figure 18: US Healthtech VC Deal Activity

The pharma&biotech sectors are the popular sector that has the highest deal count of 866. Also, the deal value amount to \$16.6 billion which is the second highest value after the \$18.6 in 2018 (Fig.19).

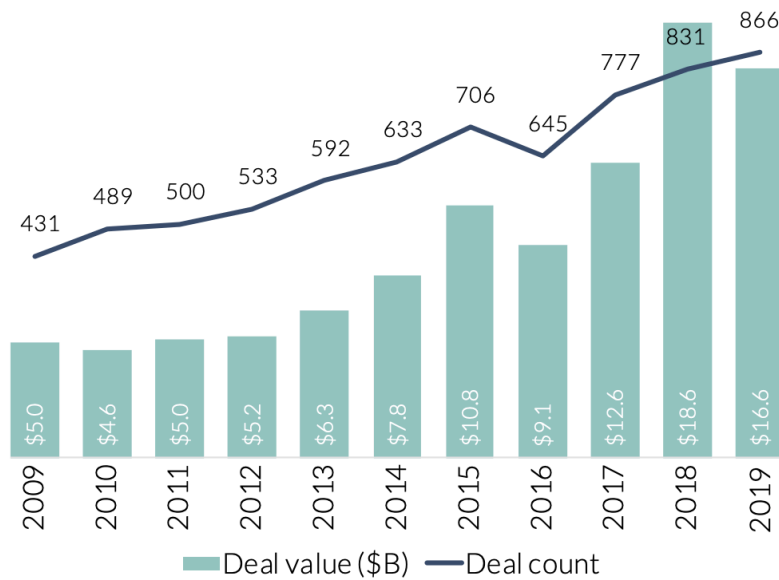


Figure 19: US Pharma&Biotech VC Deal Activity

3.4 Exit Activity

2019 was an exceptional year for the US VC activity in. An annual record for US VC exit value is recorded at \$256.4 billion across 882 liquidity event. 2019 was an exceptional year for US VC exit activity. An unprecedented \$256.4 billion in value was recorded in the year (Fig.20), which will translate to some impressive returns for both GPs and LPs in VC funds. This elevated amount of capital exited was spread between a smaller number of exits than the last couple of years, leaning on ever-larger exits, specifically IPOs such as Uber, Lyft and Slack.

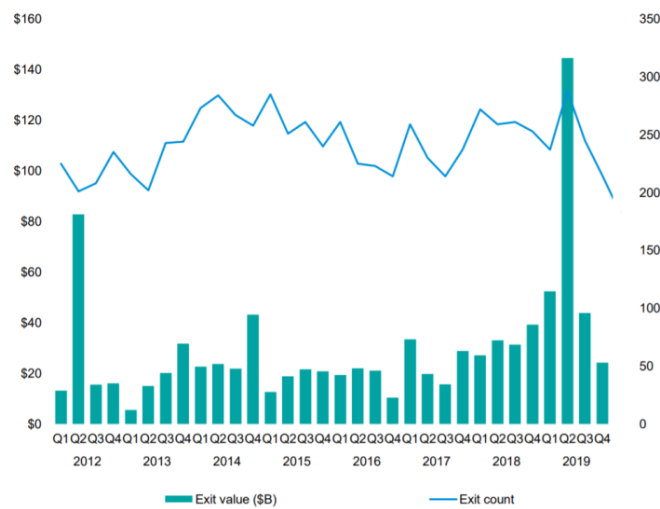


Figure 20: Exit Activity in the US

2019 is a blockbuster year for the US VC industry in terms of IPO exits. That situation reflects the backlog private mature companies, the willingness of VC funds to give return to their investors, and the increasing pressure on venture firms to give their employees with shares some liquidity. In the second quarter of 2019, VC-backed IPOs created more exit value with \$138.3 billion than they have in any full year for the past 10 years. In general for exits, 2019 is a record-breaking year for including M&A events and buyouts and especially IPOs stood out (Fig.21).

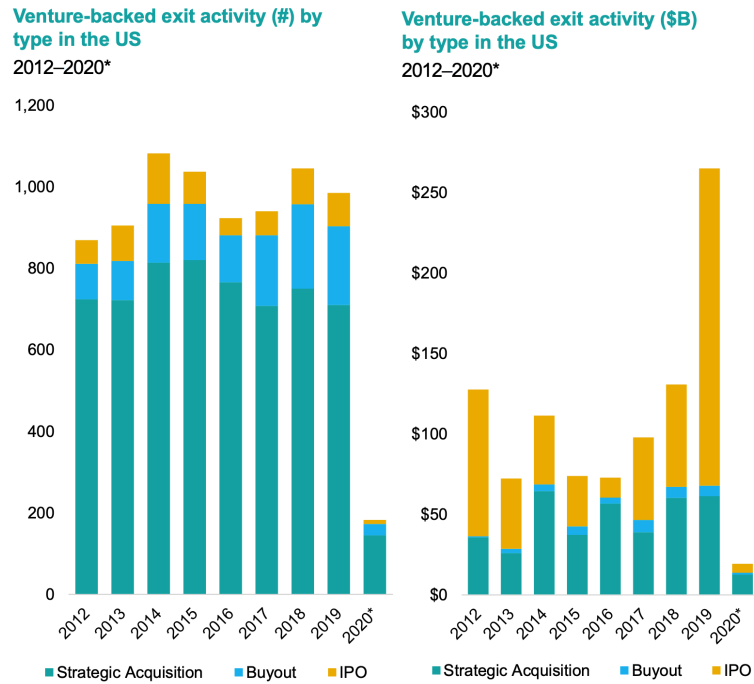


Figure 21: Venture-backed Exit Activity by Type in the US

Although the number of IPOs decreased slightly compared to 2018, IPOs accounts for 78% of the total exit value in 2019. The number of US-based IPOs declined from 93 in 2018 to 80 in 2019. The largest US-based venture-backed exit last year was the \$8.1bn IPO for Uber Technologies, Inc., which took place in May 2019 (Fig.22).

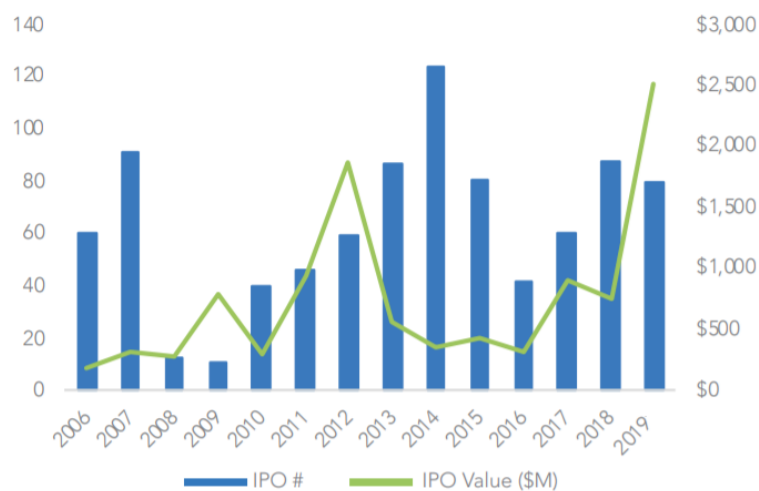


Figure 22: VC-backed IPO Activity in the US

3.5 Future Trends

Coronavirus outbreak is the biggest crisis after the Great Recession seen in the US economy. Therefore, when trying to predict the future of US VC market, the patterns observed during the recession can be used as a possible outcome of the outbreak. During the 2008 recession, angel & seed activity increased as interest began to boom during a period of prolonged growth. The investors of that time prefer to focus on the potential windfalls that could be realized than the risk of early bets on companies and the illiquidity. However, angel&seed activity is functioning much different today. More than 5,000 deals completed at this stage in 2019 which five times greater than the total prior to the financial crisis. Thus, the angel & seed dealmaking will be resilient but a strong uptick in activity like in the recession is not anticipated because the deal counts have been trending downward in recent years.

The reason behind the expectation of the sustained sustained investment activity is due to a common belief that companies formed during a recession end up being some of the most successful. The confidence coming from not having any customers to lose and the ability to ride the wave of economic expansion as the companies start to ramp up leads to better outcomes for earlier-stage startups rather than established players. There are some examples from the great recession in 2008 and 2009, including many of the most highly valued VC-backed businesses, such as Pinterest, Airbnb, Uber, WhatsApp and Slack.

The lack of in-person meetings is slowing down sourcing and due diligence, even if most of the VC investors express a desire to execute deals. The overall deal quality will decrease due to that decline, as VCs reserve capital for the most promising portfolio companies and as new deals receive more inspection. The valuations will be challenged as

investors become more skeptical and stringent in sourcing and diligence.

Startups at different stages will be affected differently from the outbreak. Companies early in their lifetime will probably does not have enough revenue and may rely solely on bootstrapping and venture dollars for growth, while more mature companies will enjoy access to a wider array of financing options. Latestage companies that moving toward an exit will need to keep revenues stable and find ways to achieve efficiencies while maintaining growth across different business sectors.

The healthcare and biotech sectors will be the new hot investment areas as they are urgently needed to prevent as much as possible the infection of COVID-19. and Investors and operators alike within these sectors will likely shift strategy to avoid being caught flat-footed. In order to give a direct response to the novel coronavirus, some VC investors, including Y Combinator's Sam Altman and The 1517 Fund, have been eager to finance scientific discoveries that could manifest vaccine technologies. Large tech companies in Silicon Valley are also leveraging their skills to better diagnose and treat the Coronavirus. VC-backed companies with drug R&D activity and clinical trials in vaccines and infectious diseases are well positioned to see a significant advantage as the market continues to set the timing and duration of the global pandemic. Despite the incentives including large fundings, VC-backed biotech companies also have a disadvantage of high burn rates due to escalating drug R&D costs and increasing capital expenditures. Due to the capital-intensive nature of biotech business model, these startups tend to have at least a year or two of ready to deploy cash. However, the potential future of the current market conditions could force startups to cut drug development budgets to maintain long-term sustainability as the instable future funding

continues to grow. Clinical-stage companies are also having disruptions and delays to trial treatments and data collection due to the overwhelmed hospitals. This is extending the timeline further and causing the more cash to be spent by companies.

The vaccine market is inherently risky when compared to other sectors within biotechnology. Funding for infectious diseases and vaccines has been quite poor historically. VC investors have an argument that it is challenging to predict a market aspects for emerging infectious diseases and due to the ambiguous timeline of viral outbreaks, there is no definite assumption related to the revenue stream for vaccine manufacturers. In the previous outbreaks, SARS in 2003 and MERS in 2012, firms that began developing and testing vaccines and treatments found themselves out of funding when the outbreaks suddenly disappeared. Eventually, the COVID-19 has placed the impact and pressure on nearly every industry in the global economy. Therefore, a sustained interest from investors over the next few quarters toward both directly-affected companies such as preventive healthcare technologies and biotechs focused on inhibitor drugs and indirectly affected tangential firms such as manufacturers of ventilators and other medical equipment or sub-supplier companies focused on rapid vaccine technology development is anticipated.

