

Startup funding, Venture Capital and fintech in Japan

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Executive summary

This report gives an overview on startup funding, venture capital and Fintech in Japan.

As often mentioned, Japan is a very risk-averse society and it is still rather uncommon for people to quit their stable jobs and found their own startups. However, things are changing with more investors ready to invest in startups and spin-offs.

In general, the amount of Japanese venture capital is still very limited compared to other countries but steadily growing. In 2014, the amount of capital raised by 462 startup companies reached a 6-year high at JPY 115.4 billion (~CHF 1.11 billion), and in a similar way the median amount of funds raised per company increased by 80% to JPY 72.5 million (~CHF 700'000). As of the end of 2015, the amount of venture capital in Japan is back to pre-financial crisis level, with annual growth rates of 10%.

Japan is the world's second largest financial market with a volume of approximately USD 16 trillion (~CHF 15.66 trillion) of personal financial assets. Together with Singapore and Hong Kong, Tokyo is the financial center of Asia. Despite Japan being a high-tech nation leading in cutting-edge technology and robotics, the largest shares of assets in Japan are cash and deposits at 53%, followed by insurance and pension, which shows the rather conservative approach to investments in Japan.

However, the Japanese government supports innovation in fintech with the modernization of financial regulations and by offering incentives to firms and institutions including universities that encourage the creation of startup incubators. Investments in fintech startups more than doubled in Japan during 2015, hitting USD 141.73 million (~CHF 139 million), while investments into startups related to financial services amounted to 5.4% of venture capital in 2015.

1. Startup funding in Japan

The term ‘startup’ is originally associated with the USA and the spirit of Silicon Valley: a small but bright idea turning into a large, successful business. Japan is the third largest economy in the world, ranks sixth in the global competitiveness report¹ and is placed fifth out of 140 in the category “innovation”. Even though PM Abe talks about bringing Silicon Valley to Japan, the local startup ecosystem looks quite different.

According to Hofstede’s model², Japan scores 92/100 in uncertainty avoidance, meaning— as is commonly said—Japan is a very risk-averse society: It is still rather uncommon for people to quit their stable jobs and found their own startups; in the same manner, potential Japanese investors seem to be reluctant to bet on deals the outcome of which they cannot foresee.

1.1. In Brief: The Japanese startup ecosystem

Japan startup expert James Riney summarizes in an article³ published on his blog the local startup ecosystem in seven points:

- *“Venture investment in Japan is small.”*

Although Japan’s GDP is about 1/3 of the USA’s, only about \$1.2b (0.03% of GDP) of venture capital is available, in comparison with USA’s \$75b (0.4% of GDP). (In comparison, \$676 Mio⁴ were invested in Switzerland, amounting to approximately 0.1% of its GDP.)

- *“There is not that much M&A activity for Japanese startups.”*

The majority of Japan’s large companies prefer creating ideas in-house over acquiring innovative companies. There are signs that this is gradually changing and more companies are interested in open innovation.

- *“The bar to IPO for Japanese startups is low.”*

For many startups getting acquired is not an option; they therefore go public early to get money for their growth.

- *“Corporate venture capital is king.”*

CVC is not looked down on in Japan.

- *“Smart people in Japan are finally joining startups.”*

With lifetime employment at large companies becoming less appealing for young people (and only being readily available for a minority of job-applicants), the probability of talents entering startups is on the rise.

- *“There are a lot of cool things being developed.”*

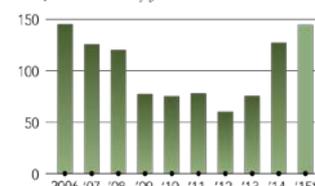
Unlike their American counterparts, Japanese startups tend not to brag about their inventions and therefore risk being overlooked.

- *“The hammers are pulling out the nails.”*

Along with the Abenomics and the quest for innovation, governmental support and top-down programs are increasing.

Compared to other developed countries, the amount of venture capital is still small in Japanese, but growing steadily: In 2014, the amount of capital raised by 462 startup companies reached a 6-year high at JPY 115.4 billion (~CHF 1.1 billion), and in a similar way the median amount of funds raised per company increased by 80% to JPY 72.5 million⁵ (~CHF 700’000).

