

Unlocking IP-backed Financing Series

Country Perspectives Switzerland's Journey





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The views expressed here are those of the authors and do not necessarily reflect the opinions of WIPO, the IPI or any other persons or institutions.

Acronyms

CHF	Swiss Franc	IMC	International Management
CISA	Collective Investment Schemes Act		Center, University of Applied
CISO	Collective Investment Schemes Ordinance	IP	Sciences Krems, Austria intellectual property
EPFL	Swiss Federal Institute of Technology Lausanne	IPI	Swiss Federal Institute of Intellectual Property
	(École polytechnique	L-QIF	Limited Qualified Investor Fund
	fédérale de Lausanne)	OSS	open-source software
ETH	Swiss Federal Institute of Technology in Zurich	SECA	Swiss Private Equity & Corporate Finance Association
	(Eidgenössische Technische Hochschule Zürich)	SECO	State Secretariat for Economic Affairs
EU	European Union	SME	small and medium-sized
FinIA	Financial Institutions Act		enterprises
FINMA	Swiss Financial Market Supervisory Authority	Swiss LP	Swiss Limited Partnership for collective investments
FinSA	Financial Services Act	swiTT	Swiss Technology
FinSO	Financial Services Ordinance		Transfer Association
FTO	freedom to operate	VC	venture capital
GII	Global Innovation Index	VD	venture debt
ICT	information and communication technology	WIPO	World Intellectual Property Organization
IFJ	Institute for Young Entrepreneurs		

Executive summary

In 2023, Switzerland ranked as the world's most innovative economy in the Global Innovation Index (GII), for the 13th year in a row. According to the GII, the country excels at transforming innovation inputs into innovation outputs, including the creation of patents. Switzerland recognizes the imperative for the active protection, management and commercialization of intellectual property (IP) to drive economic growth. This includes access to financing for innovative companies, entrepreneurs and startups producing these innovations.

Today, most Swiss startups, early-stage and emerging companies secure funding to implement their innovation through private equity investment, especially through the venture capital (VC) community. VC funds invest in promising innovative businesses in exchange for an ownership stake. Besides VC, debt finance instruments, including venture debt (VD), have started to grow in popularity. VD, however, currently plays only a minor role in Switzerland.

Several publicly funded programs also provide support to small and medium-sized enterprises (SMEs) and startups to put their innovative ideas into action. These include the Startup Coaching program run by Innosuisse, Switzerland's Innovation Agency and the Assisted Patent Search program run by the Swiss Federal Institute of Intellectual Property (IPI), and venturelab, a set of training programs run by the IFJ (Institute for Young Entrepreneurs).

Investment and supporting public financing programs primarily focus on high-tech segments, like life sciences and medical industries, information and communication technology (ICT) and clean technology. IP plays an essential role for respective investments, be it through – primarily – VC, VD or publicly financed programs. While all forms of intangible assets contribute to these investments and collaborations, patents and software stand out. These assets provide substantial input into decision making for investment, but typically do not serve as standalone collateral.

This report identifies several potential challenges and actions to improve access to capital for businesses. These include:

- increasing the funding available to universities and universities of applied sciences for IP filing and commercialization activities;
- enhancing the Swiss VC and VD markets, particularly for financing of later rounds;
- discussions around the topic of a Swiss innovation fund; and
- awareness raising, training and education on IP in general and finance related issues, also for investors.

Targeted measures in these areas could further broaden access to financing for Swiss innovators and give a boost to the startup ecosystem in Switzerland.

This report gives an account of Switzerland's financing journey, the initiatives and the challenges faced, as well as the next steps to improve access to financing to commercialize Swiss innovation.

Switzerland's Journey

Introduction

For the last 13 years, Switzerland ranked as the world's most innovative economy, according to the Global Innovation Index (GII).¹ The country excels at transforming innovation inputs into innovation outputs such as patents and software. Switzerland's performance can be attributed, among other features, to effectively translating innovation investments into results. Over the past years, resident patent applications and resident trademark applications have witnessed practically continuous growth (see Figures 1 and 2).

