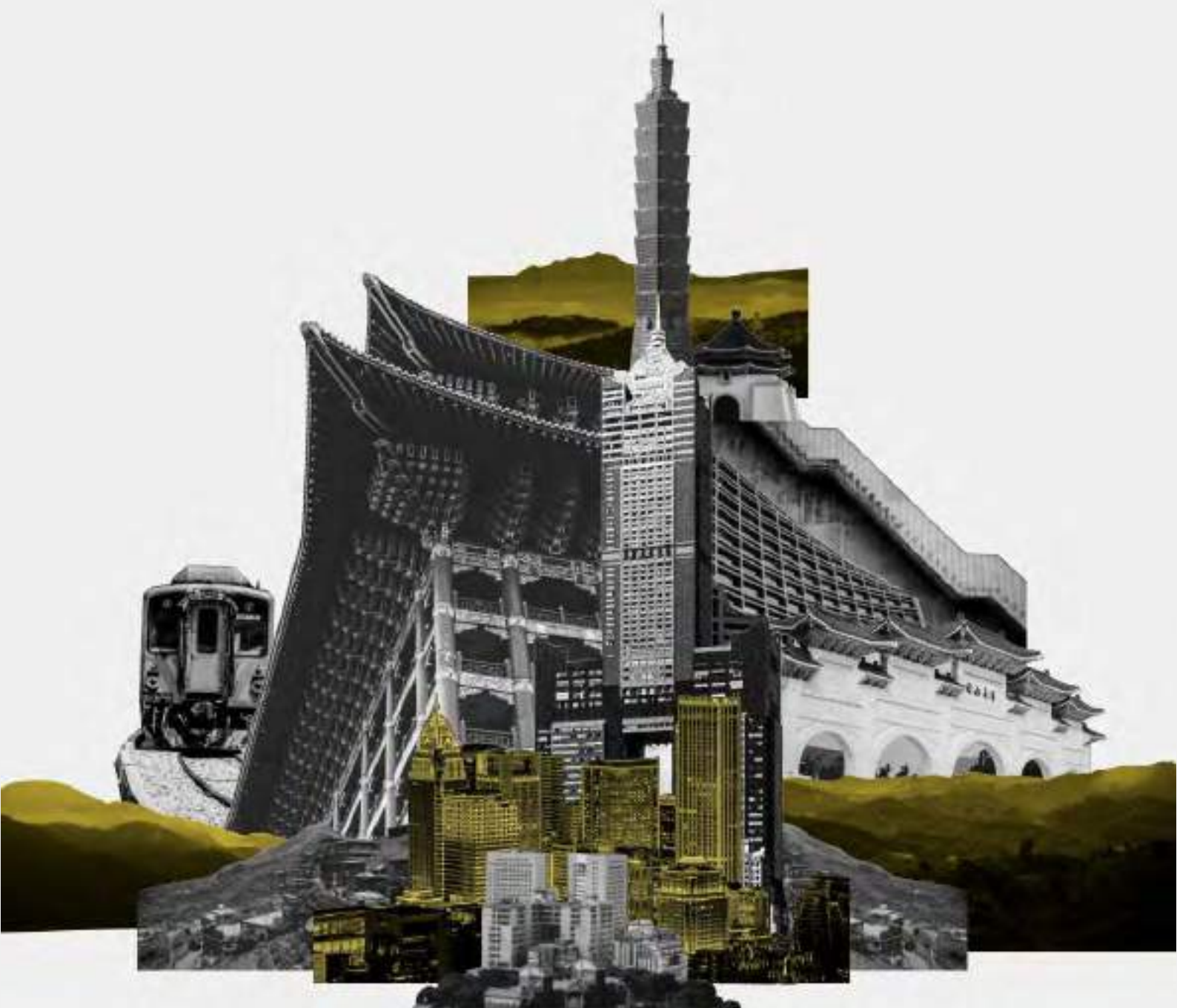


2020 TAIWAN STARTUP INVESTMENT SCENE REPORT

Latest Trends of Early Stage Startup Investments in Taiwan



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Editor's Note

This report⁽¹⁾ was originally written by the FINDIT team of the Taiwan Institute of Economic Research (TIER), then edited into an English version by Taiwan Startup Stadium (TSS), in hopes of shedding light on the latest trends of the Taiwan investment scene. FINDIT's mission is to integrate and provide valuable information related to innovative entrepreneurship and market, such as early-stage investment market dynamics, perspectives on the startup ecosystem, and latest ideas on technologies and media.

Founded in 2015 and funded by Taiwan's National Development Council (NDC), TSS' main mission is to help Taiwanese startups grow and scale to world-class tech businesses by bridging innovation thought leaders, potential investors, and other resources necessary to become successful. We serve startups through a free membership program called "Starting Lineup X (SLX)", offering educational content and workshops, investor and mentor match-making, and many more resources that help startups grow. Currently, TSS has 220+ startup members across different industry verticals.