4. Europe Venture Capital Market

Until 2014, European venture capital market had hard times with poor returns and fund-raising. The main reasons behind the poor performance can be listed as the rigidity of European economies, risk-averse attitude of Europeans and the Silicon Valley which is being the central hub of economy of mobile, cloud and digital media. However, VC investors' stance on Europe, an overlooked and under-invested VC market, is shifted dramatically over the last several years. European



venture capital is recovered from tech bubble and financial crisis and shows robust growth. The increasing number of professional entrepreneurs, high standard of education and many technology and education centers are the main factors behind that growth. In recent years, European VCs are delivered great success in some of the hot areas such as music streaming (Spotify, SoundCloud) and gaming (Angry Birds, SuperCell). There is also a shift in Europe towards entrepreneurial culture. Lots of innovation hubs set up across Europe and governments are proactively supporting the venture capital market through national funds of funds and the European Investment Fund.

Europe's largest tech communities are found in London, Paris, and Berlin. London remains as the central hub, while Paris is known for tech talent, and Berlin's ecosystem, which is defined by its maturity, open culture, and low cost of living, is drawing lots of attention. Berlin may challenge London as the European VC epicenter launched the Forbes Midas List Europe 2019 in Berlin.

4.1 Fundraising Activity

Although Europe is struggling with political and economic uncertainties arising from all corners of the continent, the venture capital market is not the one of industries that is harmed of this situation. The emerging maturity of the venture capital market is one of the reasons for improving industry performance. That's why more and more investors are attracted to the European VC market. During the last five years, European fund sizes grow in order to compete internationally. In 2019, total capital raised in European VC funds reached €10.1 billion across 85 closed vehicles (Fig. 25).

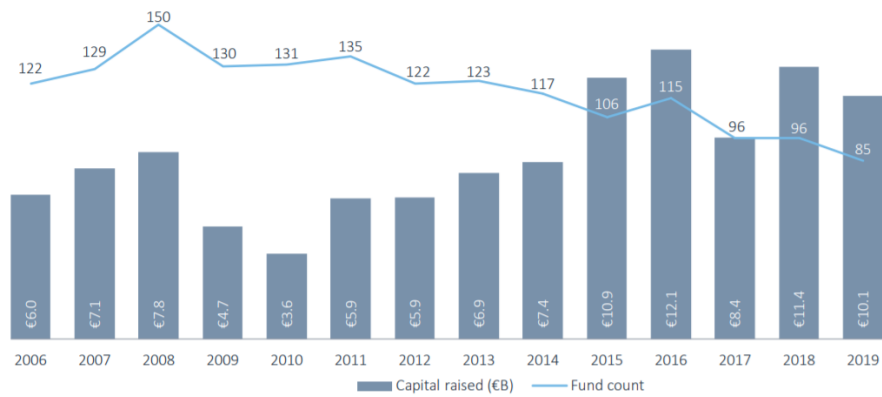


Figure 25: *European Venture Fundraising*

The median fund size hit a new peak of €96.4 million and the median time to close a fund dropped to lowest point of 9.7 months. These measures are the indications of LP appetite for venture allocations remains intense heading into the new year (Fig. 26).

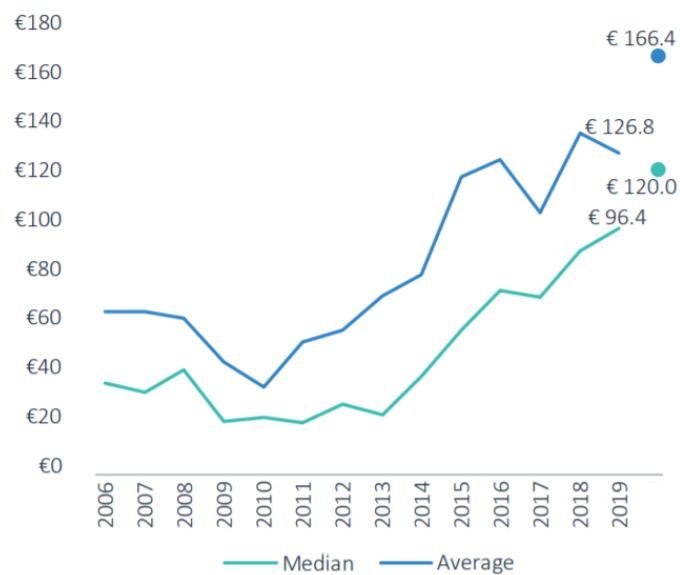


Figure 26: *Median and Average of European Venture Fundraising*

4.2 Investment Activity

For a long time, Europe was facing with the shortage of capital but in the recent years, VC market is starting to change. However, it is making life harder for venture capitalists because it is giving more power to the entrepreneurs due to the more intense competition for deals and better education for founders. The quality of ecosystem is getting better as more experienced startups entering to the market to improve the next generation of companies. The total amount of money invested into European startups continue to increase and the number of deals completed is increased gradually until 2018 but in 2019, it is decreased significantly to 6,089 (Fig. 27).

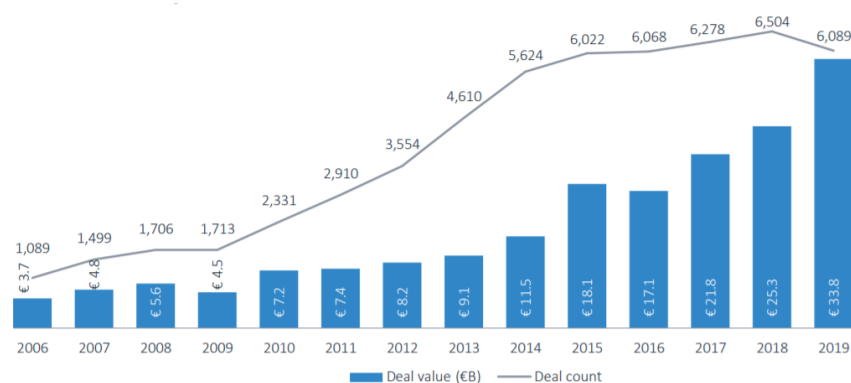


Figure 27: Venture Financing in Europe

The European ecosystem is an intriguing landscape with multiple countries having different languages and cultures practicing various political, economic and environmental regulations. All regions set new deal value records in 2019 which points out to a well-balanced and diverse ecosystem. While the UK and Ireland are still in leading position in the European venture capital industry, the DACH region recorded the strongest growth in deal activity in 2019, making up 17.8% of all transactions (Fig. 28). A record amount of funding observed in DACH region, particularly in Germany, mostly due to the late-stage rounds, showing a mature and healthy ecosystem.

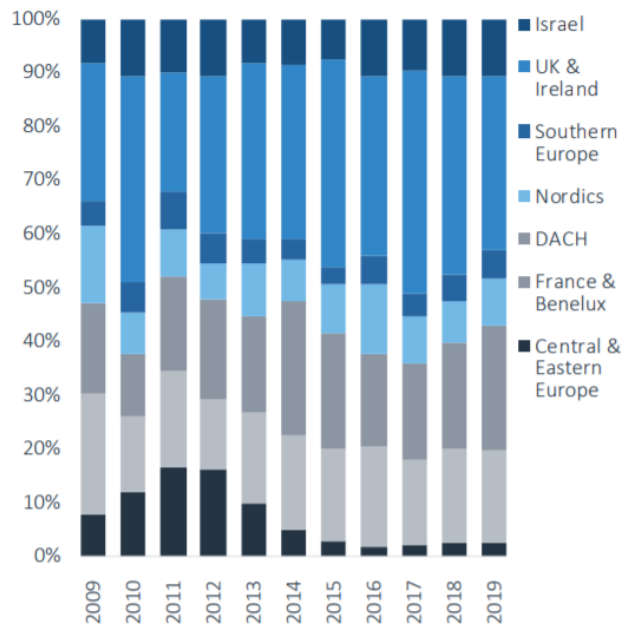


Figure 28: Venture Financing in Europe by Region

In recent years, the number of first-time venture financed companies in Europe did not represent a growth at the same pace as the amount of funds raised. In fact, it decreased extremely. Firstly, early stage rounds are increasing and are much more competitive than in years past. But the great uptick comes at later-stage rounds (Fig. 29). International investors are competing over deals in that stage and recently there are fewer new deals to fight over.

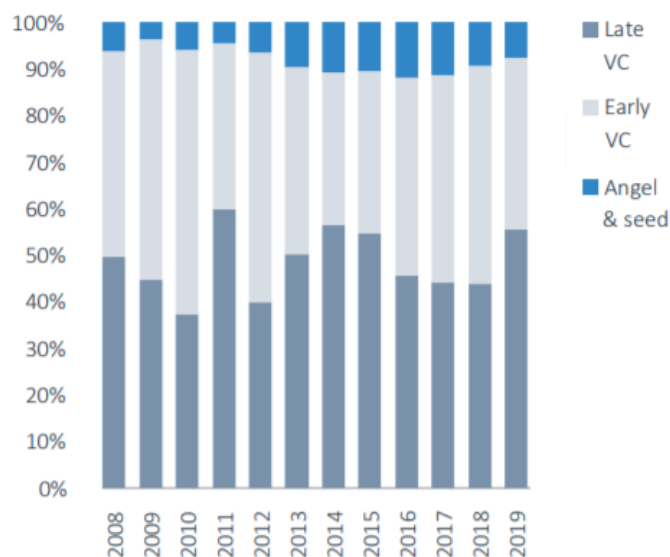


Figure 29: Venture Financing in Europe by Stage

The total value of deals with CVC participation is increased continuously for the eighth consecutive year with reaching a new annual record at €15.5 billion in 2019 (Fig. 30) and software deals accounts for 38.2% of the total deals. CVCs are mostly interested in rounds above €25 million, with half of all €25 million and above VC deals containing a CVC. Corporates now prefer to invest more in startups, as sinking capital into R&D and creating new divisions could have existing core strategies and balance sheet performance. In 2019, CVC involvement in all VC deals rose to a new high of one in five. Joining larger VC round for the potential innovation and return on offer remains as the emphasis for CVC investors. This approach shows how quickly companies can turn towards VC buy-side activities in order to keep new startups in their own space.