Total amount raised by unlisted venture companies in Japan (in billions of yen)



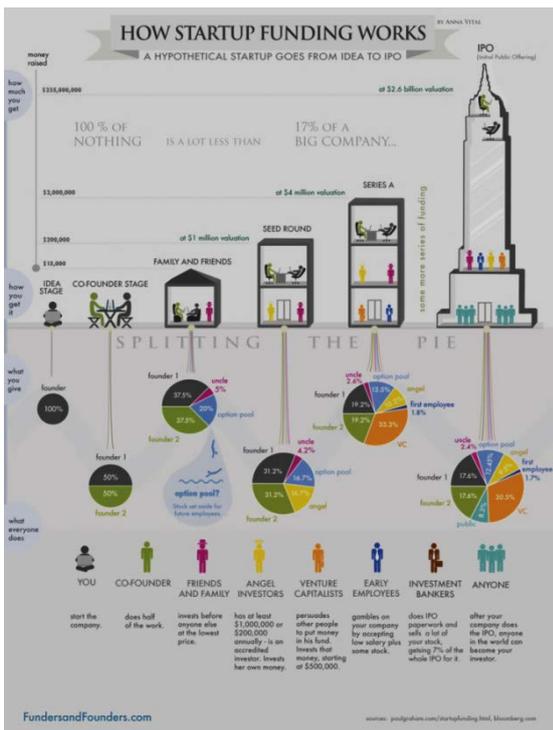
*Forecast
Source: Japan Venture Research

1.2. Startup Funding and Venture Capital

In Japan and elsewhere, there are various ways of receiving capital: either, the company is funded by its own means (boot-strapped), the founders receive money from friends and relatives or external investors invest in the newly founded company in exchange for a share of the company. If the company is acquired or “goes public”⁶, this allows them to receive a return on their investment.

1.2.1. Stages of Funding

There are different stages in startup funding. The first capital acquired is called ‘seed money’, as it is the seed the company will grow from. When the business outgrows the seed

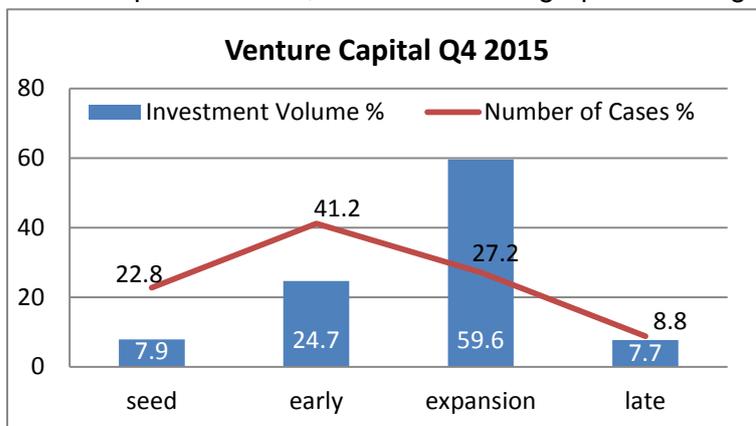


money stage, the next round of funding is the ‘early’ stage, followed by the ‘expansion’, and finally the ‘late’ stage⁷. After several rounds, the startup should have grown enough to be either sold for profit and merged into a larger company or go public. In Japanese, the same English terms are generally used for the different stages. Some also add the “Angel” stage before the seed money, the phase when the business is not more than an initial idea depending on angel investors.

Goodfind Insight⁸ gives a short description of each stage, adjusted to the Japanese “reality” where angel money is basically inexistent. Seed money is usually paid in rather small per case amounts of less than JPY 50 Mio. (~CHF 450'000). Some of Japan’s most important seed-stage venture companies are [Samurai Incubator](#), [Skyland Ventures](#) and [ANRI](#). Well-known early stage investors are Nippon Venture Capital Company [NVCC](#) or the [SMBV Venture Capital](#) (Sumitomo Mitsui Banking Corporation). During

the middle (expansion) or late stage when the business is growing and needs money for marketing and talent acquisition, [JAFCO](#), [Globis Capital Partner](#) or [Infinity Venture Partners](#) are among the most prominent investment companies.

According to a survey by Venture Enterprise Center⁹, as shown in the graph on the right, 7.9% of investments went into seed stage companies, 24.7% into early, 59.6% into expansion and the remaining 7.7% into late stage businesses (Q4/2015). Even though the largest number of investments is in the early stage, only one quarter of the money is invested in this stage. The largest share of the investment is made in the expansion stage businesses.