The purpose of this report is to share the data and findings on Taiwan's startup investment scene. We will be covering investment trends happening in Taiwan for the past few years along with some analysis and comments, followed by further data collected from our internal SLX database. We hope that after reading this report, you will gain more interest in the latest trends and deals happening in Taiwan.



Introduction

Both access to early stage funding as well as information regarding venture capital markets are important for a robust startup ecosystem. Taiwan's startup investment scene has always lacked a transparent and aggregate information database. The FINDIT research team has analyzed publicly-recorded companies in Taiwan from 2015 to Q2 of 2020, aiming to establish a more thorough picture of the early stage investment market.

In the past few years, the Taiwanese government has been actively investing numerous resources into building and establishing a robust startup ecosystem while also trying to create a stable and prosperous venture capital market to increase incentive for startup founders and investors. In other words, venture capital plays a key role in nurturing entrepreneurship and new ventures. For investors, it is a necessity to understand and track shifts in the capital market and ever-changing industry trends to scope out new potential investment targets. For startup founders, receiving external investment is a necessity to growing; it is important for founders to know the innovative trends and the characteristics of startups that are receiving funds. All in all, a robust venture capital (VC) market is necessary to spur entrepreneurial growth and create a stable startup ecosystem.

Recently, with more programs connecting the startup communities in Taiwan, enthusiasm and energy have been pouring into the startup ecosystem. We are seeing an increase in the number of startups entering the market and more interest from inves-

tors. With the help from government resources and startup community builders, more talented and innovative startups have been nurtured, spurring investments within the market. Though check sizes have been relatively small compared to markets like that of the United States of America, the number of deals have increased tremendously throughout the years. These startups with international competitiveness have not only become hot commodities between domestic investors, but also are attracting interest from overseas.

Due to the outbreak of COVID-19, investments and deals have slowed down. Comparing the first half of 2019 and 2020, the number of deals and amounts have decreased by 20% and 1.7% respectively. Facing sudden challenges one after another has become a normal practice for startups to grow. However, Taiwan has remained lucky enough to keep COVID-19 at bay, with businesses and startup communities slowly but steadily pushing forward. As a result, we are excited to expect more deals happening in Taiwan in the near future.





Taiwan's Venture Capital Markets

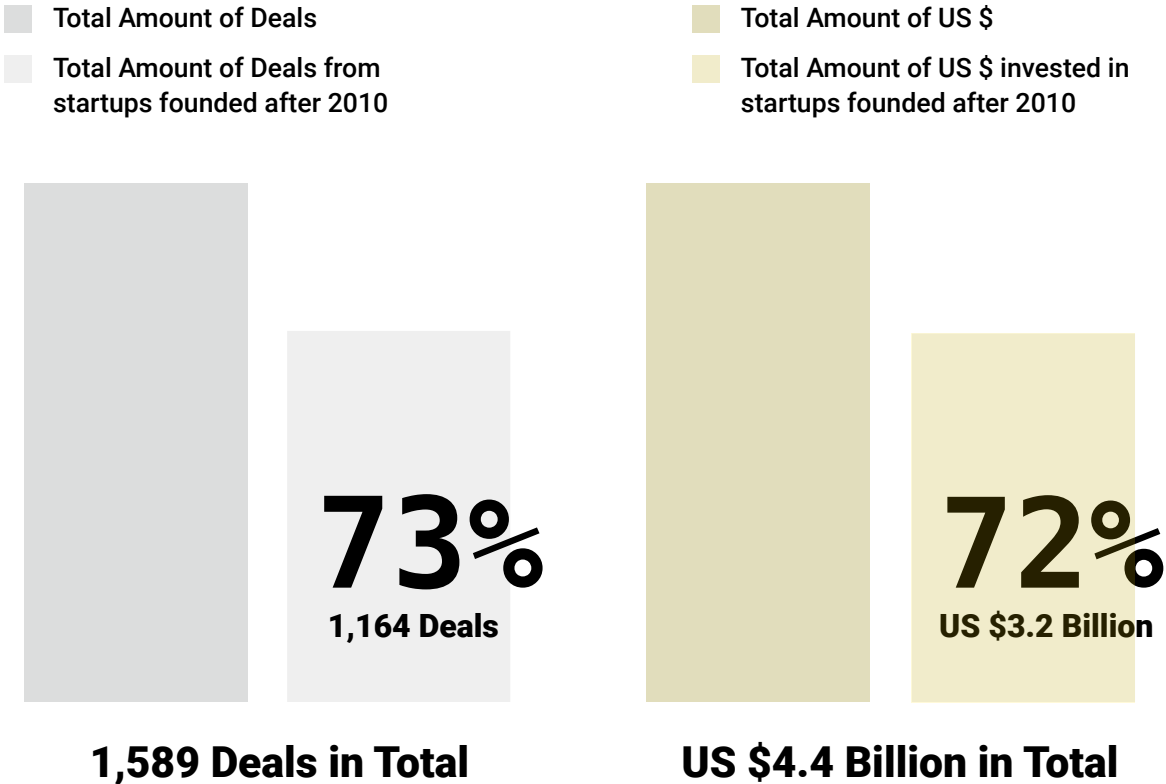
Between 2015 and Q2 of 2020, there are 1,589 early stage investment deals in Taiwan totaling over US \$4.4 Billion, in which 1,164 deals were involved with startups founded after 2010.