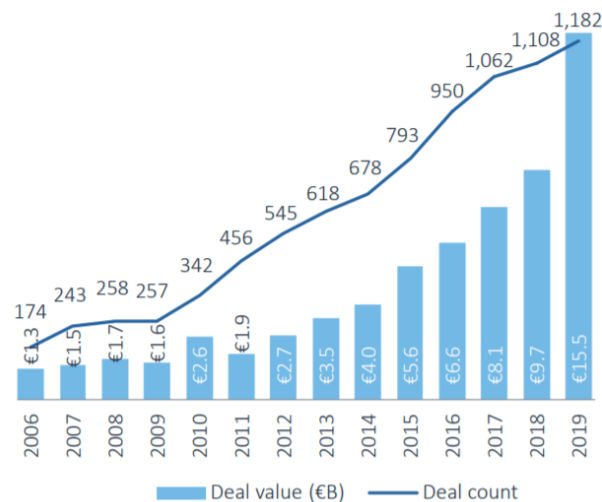


Figure 30: CVC European Deal Activity

4.3 Sector Activity

‘Software is eating the world’ is a famous saying of Marc Andreessen, co-founder of Netscape which is actually as snapshot of what present looks like. Over the past few years, there has been a rapid acceleration in software technology which has revolutionized and changed dynamics of many traditional industries. The number of closed deals in software industry accounts for %39 and the investment accounts for %44 of the total European VC market (Fig. 31).

Software deals, especially involving food delivery-based solutions, are featured during 2019 as intense competition, outlier rounds and sizable exits. 2019 showed that European startups are getting beter at their international pulling power. Deliveroo’s € 519.7 million round financed by Amazon was the second largest deal of the year. As SaaS and cloud software companies continue improving and enlarging their services, that numbers will probably increase in the upcoming years. Fintech innovation due to the disruption of financial services is among the most significant trends in the world. Besides changing how banks operate, startups are also bringing the financial areas that have been left untouched for decades into the light. London becomes a global fintech startup hub, led by companies Funding Circle and TransferWise.

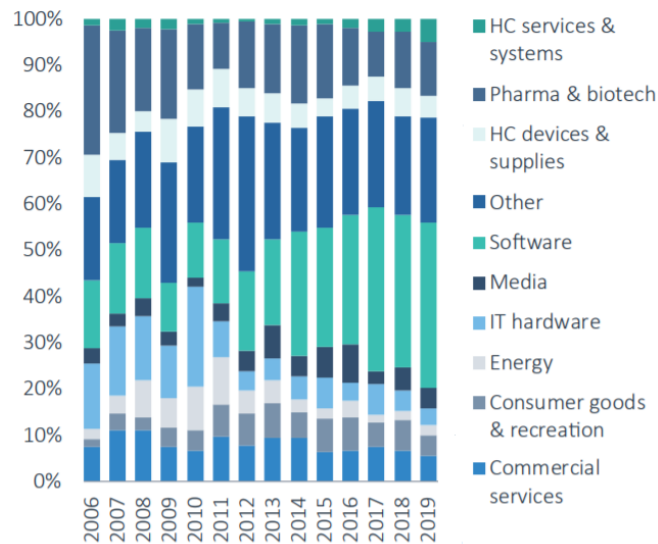


Figure 31: European VC deals(€) by sector

During the last decade, healthcare VC activity has ballooned. Healthcare startups had a record value of €7.2 billion from investors in 2019 (Fig. 32). Before the COVID-19 pandemic, the healthcare deal activity was expected to reduce as recessions arrive on the scene. However, the rapid evolution of healthcare services have the pandemic could accelerate the fast growth in startups focusing on telemedicine services.

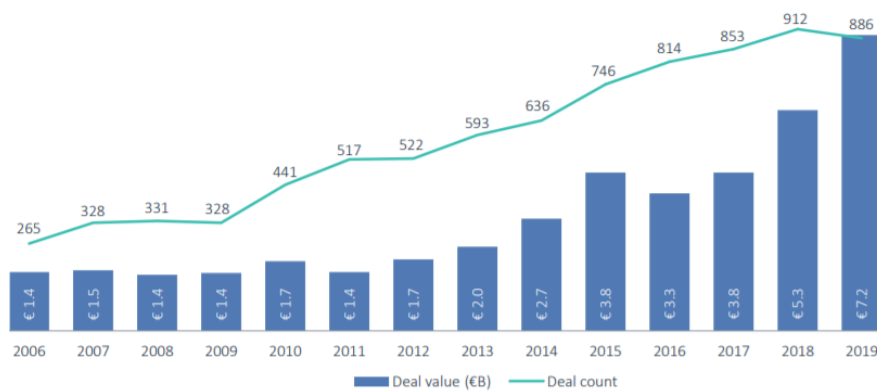


Figure 32: VC-backed Healthtech Deal Activity in Europe

4.4 Exit Activity

Looking towards 2020, there the European VC is representing an optimistic ecosystem. There are over 30 unicorns which most of them approaching to the milestone. In 2019, 32.4% of total exit value is provided by only two unicorns which is an evidence for the importance of creation of an ecosytsem that fits to the development of startups. 2019's exit value amounted to €15.4 billion across 541 liquidity events which is in line with annual figures prior to 2018's record year (€53.4 billion across 538) (Fig. 33). The current European VC conditions is promising for a healthy venture activity in the coming years. It is due to the expansion of LPs and the companies which can can remain in the ecosystem without having to exit to raise capital. As a result, the ecosystem is maturing with more valuable companies staying private and completing massive late-stage rounds. The rate at which €1 billion valuations ,which are known as unicorns, are achieved is also decrease in the last decade. Some investors are worried of the overheated market as outsized funds could foster excessive capital into the ecosystem and inflate valuations.

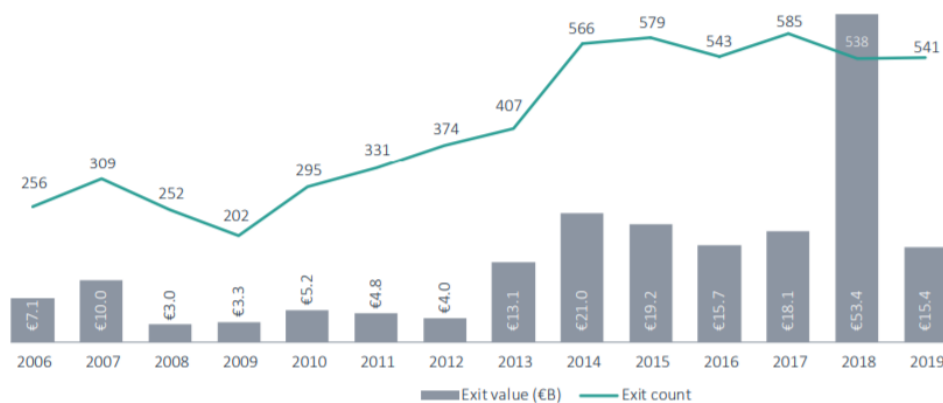


Figure 33: VC-backed Exit Activity in Europe

Segmenting activity out by geography, The DACH region recorded its highest annual VC exit value with €4.8 billion across 69 exits, while the UK had its lowest exit value since 2013 with €2.3 billion (Fig. 34). Prolonged Brexit uncertainty, while not decreasing investors' interest in UK-based startups by any means, appears to have induced hesitancy around liquidating UK-based assets. Vc investors instead preferred for a more pragmatic approach to avoid risk caused by Brexit, the general election and currency fluctuations devaluing the pound.

The IPO of Germany-based company BioNTech, was the largest liquidity event in 2019, with an exit for €2.9 billion pre-money valuation. Fewer shares are sold at a lower price when it is presented as political uncertainty created volatility in public equity markets around the globe. This caused several disappointing or delayed listings of VCbacked companies, especailly in the US. Additionally, the ongoing debate about the path to profitability and market share growth for rapidly developing startups is still on the table.

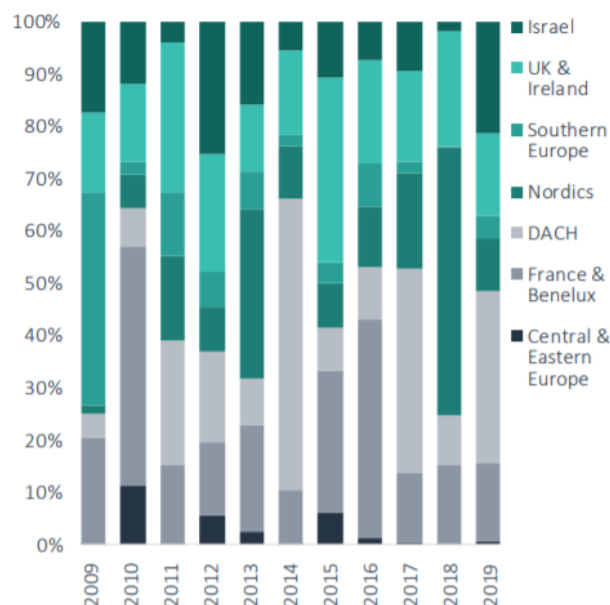


Figure 34: VC-backed Exit Activity in Europe by Region

M&A in European VC market represents an approximately constant trend between 2014-2019 which constitutes the majority of the VC exits. In 2019, IPO reached the lowest level since 2014 (Fig. 35).

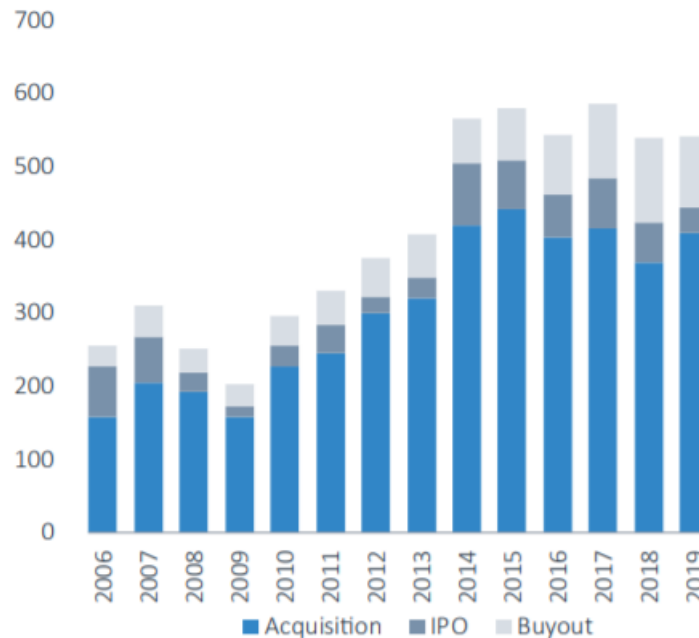


Figure 35: VC Exit Types in Europe

The software industry accounts for 43.0% of all exits in the European VC market and there is an enlarging range of sectors moving towards software platforms for innovation (Fig. 36). One of the largest exits in 2019 was the Partners' acquisition of Finland-based adtech startup Smartly for €200.0 million which helps the automation aspects of online advertising campaigns. The exit is the latest in a longline of software companies disrupting industries using legacy technology. Regulation changes facing digital taxation in the EU and cybersecurity are gainining focus on startups and investors in the VC space.