Figure 1 Resident patent applications



Source: WIPO Statistical Country Profiles

Figure 2 Resident trademark applications (numbers are in class counts)



Source: WIPO Statistical Country Profiles

One other measure that reflects this, apart from patent and trademark applications, is the growth in capital invested in local startups, which has been accelerating in recent years. New venture capital (VC) funds continue to be established in Switzerland at a rapid pace, with 55 currently open in the Swiss market.² Fintech, the information and communication technology (ICT) sector, cleantech and healthcare sectors drive much of the growth. In 2022, over CHF 2 billion were invested in ICT and fintech startups, with the ICT sector experiencing a growth of over 70 percent and surpassing CHF 1 billion for the first time. Fintech companies saw an increase in investment by 17.4 percent, while the number of financing rounds for ICT startups declined by 8.8 percent. Cleantech had a strong year, with investments nearly quadrupling to CHF 826.9 million, and the number of rounds increasing by 32.3 percent. However, the biotech sector experienced a downturn, with a 47.4 percent decrease in investment and a 48.6 percent decrease in the number of financing rounds. MedTech startups, on the other hand, saw a significant Increase in both the number of rounds (82.6 percent) and capital (10.6 percent).

Overall, according to the latest figures, there were CHF 3,969 million invested in Swiss startups in some 383 financing rounds in 2022.³ Growth over the past years with respect to investment volume and startup rounds was steady, with an increase in the number of financing rounds by 7.9 percent and a significant rise in the total amount invested by 29.7 percent in 2022. Despite the difficult environment caused by factors such as inflation and global supply chain issues, Swiss startups showed resilience, with positive developments and increased VC fund launches.

At the same time, there appears to be room for improvement. Small and medium-sized enterprises (SMEs) generate more than two-thirds of jobs and make up 99 percent of businesses in Switzerland.⁴ These companies can face challenges when being set up as well as when getting access to credit.⁵ Classic debt financing, mostly provided through commercial banks, is the most important form of external funding for Swiss SMEs.⁵ However, many businesses do not apply despite needing access to capital.⁷ According to one study, four out of five companies that chose not to apply for bank financing indicated concern over collateral or security requirements.⁸ A number of public measures address this issue but do not specifically relate to the existence or quality of a business's intellectual property (IP).⁹

Overall, local support programs reflect the specific Swiss philosophy that state intervention should be limited to cases where a market or system failure can be clearly documented. In the field of IP, as a recent analysis has shown, this has led to the implementation of rather few staterun support measures that aim to improve the use of IP in the innovation ecosystem – but those measures that are in place are typically of high quality.¹⁰

This report explores the role IP plays in facilitating access to finance for Swiss businesses. Its findings draw mainly on two components: a targeted literature analysis and expert interviews. These experts provide insights from different segments of the Swiss IP finance ecosystem, including representatives from private equity, VC, government agencies supporting businesses, and law firms. Contributions were also guided by an advisory steering group for the project. A list of interviewees can be found in the Annex.

Local legal and regulatory framework

Switzerland provides a robust legal and regulatory framework that can support financing of innovative companies. A number of laws relate to equity financing, particularly related toVC fund formation and management:¹¹

- the Collective Investment Schemes Act (CISA) of June 23, 2006 and its implementing ordinances;
- the Collective Investment Schemes Ordinance of Nov. 22, 2006 (CISO) and the Ordinance of the Swiss Financial Market Supervisory Authority (FINMA) of Aug. 27, 2014;
- the Financial Services Act (FinSA) of June 15, 2018 and its implementing ordinance, the Financial Services Ordinance of Nov. 6, 2019 (FinSO);
- the Financial Institutions Act (FinIA) of June 15, 2018 and its implementing ordinances;
- the Financial Institutions Ordinance of Nov. 6, 2019; and
- the ordinance of the FINMA of Nov. 4, 2020.

The Swiss Limited Partnership for collective investments (Swiss LP) is one of four major vehicles to set up a legal structure for VCs. The others are Swiss unregulated investment companies, offshore vehicles often structured as Luxembourg specialized funds or investment clubs.¹²

The Swiss LP, set up in 2007, faces strong competition from offshore vehicles. This is partly due to the absence of passporting available for Swiss investment fund managers, which limits access to the European Union (EU) market (and corresponding private placement exemptions). As a result, Swiss LPs "tend to be limited to local investors and focus on local niche areas." ¹³

Investment clubs enjoy exemptions from CISA, which lays out supervision by FINMA and the legal, contractual, statutory and regulatory requirements asset managers and financial intermediaries have to abide to. However, they are also subject to limitations, for example with respect to the maximum number of members.