During 2018, 207 deals that totaled up to an amount of US \$685 Million were completed in Taiwan. In the following year of 2019, the number of deals increased by 65.2% to 342 deals while the total amount decreased by 2.3% to US \$669 Million.

Affected by the COVID-19 pandemic this year, deals from January to July decreased to 93 with a total amount of US \$231 Million; this number is equivalent to a third of the amount last year. It is estimated that new ventures in 2020 may not reach the extent of 2019.

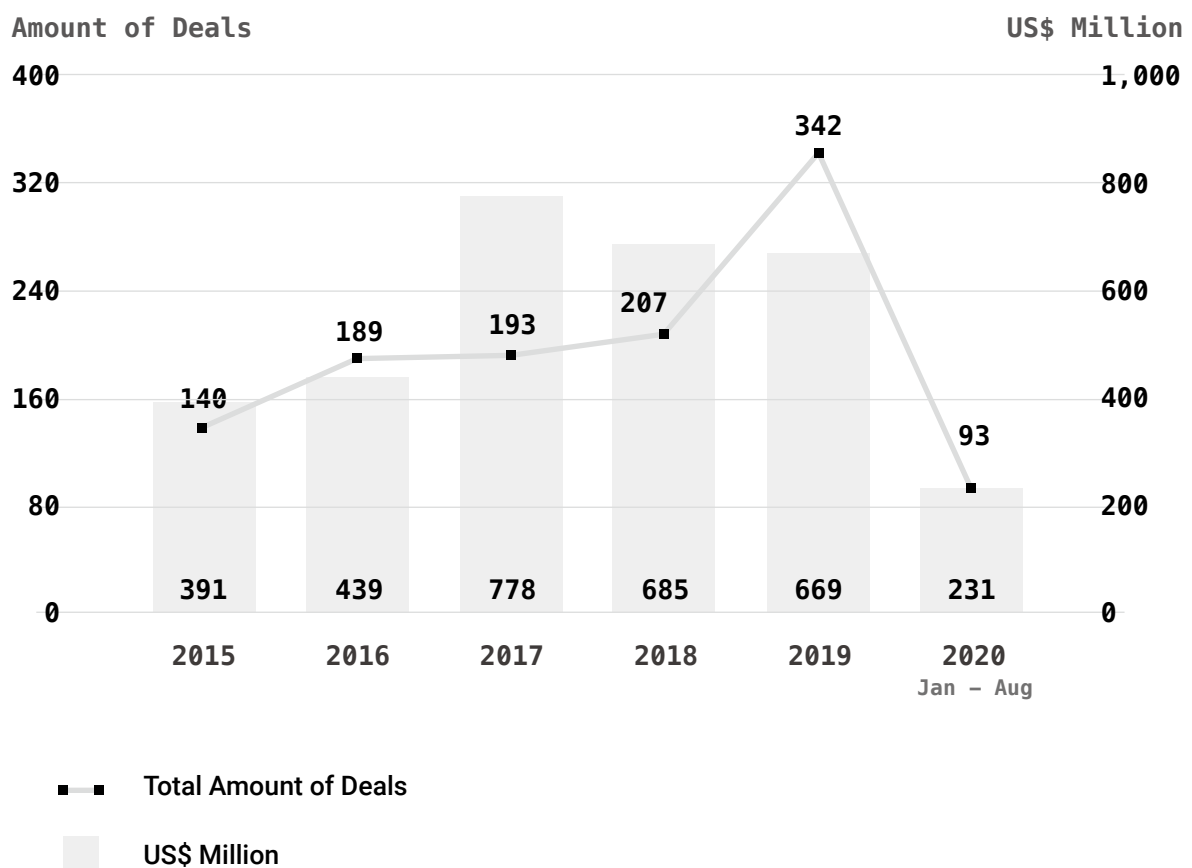
According to the NDC, Appier and Gogoro have grown to become Taiwan's first two unicorn startups in 2019 ^[2].