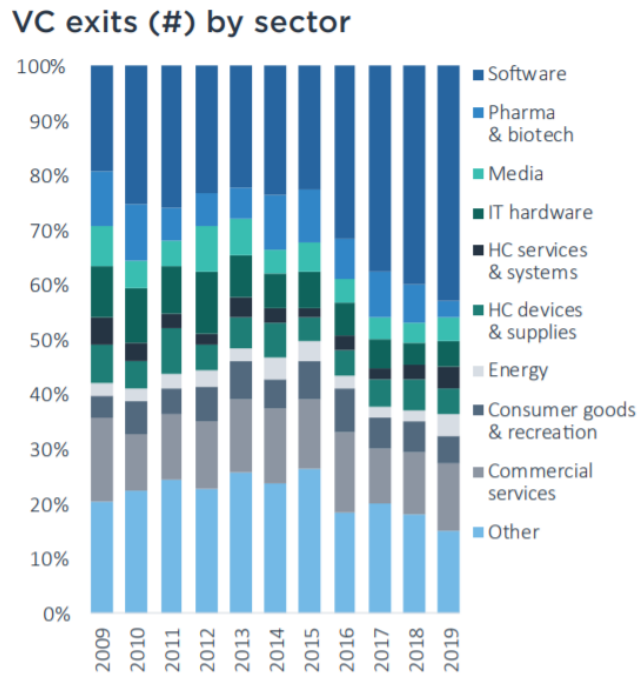


Figure 36: European VC-backed Exits by Sector

4.5 Regional Analysis

According to the 2018 VC investment by country and 2018 number of rounds statistics, UK, Germany, France and Israel are the top four countries that lead the European VC market (Fig. 37). Among these regions, UK is the rising star in developing one of the best VC ecosystems in the world with total investment . In 2019, the total venture capital funding received in the UK is right behind the US and China. In addition, London joined to the top of the world's most funded areas, New York, Bay Area and Beijing with the amount raised by the London-based companies of £7.4bn during 2019.

UK's technology sector gained a faster momentum than the US and China in the investment for the technology sector which leads the country to become a major global tech player. The supportive business environment, geography and language and some of the world's top schools are the main factors for for the growth of its tech sector.

In 2019, British startups received VC funding of a record \$13.2 billion in 2019 with a growth of 44%. Growth in VC investment exceeded 40% for the third year in a row. To put this growth into perspective, investments in France grew by a little over a third compared to 2018, while Israel's investments rose by a fifth. On the other hand, the investment in US and Chinese tech firms is slowed from January to December. US observed a 20% decline and China a steeper fall of 65%. (Fig. 38) However, the US and China still lead the VC market in terms of total deal value by attracting \$116 billion and \$33.5 billion respectively.

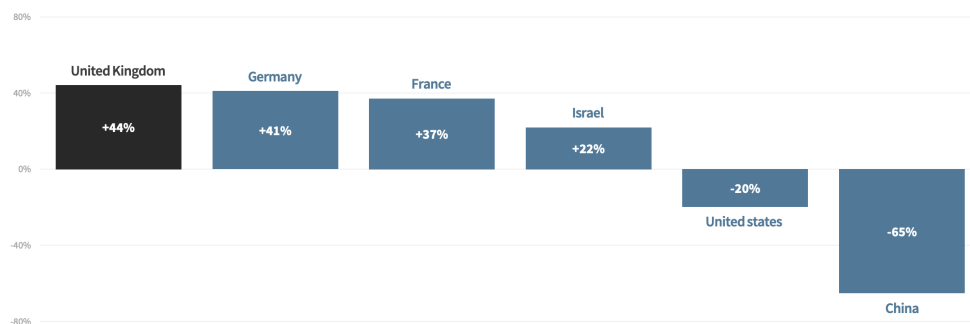


Figure 38: 2018-2019 Percentage Change in VC Investment

The UK has produced more than twice the total number of \$1bn tech companies than any other European country since 2014. 8 of the British companies reached unicorn status which means that UK now created \$77 billion businesses whereas Germany reached a total value of \$32 billion and Israel of \$22billion (Fig.39).

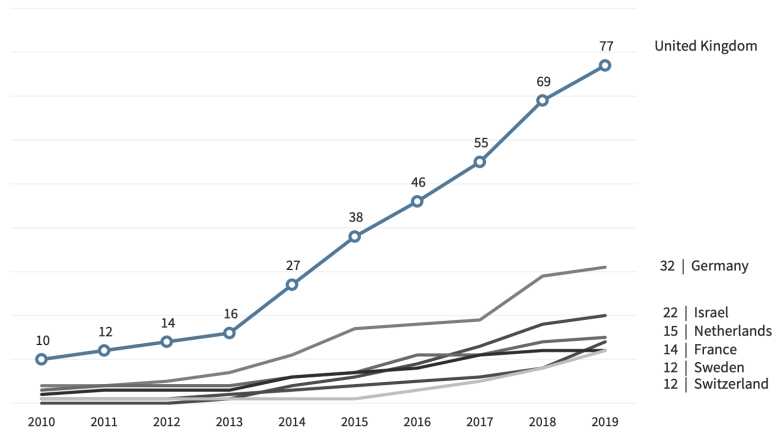


Figure 39 : Cumulative Number of Unicorns Reached

Among the European countries, UK is the by far leader of the VC market in terms of amount raised. During 2019, nearly £30.4billion raised in Europe and Britain accounted for a third of total amount. Germany received VC investment of £5.4 and France received 3.4billion (Fig. 40).

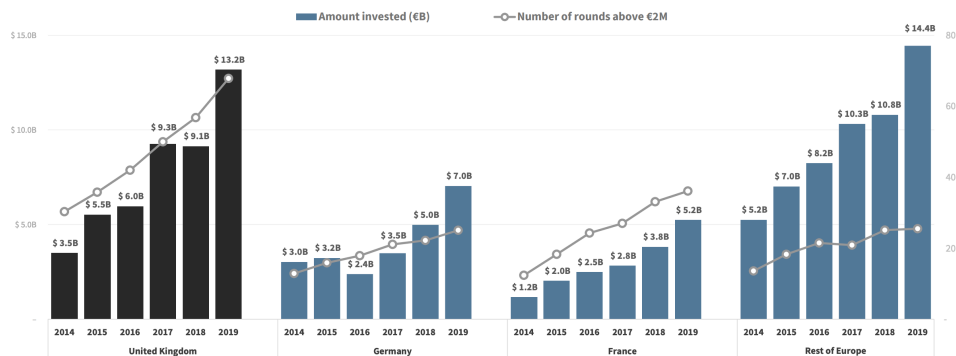


Figure 40: VC Investment Amount and Number of Rounds Above £2 Million

Fintech, AI and deep tech, and clean energy are the most attractive sectors in the European VC industry. Britain has the highest percentage of fintech investment globally, with 30% of its total VC funding directed toward fintech also it has the highest investment in Europe with a value of \$5.3 billion.

Germany is in the second place with the investment of \$1.6 billion and France is in the third place with the investment of \$0.7 billion (Fig. 41).

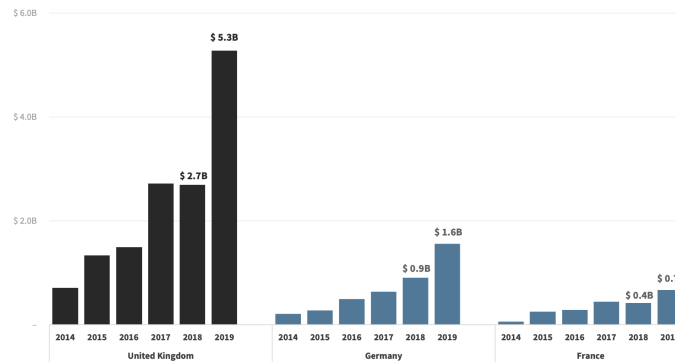


Figure 41: European VC-backed Investment in Fintech by Country (\$ billion)

AI and deep tech is the other key sector in the European VC market. As of 2019, cumulative capital investment since 2015 has surpassed \$10 billion in three European countries UK, Germany, France and more than \$1 billion in a further eleven countries (Fig. 42).

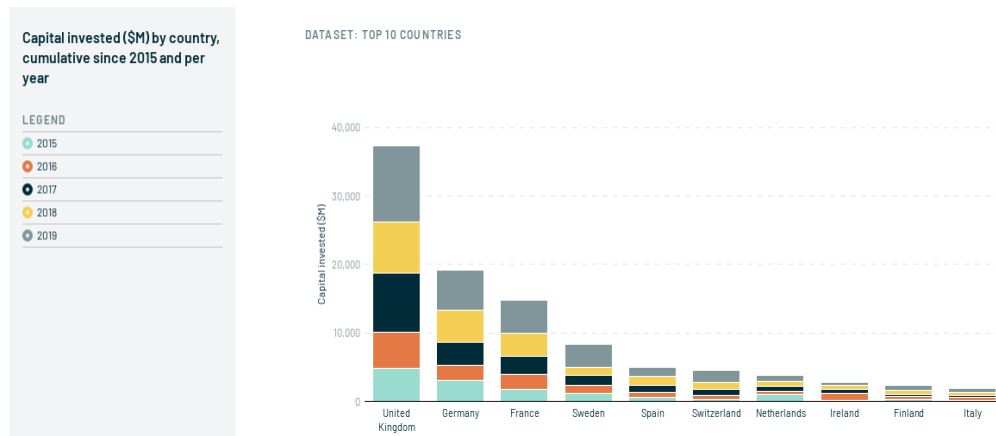


Figure 42: Cumulative European VC Capital Invested to AI&Deep Tech by Country

4.6 Future Trends

After a record-setting 2019, optimism was widespread across the venture ecosystem in Europe. The amount deposited into venture funds was huge and both valuations and round sizes grew rapidly to end up a strong decade. The European VC market was performing as expected in the first two months of 2020. However, the COVID-19 outbreak forced to put Europe's largest economies including Germany, UK, France, Italy and Spain into lockdown. Businesses remained shut down for a while and employees are instructed to work from home as healthcare system were overwhelmed. The outbreak is believed to be the biggest challenge that economies and governments in Europe are facing since the global financial crisis.

The momentum gained in the past decade related to the European VC deal activity is expected to slow down as VC investors behave more economically in response to pandemic-induced crisis. As rounds get riskier, deal terms will likely turn in favor of investors. Thus, the VC activity across fundraising and dealmaking activity will drop in the near. The prolonged impact of the decreasing activity will have a greater prolonged effect in VC-backed exits. Additionally, exits will be delayed in order to decrease the downside valuation risk.