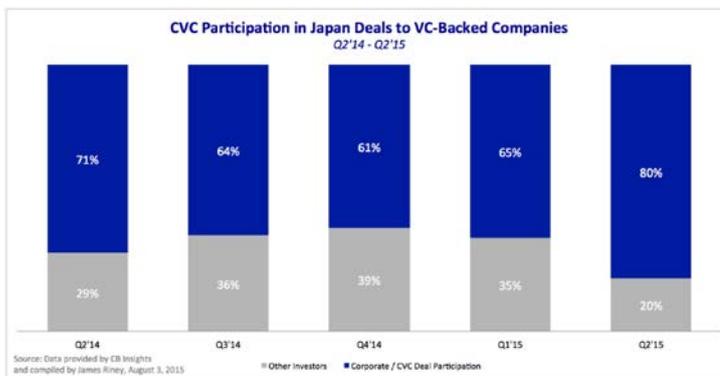


1.2.2. Venture Capital vs. Corporate Venture Capital

Venture capital can stem from either individual venture capitalists, capital venture firms, or from corporations which are not financial institutions. Venture capital from non-financial institutions is called corporate venture capital (CVC).

Unlike in the USA, corporate venture capital plays a key role in Japan and is highly valued. According to James Riney of 500startup¹⁰, this is due to the above-mentioned risk adversity. For large companies in Japan, it is part of their R&D strategy to invest in startups. They invest into research but outsource the risk of loss of reputation if the outcome is not satisfactory. Furthermore, it is beneficial for the startup to have a large company backing them as it shows that they are trustworthy and stable.

The graph¹¹ on the right shows the percentage of CVC (blue) as a share of the total VC; between Q2/2014 and Q2/2015 CVC investments ranged between 61% and 80% of all VC investments.

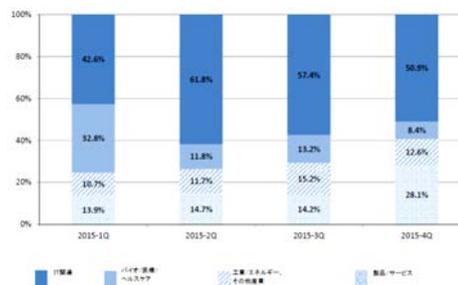


1.2.3. Japanese Venture Capital in 2015

According to the 2015 edition of the Japan Venture Capital report by Venture Enterprise Center¹², the amount of venture capital in Japan reached JPY 73.8 billion (~CHF 708 million) in 2015. The report is based on surveys among more than a hundred venture capital firms in Japan.

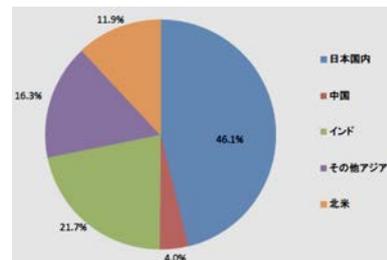
In 2015, 48 new investment funds were established with a total capital of about JPY 14 Billion (~CHF 126 Million). The newly established funds belong to financial institutions, governments or regions, private companies and other organizations.

The following domains are favored by investors: IT (blue), bio/ medical/ healthcare (light blue), engineering/ energy/ industry (stripes), and products/ services (waves); as can be seen (from top to bottom) in the adjacent graph from Venture Enterprise Center¹³. In Japan, IT firms receive the majority of VC investments.



In comparison, in Switzerland the majority of investments (46 %) went into biotech & life-science ventures (2014: CHF89.6 million to 2015: CHF 310.7 million), ICT including fintech (2014: CHF 86.3 million to 2015: CHF 129.3 million) out of a total of CHF 670 million in 2015, up from CHF 450 in 2014.