Over the past 5 years, the FINDIT team of the Taiwan Institute of Economic Research (TIER) has been researching and investigating Taiwan's venture capital markets. After analyzing and cross-referencing data from early-stage startup investment databases, major media reports, public companies' quarterly financial reports, press releases published by startups, investment organizations, and government investment reports, FINDIT has uncovered some interesting data regarding the early stage capital markets of Taiwan. The FINDIT research team has analyzed data from 2015 to Q2 of 2020, aiming to establish a more thorough picture of the early stage venture capital market.



■ From 2015 to Q2 of 2020, there have been 1,589 early stage investment deals totaling up to US \$4.4 Billion. Of the 1,589 deals, 1,164 are deals where the startup was incorporated after 2010. These 1,164 deals totaled US \$3.2 Billion.

In 2015, there were 140 startup investment deals in Taiwan totaling US \$391 Million. Since then, Taiwan has seen a steady growth rate in the amount of capital invested in early stage startups. In fact, by 2019, there were 342 startup investments deals totaling US \$669 million, showing an annual growth rate of 65.2%! However, this year, the amount of investments have dipped to US \$231 million due to COVID-19's hard hit on the market. Also, the large spike in 2017 can be attributed to Gogoro receiving US \$300 Million of investment. If we exclude this large Gogoro deal from 2017, the total annual growth rate from 2017 to 2018 would be 7.2%.



■ The total number of deals and the total amount of money invested in startups per year.
 Note: 2020 only covers January to August.



According to the 2019 Global VC Report by Crunchbase^[3]. Compared with the global market, the amount of early-stage startup investments (both the total amount of money invested as well as the number of investment deals) in Taiwan is roughly around the global average. According to the 2019 MoneyTree Report by PwC and CB Insights^[4], the total number of VC investments globe wide was 15,920, an 11.74% increase compared to 2018. However, these investments amount to a total of US \$111.9 Billion, a 85% drop compared to 2018.

One special aspect about Taiwan's startup ecosystem is government involvement. Growth in recent years can be attributed to Taiwanese government's investment in the startup ecosystem. In fact, in 2017, the NDC started a program through the National Development Fund (NDF), called the Business Angel Investment Program^{[5][6]}. Through this program, NDF aims to establish a sound startup investment mechanism to improve the angel investment environment in Taiwan. Through co-investments in startups alongside angel investors, this 5-year program has already allocated an amount up to \$2 billion NTD, and has made over 130+ startup investments since the program began. Between Q4 of 2014 and Q1 of 2019, the Business Angel Investment Program already comprises 16% of all early-stage startup deals.



04/

Trends In The Taiwan Startup Investment Scene

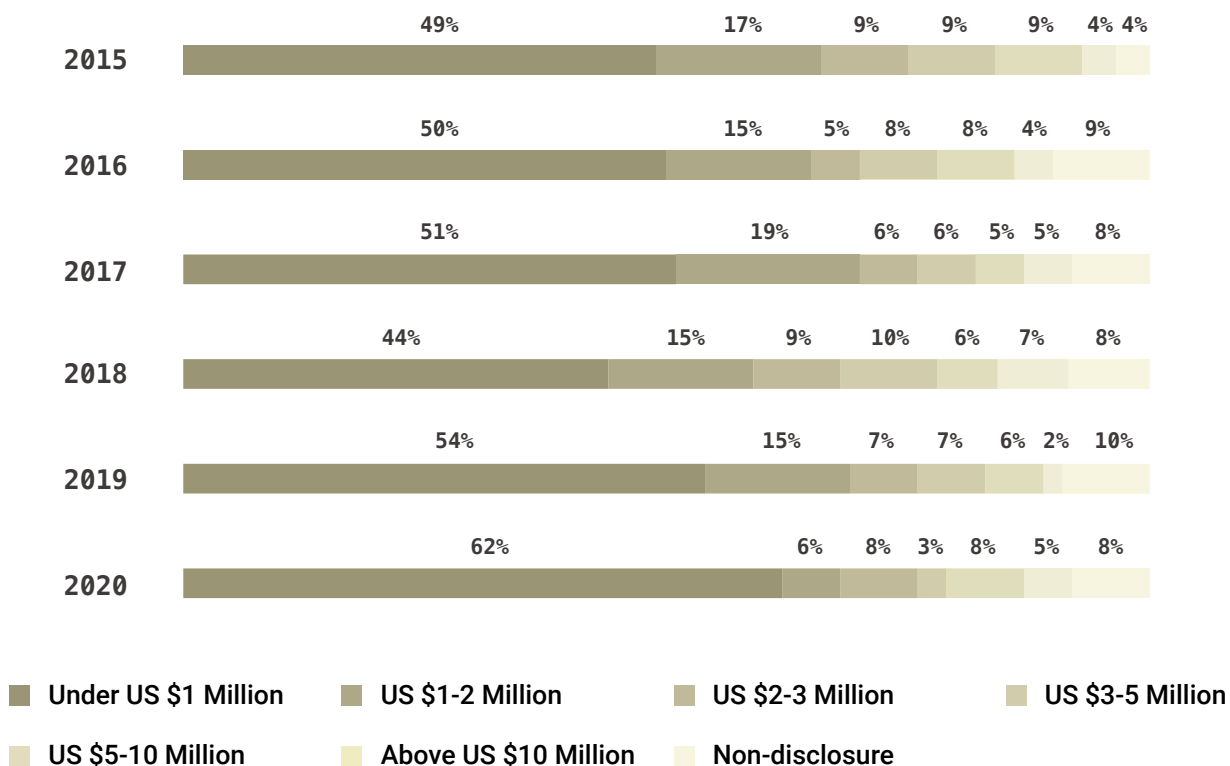
Looking from an investor's perspective, high risk, high reward, and high technological barriers are still the most attractive when looking to invest in Taiwanese startups.