The temporary muted activity for dealmaking and fundraising could cause the successful European startups to face funding they have never experienced before. On the other hand, startups with cash flow issues could become acquisition targets. Startups will need to concentrate on managing existing resources and rather than pursue ambitious growth targets, startups will instead need to focus on managing existing resources and ensure the existing clients for renewals in order to maintain business continuity. Some of the loss-making startups could be pushed out of the business especially for the ones that had

not time to build up capital reserves. Historically, the software startups are saving huge costs by having a single European HQ. Without a resistance from regulatory challenges or physical presence, they are able to expand quickly into the wider European market.

Companies operating a SaaS business model are generally have a more consistent and upfront cash flow to invest into growth which could lead them to survive during the crisis. Food delivery companies such as Deliveroo, Just Eat and Uber Eats have been able to remain open as sit-in restaurants forced to close shop change gears. However, gig economy food delivery players have not seen the surge in demand that many forecasted. Deliveroo orders in the UK have reportedly dropped due to closures of restaurant the rising anxiety due to the risk infection. Restaurant delivery enterprises are pivoting towards groceries. Uber Eats has accelerated its push into the sector by striking an agreement with France-based supermarket Carrefour. In Spain, Uber is uniting with Portugal-based energy group Galp to deliver items from petrol stations. Deliveroo is also diversifying and has launched an “essentials” delivery service across cities in the UK, having already offered items from Marks & Spencer and Co-op stores.

On the other hand, the outbreak is not detrimental to all aspects of VC market and new opportunities are arising. Opportunities could arise for European startups in the healthcare and biotech & pharma sectors. Key equipment including ventilators, PPE and sanitary products face shortages in Europe national healthcare infrastructure in Europe is overwhelmed and the private sector will need to lend support. University College London (UCL) and the Mercedes AMG F1 team designed a breathing aid. Academic research and technological production capabilities are paired by the reverse-engineered design. UCL is a notable VC investor, especially in the healthcare sector. Innovation from a range of VC stakeholders will be at the forefront of



the war against the virus. In the long term, after lessons are taken from the COVID-19 pandemic, future innovation derived from startups could help to prevent such a devastating outbreak occurring again.

5. Rest of The World

Apart from the U.S. and Europe, the other ecosystems, which are Asia, Americas and Africa, are representing VC trends that are correlated with their regional characteristics. As the US continues to remain as the 'home of VC' with widest ecosystem of GPs and LPs and the inability of European VC market to compete with US is still a matter of fact, there are other regions expanding rapidly, most notably Asia and especially China.

5.1. Asia

The total annual VC investment in 2019 was less than the amount of \$126 billion seen in 2018 which was due to the challenges for Asia's market this year. However, some positive outcomes emerged, including the market self-correcting before it became too big of a bubble. Asia-based VC funds are well positioned to maximize their benefit from the rapid pace of innovation in the region. Increasing demand for Asia-focused funds has been a key factor behind the rapid expansion of the global venture capital industry, which in turn achieved a compound annual growth rate of 17% for the past five years. China is the main driving force behind the increasing VC investor attention.

India is another region that contributes to the success of Asian VC ecosystem. In 2019 India was quite strong with several large mega-deals. Fintech continued to be one of India's strongest sectors of VC investment in 2019, a trend expected to continue for the foreseeable future given the country's significant rural and unbanked population and the complexities and challenges associated with building a

traditional financial services company in the country. India also an attractive region for foreign investors especially from the ones in the Silicon Valley. Also, Japan's trading houses are increasingly made VC investments to India. Heading into 2020, companies in India looking to attract attention from VC investors are expected to put more emphasis on reducing their cash flow and providing clear paths to profitability. Investors are likely to focus their investments on companies with strong and sustainable global growth models. Logistics, education, and e-commerce are all expected to remain hot areas of growth.

Hong Kong is a popular region that continues to see some interest from VC investors in 2019. The life sciences sector remains a key area of attention for VC investors in Hong Kong. While companies looking to attract funding in the future might need to lower their expectations in terms of the amounts they will be able to raise, those with strong teams, unique technologies, and clear profitability potential will likely be able to raise funds. While there existed some political uncertainty in Hong Kong, the Hong Kong Stock Exchange led by the secondary listing of Alibaba in November which raised more than \$11 billion.

5.1.1 China

5.1.1.1 Current Venture Capital Market in China

The history of Venture Capital in China began long before than a state with communist underpinnings. In the late 1980s, private investment took off in China thanks to the new programs and reforms launched together to stimulate Chinese economy. China is demonstrated a success in transforming its policy from being factory of the world into an innovative-driven economy. This is occurring with the government's strong financial support to position the country as one of the leading actors of technological innovation.



The ‘Torch Program’ is represents the keystone of that policy which acts like a catalyst for startup investments in China. The main purpose of the program is to develop high technology and maintain industrialization. The program is gathering scientific and technological resources, money and talents through the high-tech industrial development zones across the country. Torch is enabled China’s high-tech revolution by being a critical factor to the growth of large international tech companies such as Lenovo, Alibaba, and Huawei. However, in terms of financial backing, the Torch program generally supported startups which were at a later stage of development. In order to enable the access of early-stage startups to larger investments, the Innovation Fund, known as ‘Innofund’, is established. This initiative provided small and medium tech companies with capital raised from enterprises, investors, local governments and banks.

Chinese technology leaders, known by the acronym BAT (Baidu, Alibaba and Tencent), providing extensive range of services that include every segment of daily-life activities. Even though all three companies started with a singular business objective, these tech firms have successful platform strategies that enables them to extend into nearly all sectors of the internet. BAT has a key role in the growth and maturity of the Chinese VC ecosystem that command significant sway in the Chinese VC and the economy with the expansive platform-based strategies (Fig. 43).

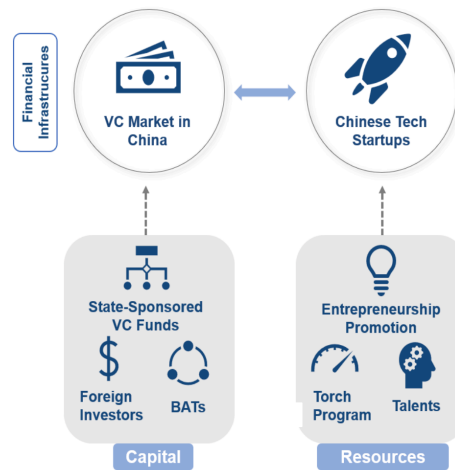


Figure 43: VC Mechanism in China

According to the report released by the Global Innovation Index (GII), China is closing the gap with other highly innovation-skilled countries such as the United States and Germany. The country leapfrogged from the 26th place in 2016 to the 14th in 2019.

2018 was the climax of the Venture Capital (VC) market in China in terms of deal value with 215 billion. 2018's forecasts about the Venture Capital market in China were still predicting the trend to keep its growth pace towards more deals backing the Chinese startups. However, after five years of exponential growth, the trend is now reversing. 2019 witnessed a dramatic decline with only USD 114 billion closed across 4,389 deals (Fig. 44).

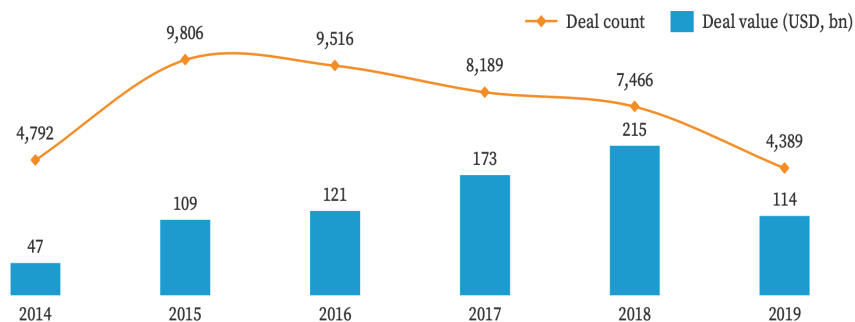


Figure 44: VC Deal Activity in China

Activity in the country is cooled from its glowing years from 2015 to 2018. . The median deal size has hit the record USD 15 million in 2015, which dropped back to USD 8.6 million in 2019. The average deal size has been showing an exceptional growth since 2016, with a bit drop in 2019 (Fig. 45).

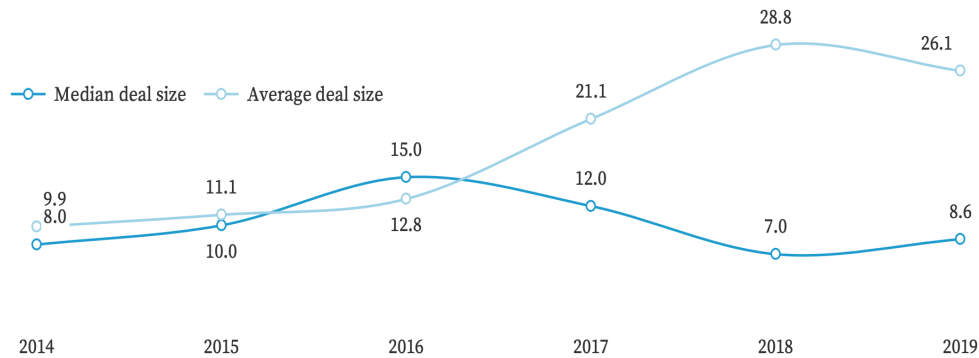


Figure 45: Median and Average of Deal Activity in China

Although 2018 set the expectations of the investors very high, the results did not come up to the desired outcomes in 2019. Additionally, poor post-IPO performances of several Chinese tech companies lowered investor's confidence. However, this is not due to the depressed VC market or to the shortage of money, but rather that investors are more critical and selective. Early-stage startups were hit the hardest which is an evidence that investors are more risk-averse.

The slowdown in the Chinese economy and trade war also affected VC investments in China. In 2019, the U.S. government blacklisted several Chinese tech companies. Trade war limited exit options for Chinese startups as the U.S. remains a hot choice for them.

From an industry perspective, healthtech, life sciences and pharmaceuticals gained attention from VC investors as the Chinese government moved forward with healthcare reforms. These reforms include plans to fast track approval of foreign drugs, improve access of

patients that need care and better manage drug pricing. On the sector side, there is less interest in platform companies and increasing VC investor interest in companies focused on AI, B2B services, deep technology and 5G. B2B services are particularly centered around financial services.

VCs investing on China are changing their business models from funding early-stage customer acquisition into funding ventures with proven ideas, market, and profitability. The trend is forced new ventures looking for early-stage funding to provide a profitability within 12 to 18 months. Unit economics, which means cost and revenue associated with the business model, is started to be discussed early in the process, something that had no significant value five years ago. These changes in valuation metrics is opening a new era where late-stage deals are prioritized the companies with strong business models and cash flows provide profitability.