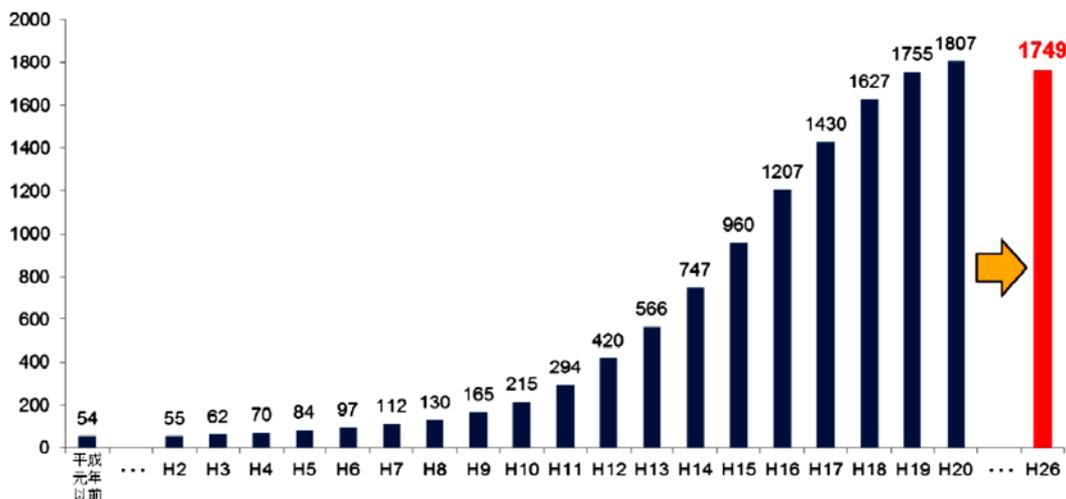
The following pie chart by Venture Enterprise Center¹⁴ shows which countries receive Japanese venture capital investments (Q4/2015). 46.1% of Japanese venture capital stayed in Japan (blue); India (green) was the largest recipient abroad with 21.7%, 4% were invested in China (red), North American companies received 11.9% (yellow) and the remaining 16.3% were invested in other Asian countries (purple).



1.3. University spin-offs

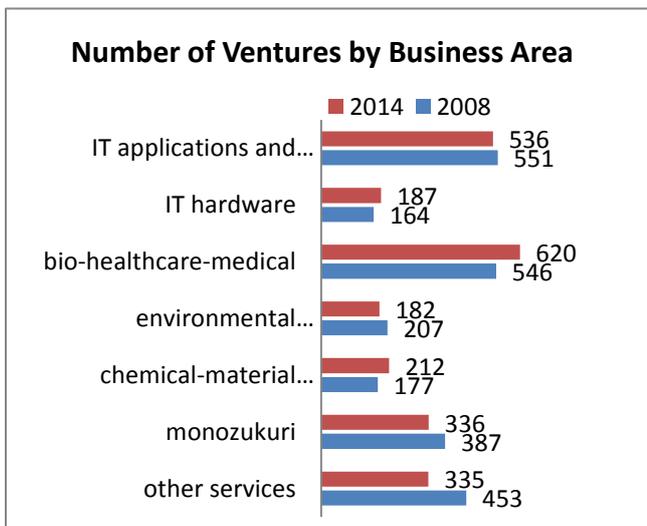
Only in recent years have Japanese universities begun to support their students' venture businesses. According to a survey¹⁵ by the Japanese Ministry of Economy, Trade and

Industry (METI), executed by the Nomura Research Institute, a drastic increase in the number of university spin-offs can be observed, from a total of 54 in 1989 to a maximum of 1807 in 2008. The financial crisis and the general state of the Japanese economy left their tolls during the years after 2008, reducing the number to 1749 in 2014. Please note that these numbers show the cumulative number of university spin-offs; e.g., in 2015, 172 spin-offs were closed, while 196 were created.



By region, in 2014 Tokyo was leading with 465 university spin-offs, followed by neighboring Kanagawa prefecture with 113, and the Osaka (111) and Kyoto (105) prefectures¹⁶; this is related to the location of the major national universities. In 2014, 196 spin-offs originated from the University of Tokyo, 84 from the University of Kyoto, 77 from the University of Osaka and 70 from the University of Tsukuba¹⁷.

Same as with non-university related startups, the majority of the university spin-offs are IT-related, closely followed by healthcare, as well as medical products and services¹⁸. However, as can be seen in the graph on the right, the number of university spinoffs has increased only marginally over the past few years, from 2008 to 2014.