Looking from a startup's perspective, the economics of starting and running a business in Taiwan is lower compared to that of other countries. Investments can typically last a lot longer and give Taiwanese startups enough runway to get to the next milestone. From another standpoint, one of the main reasons why the average scale of deals in Taiwan is lower than the international average is that most businesses in Taiwan still aim at the domestic market as their target market.



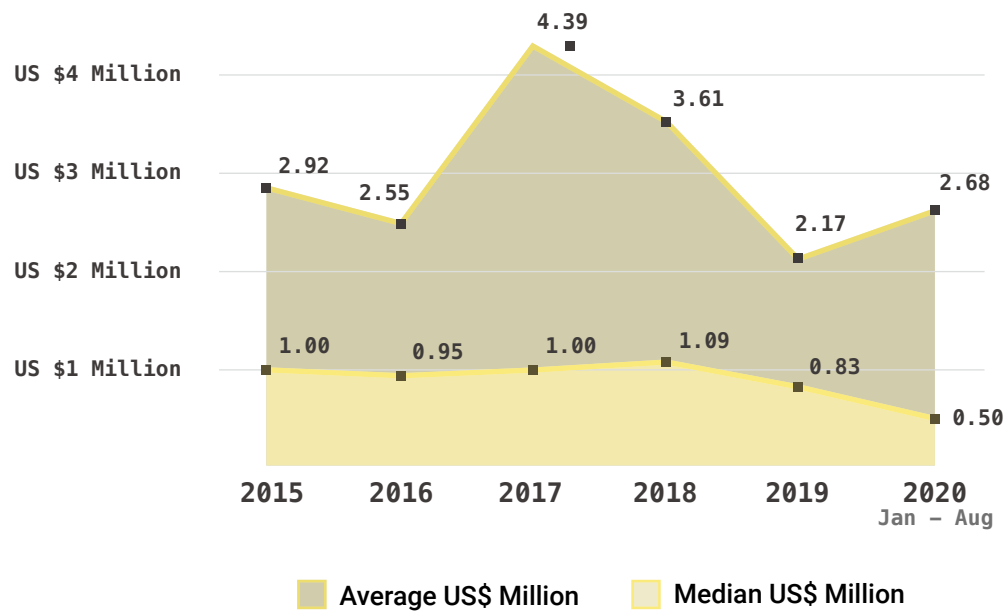
When it comes to investment scales in Taiwan, most investments are under US \$1 million, followed by investments between US \$1 to 2 million. Although there are still transactions above US \$10 million in Taiwan, most of the investment deals are still relatively small compared to the West. According to the Crunchbase 2019 Global VC Report, the global average seed/angel round size in 2019 was US \$1.4 million, with seed/angel round investment deals accounting for 55% of the total startup investments. The global average for Series A investments was US \$15.9 million, accounting for 28% of the total investment deals.

In Taiwan, deals are significantly smaller, but it is also important to keep in mind that the economics of starting and running a business in Taiwan is lower compared to that of other countries. Management fees like paychecks, office rental are relatively cheap. US \$1 Million is more than enough for an average business in Taiwan to sustain itself, and this amount can usually last long enough for Taiwanese startups to get to the next milestone. All that being said, we are seeing investment deals above US \$10 million steadily growing year over year with Gogoro and Appier being announced by the NDC as Taiwan's first two unicorn startups.



■ Percentage breakdown of deals happened in Taiwan by funding amount from 2015 to 2020 Q2.





■ Average and median amount of US\$ within deals happened in Taiwan from 2015 to 2020 Q2.