A new law is in the making for the establishment of a so-called Limited Qualified Investor Fund (L-QIF). The respective draft law was adopted on Dec. 17, 2021. An L-QIF will not require regulatory approval by FINMA and can be therefore launched more quickly and at lower cost. Levrat and Müller state: "Swiss authorities also expect that the L-QIFs will turn Switzerland into a more attractive and competitive place for fund incorporation and domiciliation. Given its flexibility from a regulatory standpoint, an L-QIF may become a suitable vehicle for various investments, in particular VC opportunities." ¹¹⁴

Limited Qualified Investor Fund (L-QIF)

In Switzerland, funds require approval and are subject to restrictions by the Swiss Financial Market Supervisory Authority (FINMA). Introduced in 2022, the newly created <u>Limited Qualified Inventor Fund</u> (L-QIF) structure takes a different approach. It does not require a FINMA license, speeding up the launch process for a fund. L-QIF funds can only be offered by institutions supervised by FINMA and investors must be qualified to participate.¹⁵

With respect to debt financing, a recent report produced on behalf of State Secretariat for Economic Affairs (SECO)¹⁶ concludes that IP assets can be used as a collateral for debt finance in principle, but legal uncertainties may act as barrier for their use. However, these legal uncertainties appear to be a much less significant barrier compared to issues surrounding valuation and illiquid markets for IP.

Local institutions supporting access to finance for innovative Swiss businesses

In Switzerland, based on the interviews and the documentary evidence collected, businesses depend on several public and private stakeholders to secure financing. Following this evidence base, many of these institutions consider IP as part of their analysis to make funding decisions. This is particularly true in high-tech sectors such as life sciences, pharmaceuticals, ICT and clean technology.¹⁷ In these fields, IP plays a central role in firm valuation. These rights, however, do not serve as the sole or primary basis of financing. This section provides a non-exhaustive overview of public and private stakeholders involved in the Swiss ecosystem that provides financing or related support to innovative businesses.

Cantonal banks

The Swiss cantonal banks are government-owned commercial banks, one traditionally located in each of the Swiss cantons (counties). Mostly founded in the 19th and early 20th centuries, these banks account for more than a third of the Swiss banking market in terms of domestic customer deposits. ¹⁸ Most of the cantonal banks enjoy a state guarantee that make the respective cantons responsible for the liabilities of the cantonal banks.

The Zürcher Kantonalbank and its startup finance offerings

Zürcher Kantonalbank, the largest cantonal bank, has become a significant banking partner for startups in Switzerland. The bank has developed financial service offerings across a firm's early development, from startup phases to scale-up and through later growth phases. Once a business breaks even and generates a positive operating cash flow, the bank makes its traditional loans available to the firms.

In a company's early stages, the bank acts as equity investor. It offers investment volumes of CHF 200,000 to CHF 1,000,000 during the startup phase and CHF 800,000 to CHF 1,500,000 for scale-ups. The bank can also provide convertible loans, which can be converted by the bank into equity shares, mostly upon reaching certain milestones such as new funding rounds. For firms in the growth phase there is also a dedicated fund available at the bank, according to interview evidence. The bank usually takes the role of a co-investor, which means that it becomes part of the cast of (private) investors who participate in individual funding rounds.

To date, the bank has invested a total volume of CHF 180 million into more than 250 startups.¹⁹ Zürcher Kantonalbank considers IP as part of its funding decisions, particularly when valuing a company valuation when providing equity funding.²⁰

Government and government-sponsored institutions

Innosuisse

<u>Innosuisse</u> is the major Swiss Innovation Agency. Its mission is to promote science-based innovation in the interest of the economy and society in Switzerland. It "accelerates the transfer of knowledge from research to industry and helps innovations and startups to achieve a breakthrough on the market."²¹ The agency provides support for projects with untapped market potential that could not be implemented without public funding. The portfolio covers support programs such as vouchers for performing preliminary studies or the funding of consortia with research institutions and corporate partners. Innosuisse also provides training and advice to startups.²²

One flagship offering is Innosuisse's <u>Start-up Coaching program</u>. It is geared toward high-tech startups and includes three different offerings: initial coaching, core coaching and scale-up coaching. To qualify for these programs, startups must demonstrate an innovative and knowledge-based business idea that has considerable market potential and can be defended through IP. Businesses must also convince Innosuisse that they have the potential to implement their ideas in a scalable way.