Kyoto University has several venture funds¹⁹ (KUVF 1, USD 45 million (CHF 44 million) launched in 2007; KUVF 2, USD 60 million (59 million CHF) in 2013; a fund in collaboration with Sumitomo Mitsui Bank, JPY 16 billion (CHF 154 million) in 2015), Keio University partners with Nomura Holdings in order to raise JPY 10 Billion (~CHF 96 million) over the next ten years²⁰, and the University of Tokyo Edge Capital fund manages capital of approximately JPY 30 Billion²¹ (~CHF 288 million) to invest into its startups.

2. Fintech

The second part of this startup-report focuses on Japan's fintech landscape. The term "FinTech" is a combination of "finance" and "technology", referring to the application of IT to finance.

2.1. Background

Only topped by the USA, Japan is the world's second largest financial market with approximately USD 16 trillion (~CHF 15.7 trillion) in personal financial assets²². Together with Singapore and Hong Kong, Tokyo is the financial center of Asia.

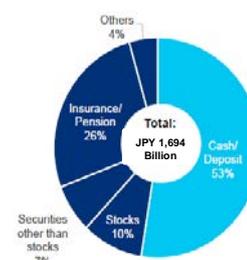
Some further statements with potentially positive (+) or negative (-) effects on the development of fintech in Japan are stated in the following:

- Conservative background:
 - o Total personal financial assets in the country worth USD 14.36 Trillion (~CHF 14 trillion), 52% held in cash
 - o 32% of Japanese still choose to pay in cash upon delivery, < 20% of people use online banking
 - o Security and privacy are major concerns
- Japanese investments accounted for only 0.40% of the roughly USD 12 billion (~CHF 11.75) invested in fintech globally in 2014
- + In 2014, the volume of investments into fintech showed a CAGR (Compound Annual Growth Rate) of 106%
- + Investments in fintech startups more than doubled in Japan during 2015, hitting USD 141.73 million (~CHF 138.8 million), accounting for 5.4% of venture capital in 2015.
- + Negative interest rates encourage investments
- + Personal investors have been exempt from taxes on profits of up to USD 8,890 (~CHF 8'700) per year with the Tax Exemption Program of NISA (Nippon Individual Saving Account)
- + Japanese government supports innovation in fintech, modernizing of financial regulations and offering business incentives to firms that encourage the creation of startup incubators
- + The Financial System Council, one of the prime minister's advisory councils, is to begin discussions within a newly established working group. The group is expected to determine the direction for the development of laws by the end of the year and propose a review of amendments to related acts at the next regular Diet session²³.

2.2. Current state of fintech in Japan

Considering Japan's image as a high-tech nation leading in cutting-edge technology and robotics, it might be surprising that the majority of payments are still done in cash and even online shopping is preferably paid by "cash on delivery". The following graph shows the breakdown of personal financial assets in Japan as of 2014, according to Accenture²⁴. The largest shares are cash and deposits at 53%, followed by insurance and pension, which again proves the rather conservative approach to investments in Japan.

Breakdown of Personal Financial Assets in Japan (2014)



Traditional Japanese banks and financial institutions have been reluctant to change this phenomenon, but are now trying to catch up fast in terms of developing the fintech Market. Many large e-commerce players along with several startups are investing heavily in the creation of new services and the advancement of fintech. In 2014²⁵, the volume of investments in fintech ventures showed a CAGR of 106% to an

amount of JPY 6'677 million (~CHF 55 million). The following year²⁶, the investments more than doubled and reached USD 142 million (~CHF 139 million). This is still comparably small, but the investments are growing. In comparison, fintech investments in India amount to USD 1.5 billion (~CHF 1.45 billion), in China to USD 2.7 billion (~CHF 2.65 billion), and to USD 7.4 billion (~CHF 7.25 billion) in the USA.

The most widely adopted Japanese fintech is Sony's FeliCa technology²⁷. FeliCa is a RFID smart card system, mainly used in electronic money cards. Its development started in 1988, ten years before Japan Railways adopted the system for train tickets. In 1994, Hong Kong imported the technology for its whole transport system, naming it Octopus card. Over time, the range of services was enlarged, now including among others payments at convenience stores, vending machines, taxis and photo machines. Today, the system²⁸ is standard in Japan and widely used in China, Singapore, Thailand, Bangladesh, Indonesia and the UAE. There is also "Mobile FeliCa" for mobile phones, co-developed by NTT DoCoMo and Sony. Also au and Softbank (former Vodafone Japan) hold the license.