Taiwan's Top Startup Industries

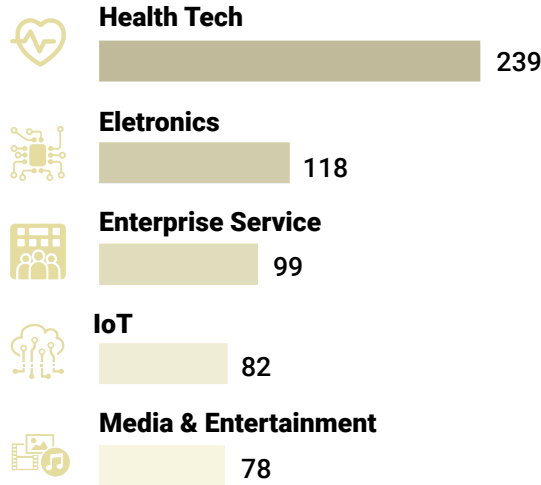


Taiwan's top industries in terms of VC funding received are the healthcare and medical industries. Both of the industries range top in terms of the total amount of money invested and the total number of investment deals. Since 2015, there are 239 cases totaling US \$828 Million being invested in biotechnology, pharmaceuticals, and medical devices. Aside from healthcare, startups that produce electronic components like IC design or communication components also appeal to investors, coming up to 118 cases totaling an amount of US \$295 Million since 2015. Startups that provide software/hardware B2B services like AI integration services, cloud services, or data analysis have also attracted a fair amount of VC funds, totaling up to 99 cases with US \$281 Million since 2015.

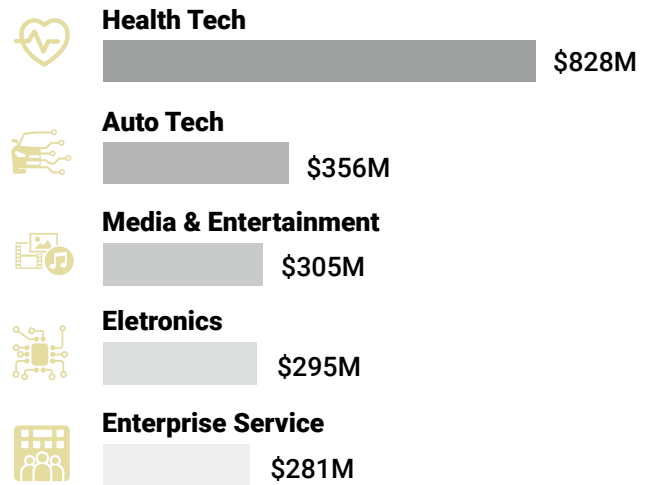
If we look from the scalability standpoint, green energy and IoT startups have scaled tremendously. Green energy startups landed top 3 in 2020's investment cases, with battery energy storage and solar photovoltaic energy being the major focuses.

Investment deals and amount have both increased for IoT startups. For example, indoor positioning systems, surveillance systems, energy management systems, industrial applications, and robots have received decent amounts of interests from VCs.

Deals



Amount



■ The top startup industries in terms of total number of investment deals closed and total funding amount from 2015 to August of 2020.

Health Tech

Taiwan's Health Tech ranked #1 in both the amount of total dollars invested and the number of total investment deals for a few years already. According to the Numbeo Health Care Index By Country 2020^[7], Taiwan ranks number 1 in the world in health care and health care experience. The healthcare system, titled National Health Insurance (NHI), was instituted in 1995 with the population coverage reaching 99% by 2005. Furthermore, Taiwan implemented a national electronic health record system in 2009^[8]. With comprehensive NHI and health records of the population, and with Taiwan entering an aging society (14.05% of its population are over 65 years old) in 2018, startups have strong incentives to build healthcare and medical solutions because there is already a well-established market to sell to.