5.1.1.2 Future of Venture Capital Market in China

The Coronavirus Crisis pushed the ongoing trend towards further caution, teams are more focused on existing assets and redirecting their cash to portfolio companies to ensure their survival rather than investing in new deals.

The first contraction of China's economy is observed in more than forty years in the first quarter of 2020. According to data published by the National Bureau of Statistics, on April 17 2020, the GDP is decreased by 6.8 % compared to the first quarter of 2019.

More than 20 provinces' government worked with tech companies to build epidemic prevention system. The reports helped to retain During the epidemic, more than 20 provinces' governments worked with

technology companies to build ‘epidemic prevention system’. The reports composed through that system enabled to see the related data, take the epidemic feedback and isolate cases by quickly detecting them. The cooperation between government and big data platforms is deriving more technology innovation. Also, in order to cope with the new order after the epidemic, Chinese people started to use more of big data tools in their daily lives which speeds up the process of digital life.

The most important sector that is promoted by the epidemic is the artificial intelligence products in public safety and medical areas. For instance, in order to increase the efficiency of the diagnosis for COVID-19, Beijing Haidian hospital is using an AI assisted diagnosis system that can process 300 chest X-ray in 10 seconds. Additionally, the food delivery industry is also threatened by the risk of human-to-human contact. In order to prevent the possible infection, therefore, autonomous delivery robots are launched during the Coronaviurs outbreak. Besides, the AI medical robots started working in Wuhan’s hospitals to help doctors and nurses with disinfection, cleaning and delivering medicine.

The COVID-19 outbreak changed the Chinese consumers’ habits. During the epidemic, more than 70% of the Chinese tried for the first time at least one new service. Online learning and remote working apps are the most tried ones, followed by online diagnosis and live streaming. 73.6% of people states that they will continue to use the apps after the epidemic which is promising for a strong growth. Particularly online learning is gaining a lot of attention. As an example for that, Chinese online education startup Yuanfuado raised \$1 billion (Fig. 46).



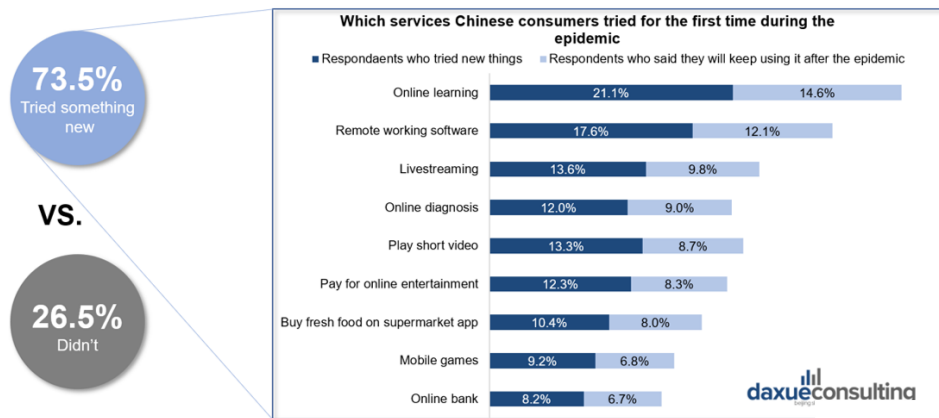


Figure 46: Services Chinese Consumers Tried For the First Time During the Epidemic

As a post Coronavirus affect on stratup investments in China, Corporate Venture Capital, BATs' funds being the largest ones on the Chinese VC market, will take the opportunity to close exclusive deals. CVCs in China have a longer-perspective in their investments and the cash available to look at current deals. Therefore, they will able to restart bargaing at low prices by being one of the only financing source to the Chinese startups. However, the total expectation about the VC market in China is the reinforcement of 2019 trend after the crisis: investors in China will be even more cautious, taking distance with cash-burning business models and being more active in their portfolio management companies.

5.2 Latin America

The VC funding in the Latin America is more than doubled to a record \$4.6 billion in 2019 compared to nearly \$2 billion in 2018. That number is over 900 percent higher than the \$500 million invested in 2016 (Fig. 47). SoftBank Group Corporation (SBG) is the main reason behind that surge which provide a SoftBank Innovation Fund for a \$ 5 billion. The fund is described as the largest-ever technology fund focused exclusively on the fast-growing Latin American market. In terms of

fundraising, 2019 is also a record year in Latin America in terms of \$1.8 billion is raised across 28 investment vehicles, compared to \$670 million across 30 vehicles in 2018.

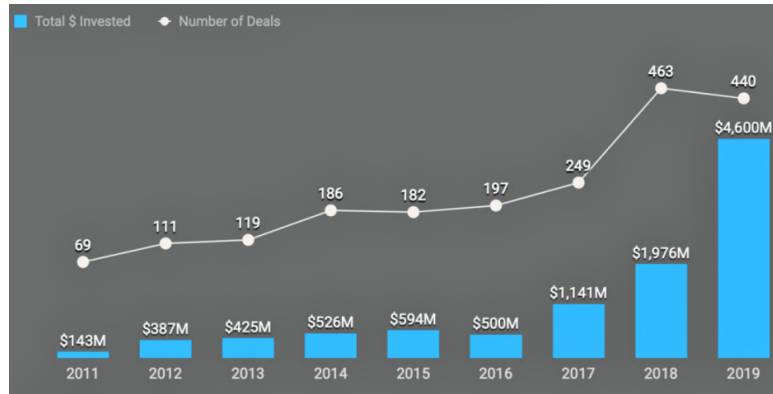


Figure 47: The VC Funding in Latin America

Latin American startup scene is also evolved over the years. In the last few years, there is an acceleration in pace and increase in quality of the founding teams which brings more depth. Recently, co-investments between global and Latin American investors are on the rise. 70% of the total \$4.6 billion is deployed via a co-investment, in which there was more than one investor involved and 37% deployed via a co-investment involves at least one Latin American investor and one global investors. That statistics signal the global cooperation to support startups in Latin America with significant growth capital that was not available in the region before.

Transaction sizes are also enlarging. There were 11 disclosed deals amounting to over \$100 million, and 18 over \$50 million. Historically, Brazil has been the largest recipient of venture dollars in Latin America in 2019; over \$2.49 billion was invested in 222 Brazilian startups, making up nearly 60% of the \$3.4 billion total invested across all of Latin America (Fig. 48). Mexico was the second most active market by

number of deals and dollars raised (100 startup investments totaling \$649 million).

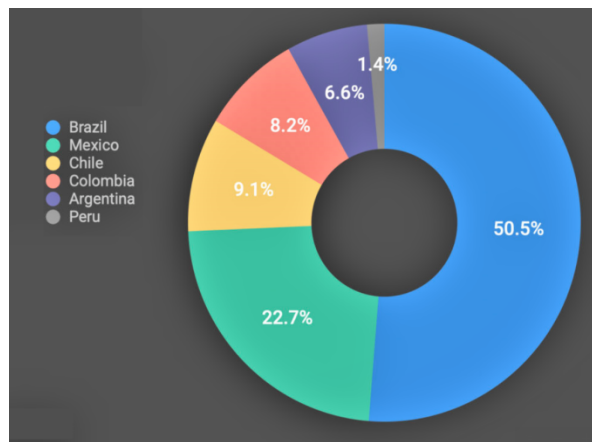


Figure 48: Latin America VC Activity by Country

Fintech maintains its position in top spot as the sector receiving the largest amount of investment dollars in Latin America. Additionally, there is a shift with more money going into logistics and distribution startups (Fig. 49).

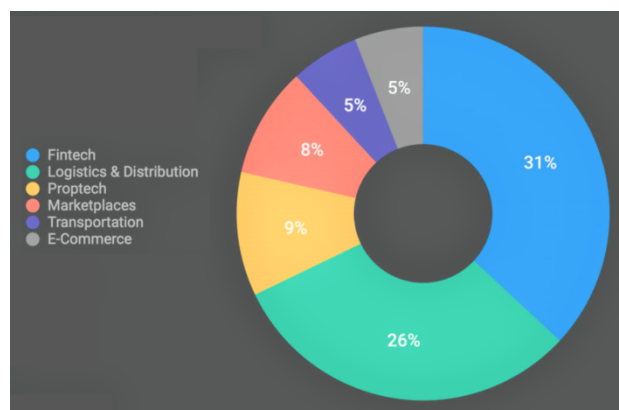


Figure 49: Latin America VC Activity by Sector

5.3 Africa

There is an increasing inflow of venture capital into the African technology ecosystem. In 2019, \$1.3 billion invested to startups operating on the continent (Fig. 45). It's the first time that annual Africa-focused startup funding is crossed the \$1 billion threshold. The rapid emergence and growth of technology ecosystems across the continent, particularly over the past decade. The sizes of funding also getting bigger in 2019 as 26 deals accounts for 83% of total funding raised in 2019.

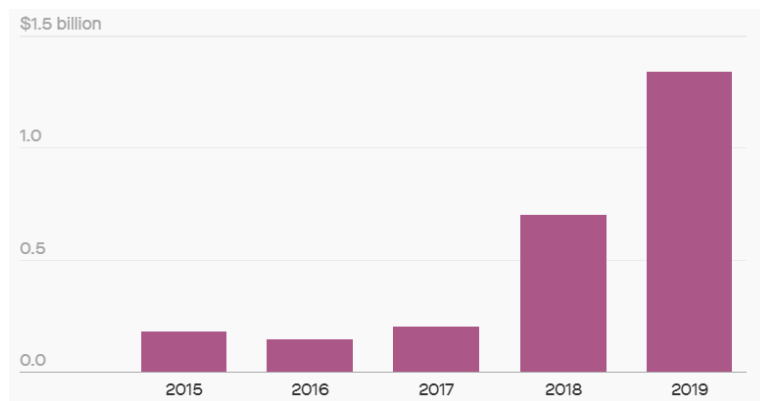


Figure 45: VC Activity in Africa

Nigeria and Kenya are the top startup investment destinations in the continent, jointly accounts for 81.5% of investment received in 2019 (Fig. 46). Nigeria ranked top both for numbers of deals and their value as startup investment received is nearly five times compared to 2018. Elsewhere, Egypt also represents a strong growth with investment more than doubling last year.