In response to the growing interest in fintech, the Japanese government has been working on relaxing its legislation to enable its growth. Revisions to the Banking Act have been discussed to enable banks establish IT subsidiaries. Especially the Tokyo 2020 Olympics Games will also pose a challenge to improve Japan's infrastructure for cashless payment. Tokyo's government is keen to revitalize Tokyo's position as an international financial market and fintech will be an important component of this vision²⁹. Two years after the Mt. Gox scandal (the Tokyo-based bitcoin exchange, handling up to 70% of all bitcoin transactions, filed for bankruptcy after a large share of their bitcoin disappeared), the Japanese Diet has enacted a bill to regulate the exchange of virtual currencies. The revision of the law uses the definition of "asset-like values" for payment and digital transfer for virtual currencies. Exchange operators will be registered under the Financial Services Agency, which can conduct inspections and issue administrative orders. The revised law will go into effect within a year and is part of a larger revision of the Japanese banking regulations. According to operators, it will enhance trust into virtual currencies and also encourage big Japanese banks to enter the market. This might further enhance innovation in the fintech sector and be a great chance for startups in that field.

The investment into startups related to financial services amounted to 5.4% of venture capital in 2015³⁰, as compared to approximately 4.2%³¹ of investment into fintech startups only in Switzerland.

2.3. Future of fintech in Japan

According to the "Study group on the advancement of payment and settlement operations of the Council on Financial Services"³² (Japan Financial Services Agency), the major concerns for the future of fintech in Japan are user security and crime prevention (e.g. money laundry). Many efforts are therefore put into the development of cybersecurity.

Despite the still rather widespread mistrust, the future of fintech in Japan looks bright, especially with the Tokyo 2020 Olympics. There are many opportunities also for foreign (startup) companies, now that the legislation is changing.

2.4. Examples of Japanese fintech companies

Among the countless companies in fintech established recently, the following might be the most noteworthy³³.

Metaps aims at revolutionizing the way payments are done. The publicly listed company provides payment solutions like *Spike*, an online payment service. The company went public in 2015 with an initial market capitalization of more than USD 350 million, becoming Japan's best funded startup in the fintech field.

Zaim, one of the few fintech startups with a female CEO, provides household budget management by a financial app, helping “normal” people dealing with their payments and calculating expenses and taxes.

AlpacADB's Capitalico prevents emotional trading, making use of deep learning in order to find trends. Users can automatically generate their own algorithm, which can also be used to test the outcome before the actual buying or selling.

Freee, by automating back office tasks, wants to help small and medium enterprises to focus on their actual business instead of having to deal with accounting software or the like. Payments are automatically categorized and even tax paperwork is done by their solution.

Money Design's application is called Theo. The investment robo-advisor for individuals depends on algorithms and artificial intelligence in order to allow people to make rational investment decisions even if they are not finance professionals.

Base provides the Japanese version of PayPal, called Pay.jp. It is an online credit card payment system for merchants. Furthermore, it offers the possibility for everyone to host an ecommerce site for free, thereby controlling the buyer as well as the seller side.

Bitflyer is, within Japan, now the largest bitcoin exchange. After the Mt. Gox incident left many people in doubt about the use of bitcoin, the company puts a strong emphasis on official auditing and trust building.

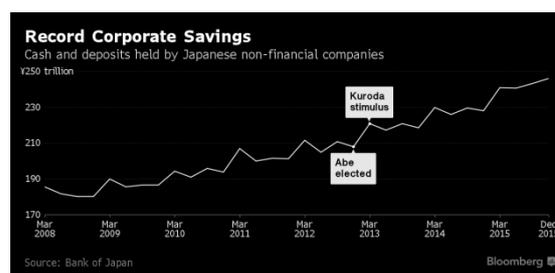
Money Forward offers solutions for individuals as well as for businesses. They run personal financial management services for the former and accounting software based on clouds for the latter.

Orb ensures 100% confidentiality that transactions can be confirmed, using blockchain technology with data finality. They are also working on other distributed ledger technologies allowing the creation of a full transaction history.

Moneytree, founded by two foreigners, is another app for personal financial management as well as for expense tracking and bank account aggregation for (small) enterprises.