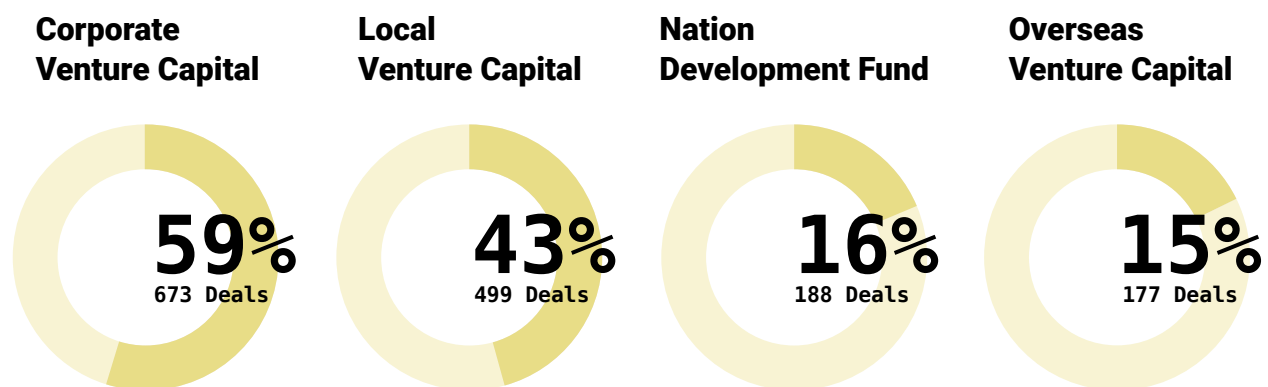
B2B

B2B startups (both software and hardware) also rank quite high in terms of the amount of total dollars invested and the number of total investment deals. This can be attributed to the fact that Taiwan is a country with strong manufacturing and integrated circuit (IC) designing background. The hardware supply chains in Taiwan are also well-organized. In fact, a large amount of the daily used smartphone components and electrical vehicle parts worldwide are manufactured in Taiwan or by a Taiwanese corporation. Corporate Venture Capital (CVC) investments comprise 59% of all startup deals in Taiwan, as corporates are constantly looking for strategic investments. It's quite common for business units in Taiwanese corporates to spinoff and develop products and solutions specific to their parent company.

06/

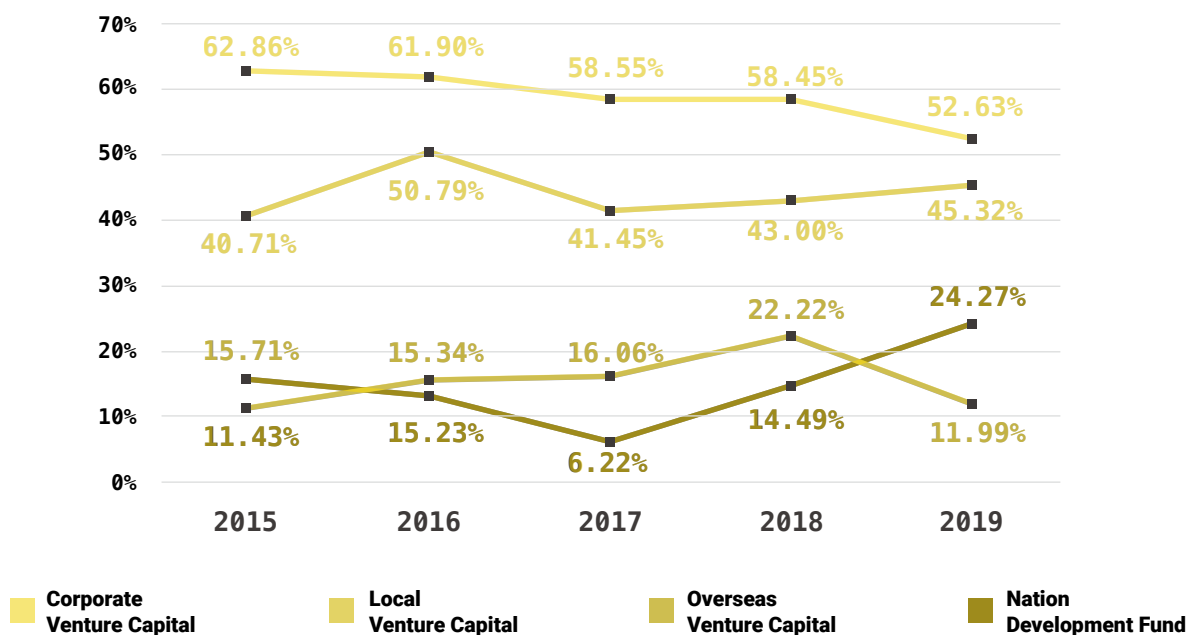
Who Are The Investors?

The percentage of local companies or CVCs that engage in startup investment is quite high, landing at around 59% of total startup investment deals; VCs come in second at around 43%. The Taiwanese government is also quite active in startup investments, with the National Development Fund (NDF) already investing in around 16% of total startup investments.



■ This graph indicates the composition of investors (CVCs, VCs, Government, Overseas investors) in Taiwan, average percentage of each type of investors, and the number of deals completed by each type of investors from 2015 to Q2 of 2020.

Note that most investments involve multiple companies, VC's, or investors, so the total percentage is over 100%.



■ This graph breaks down the composition of investors (CVCs, VCs, Government, Overseas investors) from 2015 to 2019, and the percentage of deals completed by each type of investors.

Taiwanese corporates are quite active in the early stage startup investment scene, having invested in 59% of all startup deals from 2015 to 2020. This perhaps is a reason as to why there is a lack of transparency in the venture capital markets in Taiwan — corporates are strategically investing and typically do not disclose their investments to the public.

As mentioned, the NDC started the Business Angel Investment Program through the NDF with the goal to establish a sound startup investment mechanism in Taiwan. This 5-year program has already made 188 startup investments since the program began. Between Q4 of 2014 and Q1 of 2020, the Business Angel Investment program already comprises 16% of all early-stage startup deals. The growth of startup funding in Taiwan can definitely be attributed to this program, as it has become one of Taiwan's biggest investment programs.