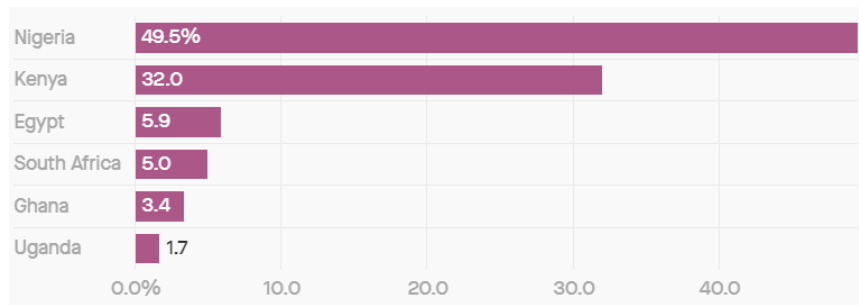


Figure 46: VC Investment in Africa by Country

The bumper rounds are largely recorded in fintech which is the sector dominating startup funding thanks to the sustained interest from international companies supporting African fintech firms (Fig. 47). In November 2019, Visa paid \$200 million for a 20% stake in Nigerian payments processor, Interswitch and make the firm Africa's first fintech unicorn. In addition, new interest emerged from China to the two new payments companies in Nigeria which received over \$210 million funding from Chinese investors.

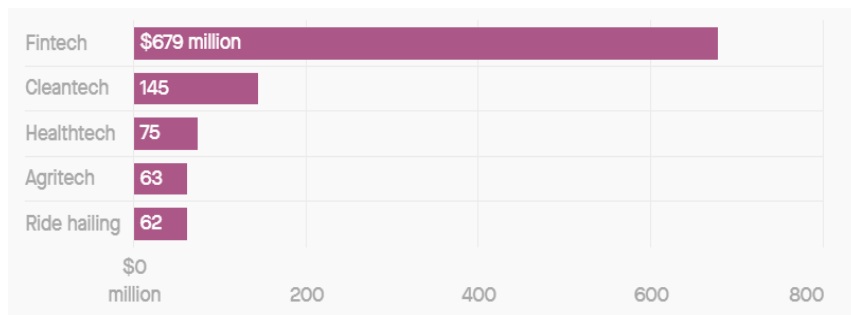


Figure 47: VC Activity in Africa by Sector

6. Conclusion

That paper is examined the fundraising activity, investment activity exit activity and sector activity of the ecosystems in the global venture capital industry. As a result of extensive research process, the United States VC industry, the European VC industry and particularly China as the central hub of VC industry in Asia is particularly discussed more intensively because of their crucial VC performance in the global VC ecosystem. Despite the macroeconomic challenges of recent years, the venture capital market had more momentum than ever before. The annual VC investment remained higher than every other year with \$301 billion in 2019 except 2018 in which the record-setting level of raised capital is observed with \$399 billion.

The United States has the majority of venture capital funds of the total investment and continue to be the longstanding hub of the VC industry. In 2019, the VC funding by the US is amounted to \$116 billion which is the highest in the world. In terms of VC funding by city, Silicon Valley (or known as Bay Area) completed a funding of \$43.5 billion and recorded the highest value among the cities around the globe (Fig. 48). Software and pharma & biotech sector deals are dominated venture capital space. In deal account, the software sector is leader while pharma& biotech is second. The software sector see a record level of capital invested. VC-backed exits shows an exceptionally strong year with the second-highest annual level of the decade behind 2012. The possible impact of COVID-19 outbreak is estimated by the comparison by the reaction of the VC industry after the Great Recession. The sustained investment activity is anticipated due to a common belief that companies formed during a recession end up being some of the most successful. Startups at different stages will be affected differently from the outbreak. Healthcare and biotech expected to be the rising sectors especially the one that focused on

vaccines. However, vaccine market have a drawbacks such as being a capital-intense sector.

Although the fundraising, investment and exit values are representing lower levels than the US and Asia, 2019 was a record-breaking year for VC investment in Europe. In 2019, a total of \$39.8 billion is funded by the European VC companies which is the second highest value among the all countries and the amount exceeds the funding in China. In 2019, the European VC market is largely dominated by four countries, including the United Kingdom, Germany, France and Israel. Despite the growing Brexit uncertainty, UK venture capital market continues to attract significant levels of funding and become the leader in the European VC industry. UK government set specific regulations for the development of frameworks to guide the development and ethical use of Artificial Intelligence (AI). The VC performance of UK in 2019 makes the country to able to compete with the US and China. The percentage change in VC investment of UK reached 44% while the US observed a loss of 20% and China of 65%. France is building its own innovation ecosystem that is based on venture activities in prior years. Especially in recent years, Fintech is particularly hot in France with rounds raised by companies including blockchain and cryptocurrency. The support given by the French Public Investment Bank is leading to significant increase in the number of new funds introduced. Looking forward for the upcoming years, AI, healthtech and biotech, are expected to remain as the popular investment areas. VC investment in Germany follows a broader European trends including bigger funding rounds and growing investor attention on later-stage deals. The most common deals that investors focus are fintech, blockchain and AI and mobility. Companies become closer to the founder ecosystem by the creation of targeted early-stage and seed funds. The impact of Global Financial Crisis occurred between 2007-2008 on the European VC industry is used

as a relative point to estimate the future trends. The similar results are obtained with the future trends of US VC industry case.

Apart from the US and Europe, the Asian venture capital market is participating to the competition with a remarkable pace. Asia is one of the driving forces behind the global expansion of venture capital market. Asian venture capital funds have the highest amount of median net internal rate of across all stages. However, due to the less established structure of Asian venture capital industry, the risk of investment is higher than the more developed markets in the world. In 2013, the US's share of global venture capital investors was 55%, whereas in 2019 it is decreased to 50%. China is evolved rapidly into an attractive hub for ventures in recent years and therefore, make the region to be the leading actor in the expansion of Asian venture capital market. 2018 was an exceptional year for Chinese VC industry. However, especially the trade war between the US-China caused an overall decline in the market. From an industry perspective, healthtech, life sciences and pharmaceuticals gained attention from VC investors as the Chinese government moved forward with healthcare reforms. Additionally, the VC investment is shifting from early-stage into funding ventures with proven ideas, market, and profitability. The impact of COVID-19 can be observed more clearly in VC industry in China. On the basis of sectors, AI plays the most active role during the crisis. Autonomous delivery robots are working in the food delivery sector AI medical robots started working in Wuhan's hospitals. The studies conducted in China that the habits of Chinese consumers is changing. During the epidemic, more than 70% of the Chinese tried for the first time at least one new service. Online learning and remote working apps are the most tried ones, followed by online diagnosis and live streaming.

In the recent years, Latin America and Africa VCs are the standout emerging regions which are receiving billion dollars of funds all over the world including the high tech enterprises in Silicon Valley and top league VC companies. Particularly in Latin America new norm is becoming as the multibillion-dollar activity. With the economic improvements and capital ready to be deployed, these emerging ecosystems will continue to attract venture capital.

Glossary

Benelux: Benelux is an economic union in Western Europe. It includes Belgium, the Netherlands and Luxembourg.

Central and Eastern Europe: Central and Eastern European Countries (CEECs) is an OECD term for the group of countries comprising Albania, Bulgaria, Croatia, the Czech Republic, Hungary, Poland, Romania, the Slovak Republic, Slovenia, and the three Baltic States: Estonia, Latvia and Lithuania.

CVC: Corporate venture capital (CVC) is the investment of corporate funds directly in external startup companies.

Dry powder: Dry powder is a slang term referring to marketable securities that are highly liquid and considered cash-like. Dry powder can also refer to cash reserves kept on hand by a company, venture capital firm or individual to cover future obligations, purchase assets or make acquisitions.

EIF: The European Investment Fund (EIF), is a European Union agency for the provision of finance to SMEs.

Financing Rounds: In order to get next stage or milestone, startups needed to raise more capital. Financing rounds represent each of these raises.

Forbes Midas List: The annual ranking by Forbes magazine of the best dealmakers in high-tech and life science venture capital.

Fund-of-funds: A pooled investment fund that invests in other funds rather than investing directly.

DACH region: DACH region in Europe includes the countries Austria, Germany, and Switzerland.

Internet of Things (IoT): The Internet of things (IoT) is a system of interrelated computing devices, mechanical and digital machines provided with unique identifiers (UIDs) and the ability to transfer data over a network without requiring human-to-human or human-to-computer interaction.

Nordics: The region consists of Denmark, Norway, Sweden, Finland, and Iceland, as well as the Faroe Islands, Greenland, and Åland.

SaaS: Software as a service (is a software licensing and delivery model in which software is licensed on a subscription basis and is centrally hosted.

Tech bubble: Tech bubble refers to a pronounced and unsustainable market rise attributed to increased speculation in technology stocks. Rapid share price growth and high valuations based on standard metrics, such as price/earnings ratio or price/sales, normally characterize a tech bubble.