3. Opportunities for Switzerland

- Switzerland and Japan have signed a Free Trade Agreement in 2009 and a Social Security Agreement in 2013; business in both directions is therefore simplified.
- Japan is busily preparing for the Olympic Games Tokyo 2020; several opportunities also for Swiss fintech companies can appear.
- Japanese corporations are loaded with cash and are looking for investment opportunities³⁴. This may be a chance for Swiss startups, as “Japan Inc.” is searching for investment prospects also abroad.
- Switzerland has a good reputation for fintech and data-related companies thanks to its strict data privacy laws, protected by Article 13 of the Swiss Constitution³⁵, stating that “every person has the right to privacy in their private and family life and in their home, and in relation to their mail and telecommunications.”, as well as, “every person has the right to be protected against the misuse of their personal data”.³⁶ Switzerland could therefore also become an important location for Japanese fintech companies expanding towards Europe, in the center of Europe.



¹ <http://reports.weforum.org/global-competitiveness-report-2015-2016/economies/#economy=JPN>

² <https://geert-hofstede.com/japan.html>

³ <http://500.co/japan-startup-ecosystem-founders-investors/>

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- ⁴ http://www.startupticker.ch/uploads/File/Attachments/VCRReport_2016_web_.pdf
 - ⁵ <http://asia.nikkei.com/Markets/Tokyo-Market/Funds-raised-by-Japan-s-startups-hit-6-year-high>
 - ⁶ <http://fundersandfounders.com/how-funding-works-splitting-equity/>
 - ⁷ http://www.turnyourideasintoreality.com/2014/01/vcs_for_seedstartups/
 - ⁸ <https://career.goodfind.jp/insight/finance/602/>
 - ⁹ http://www.vec.or.jp/wordpress/wp-content/files/VEC_H28_06_20154Q.pdf
 - ¹⁰ <https://techcrunch.com/2015/08/13/in-japan-corporate-venture-capital-is-king/>
 - ¹¹ <https://techcrunch.com/2015/08/13/in-japan-corporate-venture-capital-is-king/>
 - ¹² http://www.vec.or.jp/wordpress/wp-content/files/VEC_H28_06_20154Q.pdf
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 - ¹⁸ <http://www.meti.go.jp/press/2015/04/20150410003/20150410003-2.pdf>
 - ¹⁹ <https://www.techinasia.com/kyoto-university-launches-60-million-fund-invest-asian-startups>
 - ²⁰ <http://www.bloomberg.com/news/articles/2016-01-27/nomura-joins-with-oldest-japan-university-to-invest-in-startups>
 - ²¹ <http://www.wsj.com/articles/silicon-valley-ethos-prestigious-japan-school-ventures-into-entrepreneurship-1440704144>
 - ²² <http://www.exporttojapan.co.uk/system/files/report/files/Fintech%20Market%20Report.pdf>
 - ²³ <http://asia.nikkei.com/print/article/190612>
 - ²⁴ <http://www.exporttojapan.co.uk/system/files/report/files/Fintech%20Market%20Report.pdf>
 - ²⁵ <http://www.exporttojapan.co.uk/system/files/report/files/Fintech%20Market%20Report.pdf>
 - ²⁶ <https://www.trulioo.com/blog/2016/05/02/doors-open-japanese-FinTech/>
 - ²⁷ <http://bizmakoto.jp/bizmobile/articles/0510/26/news097.html>
 - ²⁸ <https://en.wikipedia.org/wiki/FeliCa>
 - ²⁹ <http://www.exporttojapan.co.uk/system/files/report/files/Fintech%20Market%20Report.pdf>
 - ³⁰ http://www.vec.or.jp/wordpress/wp-content/files/VEC_H28_06_20154Q.pdf
 - ³¹ http://www.startupticker.ch/uploads/File/Attachments/VCRReport_2016_web_.pdf
 - ³² http://www.fsa.go.jp/singi/singi_kinyu/tosin/20150428-1/01.pdf
 - ³³ <https://www.techinasia.com/top-10-FinTech-companies-japan>
 - ³⁴ <http://www.bloomberg.com/news/articles/2016-04-20/as-abenomics-founders-ex-boj-economist-pushes-tax-on-japan-inc>
 - ³⁵ <http://www.digitaltrends.com/computing/switzerland-data-security/>
 - ³⁶ <https://www.admin.ch/opc/en/classified-compilation/19995395/index.html#a13>