Selected businesses receive a voucher to use services and advice offered by accredited coaches. Businesses pick from around 190 coaches including veteran or fellow entrepreneurs and specialists in topics such as finance, law or IP. At least 32 of the coaches are dedicated IP specialists, highlighting the emphasis Innosuisse places on developing these portfolios. During the support period, the business engages a lead coach who helps the business create milestones to achieve its objectives. Other coaches may be brought in to provide specific expertise. One typical set-up may involve the lead coach, an investment and finance coach, and an IP coach. An overview of the type of available coaching programs is shown in the table below.

Table 1 Available coaching programs at Innosuisse

Туре	Activities	Maximum Value (CHF)	Time frame
Initial coaching	 Develop business model Develop business planning in terms of market viability Assess development stage of company 	10,000	12 months
Core coaching	 Refine strategy Structure organization Enter the market with expert advice on IP, financial planning, legal aspects or fundraising 	50,000	36 months
Scale-up coaching	 Review and implement business approach Establish scalable processes Networking, financing and internationalization activities 	75,000	24 months

Source: Innosuisse²³

After achieving the milestones in the Startup coaching program, participating businesses can apply for an <u>Innosuisse Certificate</u>. The certification process requires businesses to demonstrate that they are ready for sustainable growth, drawing on an analysis that considers both IP and finance issues. The certificate provides an additional piece of evidence for value and trustworthiness to investors.

About 500 startups are being coached through the program.²⁴ An example of a startup supported by Innosuisse and the significance IP has for the company is given in the box "Spotlight on Planted."

Spotlight on Planted

<u>Planted</u> is a plant-based food company offering a variety of products, including burgers, sausages and meatballs, that appeal to both vegetarians and meat-eaters. The food tech company was founded in 2019 as a spin-off of the Swiss Federal Institute of Technology in Zurich (ETH) and rapidly began attracting investor interest and raising large sums of funding. It was also coached in the Innosuisse program; according to interview evidence IP was important to secure finance. The startup now employs more than 65 people in research, engineering and product development and produces all its products in Kemptthal, Switzerland.²⁵ Among its international awards, Planted ranked first at the TOP 100 Swiss Startup Awards in 2021.²⁶

Planted sources high-quality ingredients and uses a proprietary blend of plant-based proteins to create products that closely mimic the taste and texture of traditional meat products. The startup also makes a strong commitment to sustainability, which has helped them to differentiate themselves from other plant-based food companies. Focusing on creating a closed-loop production system helps them to reduce waste and lower their environmental impact.

While Planted's strong focus on taste, texture, innovation and sustainability has helped them to create a strong brand and loyal customer base, their IP has aided them in maintaining a competitive advantage in the market by systematically protecting its product innovations. IP has always been and still is a high priority. Planted is aware that potential investors want to know whether a startup has IP rights and view protected innovations as an important asset. Planted has therefore developed an IP protection strategy tailored to the company's needs. Where it is possible and fits into the strategy, Planted files inventions for patent protection. In the past they have filed patents for their production process and proprietary blend of plant-based proteins and unique formulations. Trade secrets are used to keep the details of the production process a well-kept secret. The IP protection strategy also includes the Planted trademark which sets the company apart from its competitors.27

In a Series B financing round, the Swiss startup has raised CHF 70 million under the leadership of *L* Catterton, a global private equity firm in the consumer goods sector backed by Bernard Arnault's LVMH.²⁸ Planted plans to use the fresh capital to launch a new product line for so-called Whole Cuts, such as a plant-based chicken breast, as well as to continue its international expansion and increase its production capacity.

Swiss Federal Institute of Intellectual Property (IPI)

The <u>IPI</u> is responsible for examining, granting and administering industrial property rights (patents, trademarks and designs). It works together with governmental agencies, trade associations and businesses to enforce Swiss indications of source within Switzerland and internationally. The IPI also supervises the collective rights management organizations for copyright and provides information on IP rights to individuals and companies in a variety of ways.