TOP 25 VC-BACKED EXITS OF ALL TIME

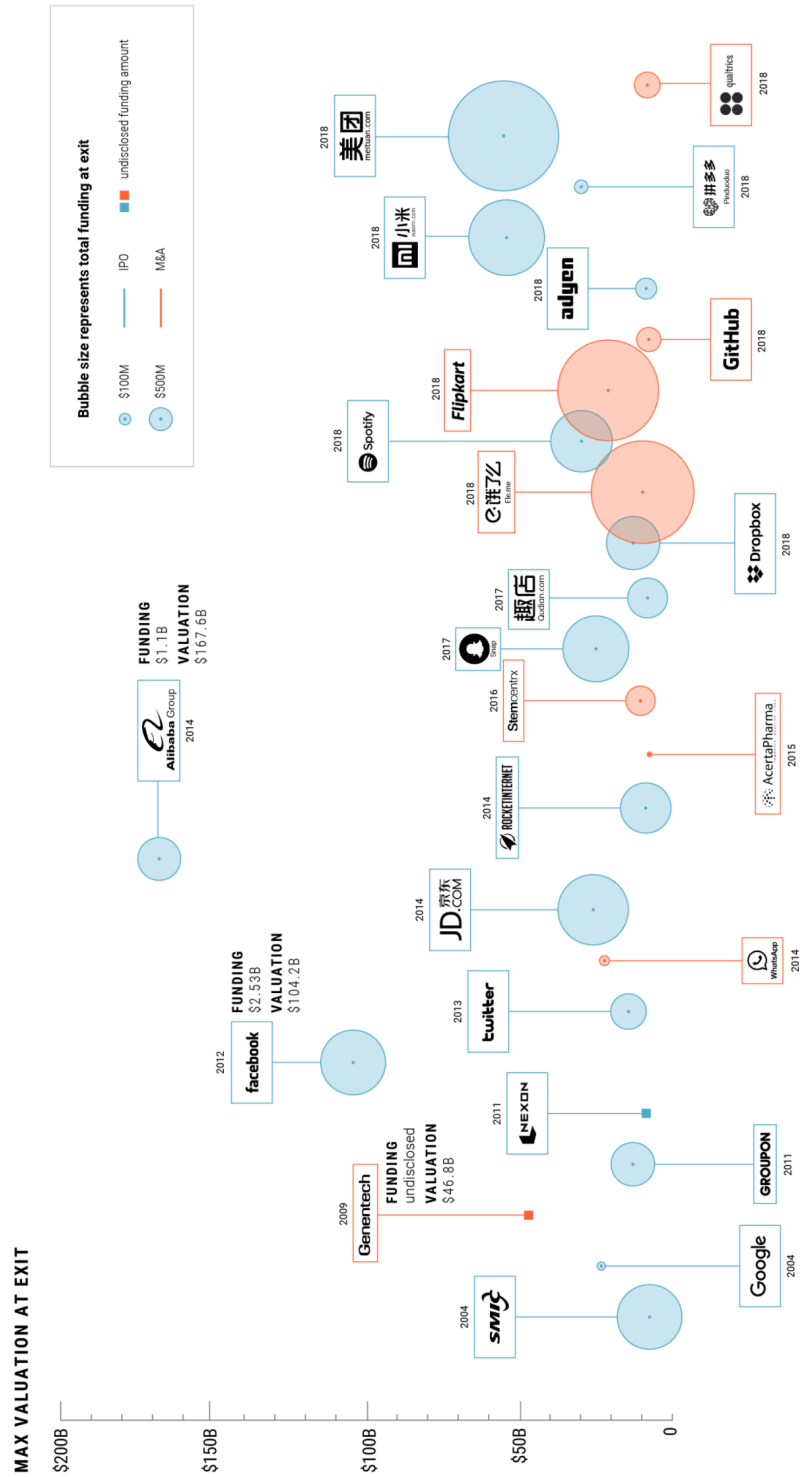


Figure 4: Top 25 VC-Backed Exits of All Time

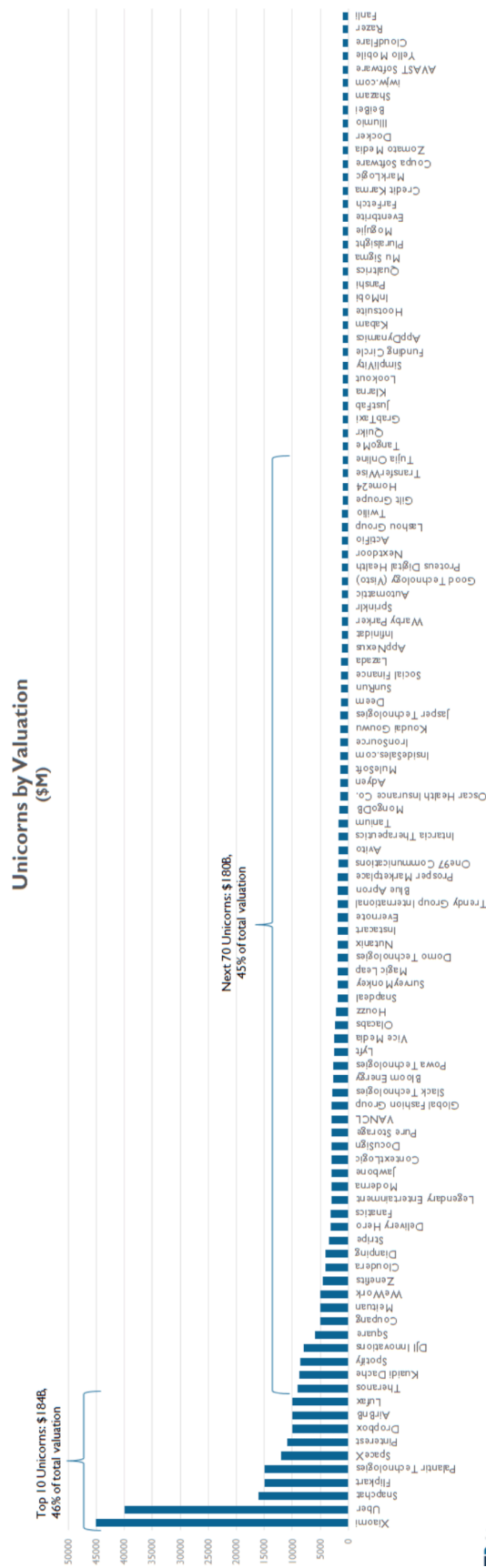


Figure 5: Unicorns by Valuation in 2019

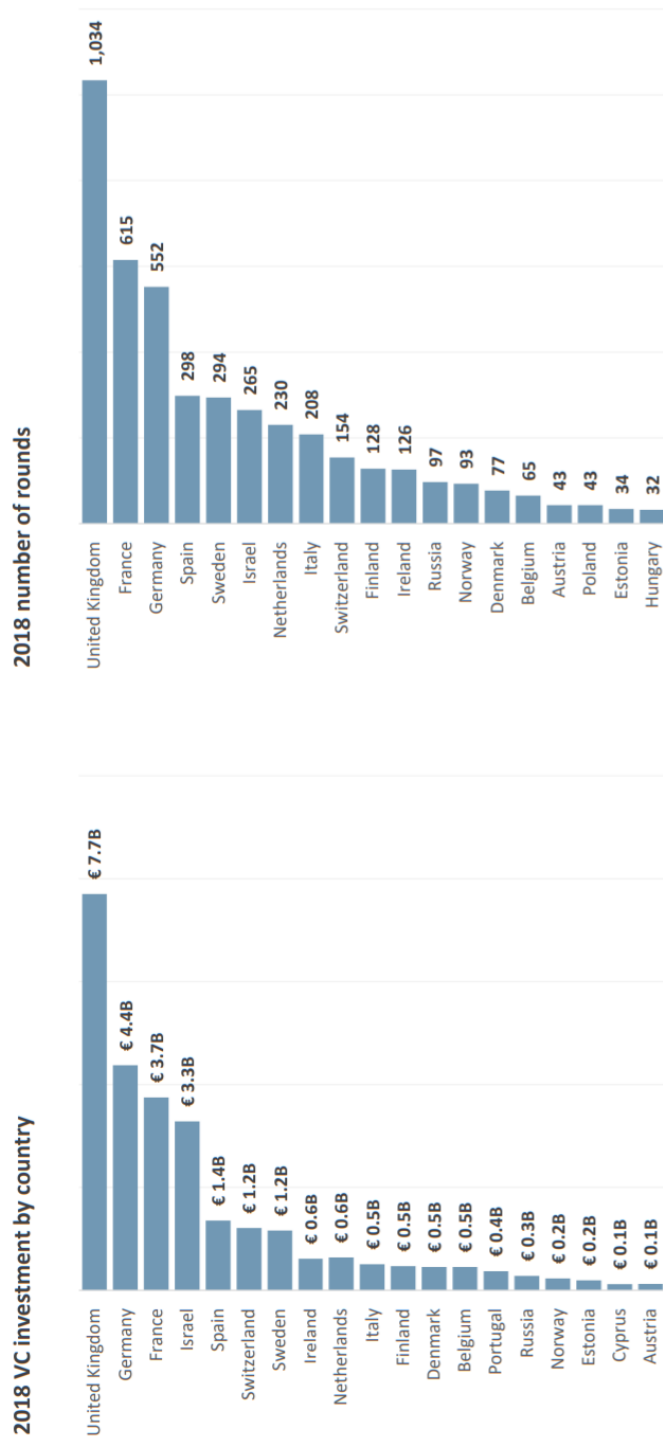


Figure 37: European VC Investment by Country

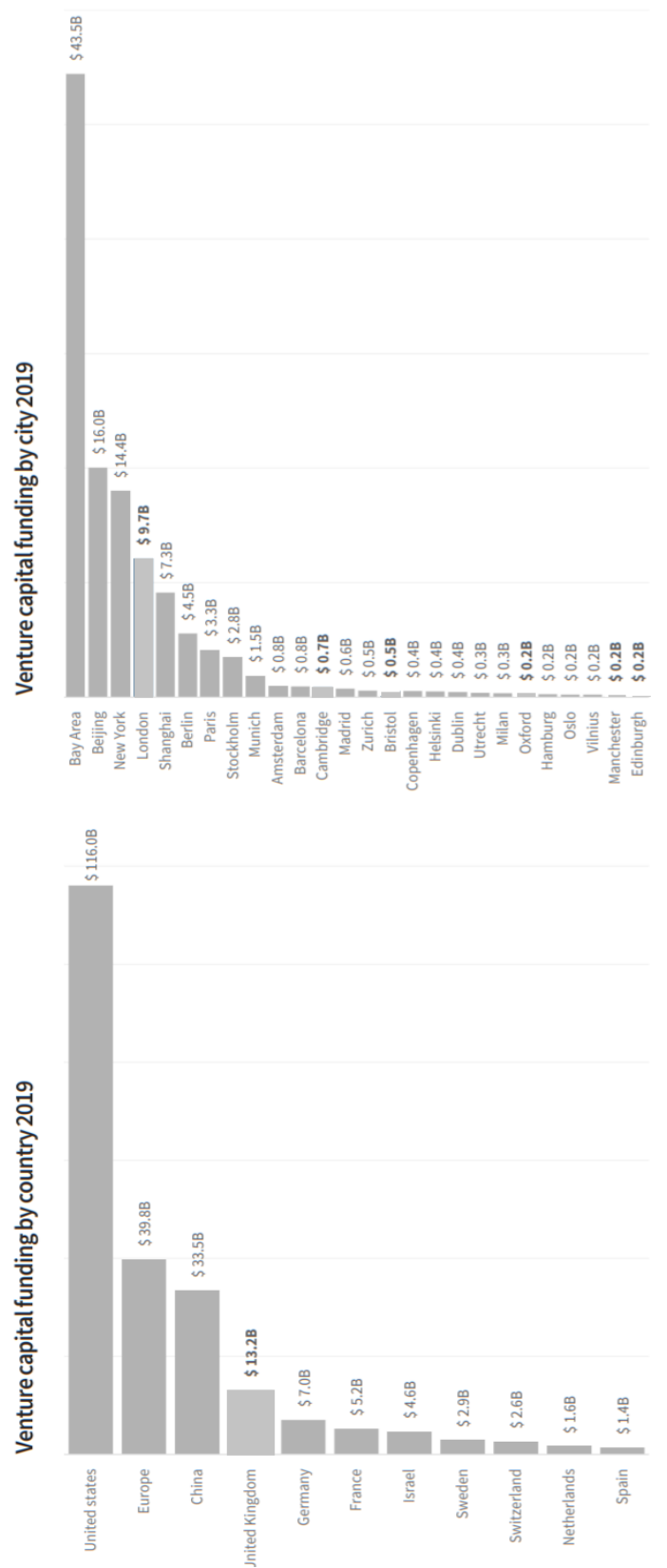


Figure 48: Venture Capital Funding in 2019



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