Summary

With programs like the NDF and numerous other initiatives to boost startup growth, the Taiwanese government has offered tremendous help and resources to the startups. In recent years, we've started to see more and more new startups attracting the attention of both local and foreign investors. Though startup investment cases have been consistently growing in the past few years, the average scale of these transactions are still relatively small compared to the global average. With that being said, high risk, high reward, and high technological barriers are still the most attractive to investors looking to invest in Taiwanese teams, such as biotech or medical startups.

Another important thing for Taiwanese startups to do is to combine their technologies with existing mature manufacturing industries in Taiwan. Main reasons being that more than 50% of investments happening in Taiwan are with CVCs and that B2B startups receive the most funding. Their businesses are not to challenge or disrupt the existing industry, but to solve a specific pain point for corporations. Though these kinds of startups might not always be in the spotlight or make headlines, they are vital and a key to the early stage investment market of Taiwan.

07 /



In recent years we have seen much corporate involvement in the Taiwan startup investment scene. More than half of Taiwan's early stage investments are strategic investments involving corporates, as mergers and acquisitions (M&As) are more likely the exit strategy for startups in Taiwan. This is why corporates are getting more aggressive in working with startups. In fact, many corporates have worked with us to build innovation. They no longer want to just do pitch sessions or single workshops, but want to actually work with and build relationships with startups. We touched on more of this topic, from corporate innovation methods to successful cases like Audi Taiwan and Acer, in our 2020 Corporate Innovation Report^[9]. It is clear that corporate innovation has become a trend in Taiwan.

All in all, we are very excited and proud of what Taiwan startups have accomplished in the past few years. Though 2020 is a tough time for the world wide capital market, we are thankful that the Taiwanese government has done a great job stopping COVID-19 from spreading domestically while supporting startups and businesses nationwide. With that being said, we are looking forward to new opportunities that came along with COVID-19, such as digital transformation. FINDIT's report has shed light on the early stage investment scene and results have shown that we are on a growing trajectory with the government as one of the main drivers.



08 / Acknowledgements



Taiwan Institute of Economic Research

Taiwan Institute of Economic Research (TIER) was established on September 1, 1976 by Dr. Chen-Fu Koo as the first private independent think tank in Taiwan. The main purpose of the institute is to actively engage in research on domestic and foreign macroeconomics and industrial economics in order to provide consultations to the government and enterprises and to promote Taiwan's economic development.



Taiwan Institute of Economic Research

FINDIT's mission is to integrate and provide valuable information related to innovative entrepreneurship and market, such as early-stage investment market dynamics, perspectives on the startup ecosystem, and latest ideas of technologies and media.



Taiwan Institute of Economic Research

Taiwan Startup Stadium (TSS) is the leading startup ecosystem builder in Taiwan with a mission to help Taiwanese startups grow and scale to world-class tech businesses. TSS currently serves 220+ startups by connecting startups with their vast network of mentors and investors, coaching startups to go global through various educational workshops and community events, and providing tons of perks from corporate partners. With tailored resources at every stage of their growth, TSS startups are ready to scale and go global!



Startup Island TAIWAN

Startup Island TAIWAN is the national startup brand of Taiwan. The brand symbolizes a journey from a startup island to the international arena. It demonstrates to the world the strong ambition and capabilities of Taiwan startup companies as well as their intention and ability to contribute to other startup ecosystems around the world.

- [1] **2020 FINDIT Report**
<https://findit.org.tw/researchPageV2.aspx?pagelId=1491>

- [2] **Taiwan's Gogoro and Appier recognized as unicorns**
<https://www.taiwannews.com.tw/en/news/3847169>

- [3] **2019 Global VC Report by Crunchbase**
<https://news.crunchbase.com/news/the-q4-eoy-2019-global-vc-report-a-strong-end-to-a-good-but-not-fantastic-year/>

- [4] **2019 MoneyTree Report by PwC and CB Insights**
<https://www.cbinsights.com/research/report/venture-capital-q4-2019/>

- [5] **NDC Business Angel Investment Program**
https://www.ndc.gov.tw/en/Content_List.aspx?n=2D6DB92237E5779B&upn=4655A290B0E7CEF5

- [6] **The Asia Silicon Valley Development Plan**
https://www.ndc.gov.tw/en/Content_List.aspx?n=0C71F2D5288596B7

- [7] **Numbeo Health Care Index By Country 2020**
https://www.numbeo.com/health-care/rankings_by_country.jsp?title=2020

- [8] **Building a national electronic medical record exchange system - experiences in Taiwan**
<https://pubmed.ncbi.nlm.nih.gov/26001420/>

- [9] **The 2020 Taiwan Corporate Innovation Report**
<https://www.startupstadium.tw/s/TSS-2020-Taiwan-Corporate-Innovation-Report.pdf>