The IPI offers several IP-related services to businesses, which can also be of use for IP finance purposes. The central pillar of the services is the <u>Assisted Patent Searches</u>, which gives an initial overview of the state of the art (also known as prior art) in the technology sector of interest. The service allows SMEs to work side-by-side with an expert from the IPI in Berne to conduct such a search over the course of four hours at subsidized rates. Such an assisted patent search can be an entry for a follow-up, an Assisted Patent Landscape Analysis. Both programs are also offered in cooperation with Innosuisse. In addition, there is information available: an <u>SME portal</u> (which also presents case studies on actual SMEs using IP, also for financial purposes), an IP Strategy checklist and a licensing agreement checklist. The IPI also provides training for startups and entrepreneurs on IP management and strategy.

Other participants in the ecosystem

There are also other actors in the innovation ecosystem worth noting. While few in number, they have a very specific role to play. This includes specialized private law firms, which offer consulting services or specific know-how to support businesses on their finance journey. Some of these firms specifically support raising of capital through venture debt (VD).²⁹ However, there are no figures available regarding the exact number of these kinds of private practices.

swiTT

The Swiss Technology Transfer Association (swiTT) is the network of technology transfer offices of the Swiss universities. The swiTT also supports IP transactions by providing a database, known as the swiTTlist, where universities can place adverts with licensing opportunities for patents. Between 2005 and March 1, 2023, the database listed 134 such licensing opportunities, with such listings increasing particularly in the past few years. Swiss universities and research institutions actively translate their work into IP and businesses. Over the last 10 years on average, these institutions produced more than 315 patent applications, 219 license contracts and 88 startups annually.

Venturelab

<u>Venturelab</u> at the IFJ, based in St. Gallen, specializes in training for startups and has a respective portfolio of offerings. This includes:

- Venture Briefings, keynote talks for aspiring entrepreneurs;
- Venture Challenge, a specific mission-based training for early-stage startups; and
- Startup Training for Business Creation and Business Growth, on behalf of Innosuisse.

Venturelab's impact in the Swiss market is sizable, having backed more than 1,000 startups and supported over 50,000 people through its programming.³⁰ Over 90 percent of Swiss startups have received support from Venturelab.³¹

Spotlight on Doodle

<u>Doodle</u> provides a web-based scheduling and meeting coordination platform that allows users to easily schedule meetings and events. Founded in 2007, it has since grown to become one of the most popular scheduling tools on the market. The company has received support both from Venturelab and the certificate (then called CTI Startup Label) from the Innosuisse Startup Coaching, which reflects having received support and advice for IP finance purposes as element of the startup-coaching program (as described above).³² In 2008, Doodle had multiple interested investors and eventually chose the Innovationsstiftung of Schwyzer Kantonalbank and Creathor Ventures as their investment partners, leading to the company's transformation into Doodle AG. By 2010, just three years after its founding, Doodle achieved break-even and, shortly after surpassing 10 million monthly users, Swiss media group Tamedia became a minority shareholder. In 2014, Tamedia acquired a majority stake in Doodle as the user base doubled to 20 million, in 2018 Doodle announced reaching a milestone of 30 million users.³³

Use of IP in debt financing

In Switzerland, debt financing comes in different forms, including VD and classic loans from commercial banks.

There is a small but increasing role of debt finance in the form of VD funding for startups in Switzerland. A study by Birrer *et al.* describes VD as a relatively new phenomenon.³⁴ Most VD funding in Switzerland is provided through foreign companies underlining a small, nascent and growing market.³⁵ Given that these loans are frequently organized as convertible notes, which grants the note holder the option to convert it into equity at a predetermined price, the lender has the ability to compel conversion if the business fails to meet its objectives or make timely repayments. This could result in significant repercussions for both the company and its shareholders, as the conversion may occur at a notably reduced valuation. According to expert interviews, IP plays a role in the VD context. In some cases, IP may be used as collateral. Alternatively, VD lenders sometimes require negative pledges over IP. This prevents the company from encumbering their IP assets until the debt is repaid.

On the other hand, IP is rarely used as collateral for loans from Swiss commercial lenders. This type of lending depends largely on the ability of firms to pay back their debt mostly through cash flows, for example through operative activity. IP, in respect to its ability to provide a competitive advantage, may occasionally inform respective bank assessments. This type of financing nonetheless only becomes available when a business has turnover and ideally breaks even. For these lending arrangements, a company's accounts receivables, rather than their IP, are typically used as collateral.

A company's IP may be used as a collateral enhancement, but this is still a rare phenomenon in Switzerland. Experts interviewed perceived that the effort and cost associated with taking possession and disposing of the IP were too high to warrant a broader scale of use at this stage. Even if not used directly as collateral, however, owning IP provides further confidence in the prospects of the business.³⁷

Debt finance, to conclude, only becomes an option in later stages of a company's life cycle. This includes business expansion, such as opening a new branch of a restaurant chain or plans of an established company to develop new IP. Unfortunately, many startups, particularly those in the life sciences, may be years away from generating such cash flows.

Use of IP for equity finance

Many Swiss companies use equity finance to support their growth, particularly VC. The information gathered through interviews indicates that a supportive IP portfolio, particularly when reinforced by robust patents, plays a crucial role as a contributing factor. With VC investors, IP functions as a door opener. Without these rights, investors are reluctant to engage

with startups.³⁸ A robust IP strategy that clearly aligns with business plans is seen as critical in post-seed funding rounds. IP signals to potential investors and lenders that a company attributes great importance to its intangible assets and that it can communicate the strengths of its intellectual assets. In Switzerland, Innosuisse is viewed as an important interlocutor, helping businesses develop investment-ready IP strategies.³⁹

In Switzerland, according to expert interviews, patents stand out as critical, especially for businesses in life science, clean technology and hardware-related sectors. Trademarks play a less pronounced role, because many businesses seeking capital have yet to build a recognizable brand. However, trademarks can contribute positively to a company's valuation. For software companies, copyright and the extent to which a firm uses open-source software (OSS) can be central to the analysis. Other types of IP such as trade secrets can be significant when companies seek finance but mostly do not serve as the focus for decision-making.

Government-backed guarantees and funds

Switzerland has three regional loan guarantee cooperatives designed to facilitate access to credit by SMEs. These guarantee business loans of up to CHF 1 million, insuring up to 65 percent of the associated risk of loss. ⁴⁰ Guarantees are provided based on prospects for success of the business. While IP does not factor outright into funding discussions, it could provide evidence of a business's potential for growth.

Other forms of IP finance

Anecdotal evidence, from interviews, suggests the appearance of novel types of IP finance in some cases in Switzerland. A very new form of finance that was mentioned by interviewees is that of financing through buying royalties (rather than the IP itself), which is "the upfront payment of cash by an investor in exchange for full or partial rights to receive future royalty payments from licensees." IP insurances, while a nascent but emerging market segment, are niche products, which are typically serviced through or by insurers in the United Kingdom. The Swiss IPI can provide information about the existence and relevance of such novel forms of IP finance, and there is potential for Swiss local players to collaborate with foreign providers of such services.

The role of IP valuation

All those interviewed for this paper agreed that valuing the IP is essential for financing purposes. However, most investors do not use valuation methods that lead to monetary value assigned to the IP but rather assess it qualitatively. There is great variety in how funders and investors deal with the topic of IP valuation, with some using checklists while others dive more deeply into the subject matter. Importantly, IP is seldom valued in isolation. Instead, these assets are analyzed as part of the overall company due diligence, as a factor contributing to the company value.

Due to the complexity of valuation, both equity and debt funders of Swiss companies frequently work with specialized service providers and law firms to value IP. In some transactions, experts with specific technology expertise are needed, particularly in the life sciences industry. For early-stage businesses, valuation tends to be basic and qualitative, while for more mature companies valuation is done more comprehensively. Indeed, the amount and time allocated to due diligence tends to increase with the size of the funding round.

Investors and businesses seeking valuation services often need to look outside of Switzerland, commonly using providers in the United Kingdom, Germany and the United States of America, as was mentioned in the interviews. The lack of these specialized firms was not seen as problematic, however, as "the industry operates globally, and it would be difficult for Switzerland to have all the expertise within the country, given the market size." A respective patent valuation, including a detailed freedom-to-operate (FTO) analysis, can easily amount to six-digit CHF figures.

The extent to which funders draw on detailed external IP valuation by outside service providers varies. As startup funding is typically done by several investors at the same time in the same rounds, some smaller co-investors seem to rely on the judgment of larger anchor investors.⁴⁴

Professional support received from technology transfer offices of the ETH and universities builds additional trust in the quality of the IP behind the company. Many Swiss companies seeking funding are spin-offs from universities, a unique feature of the local market, according to interviewed experts.⁴⁵

Potential challenges and fields of action regarding IP-backed financing in the country

While a healthy investment climate exists in Switzerland, many firms still face challenges securing the capital they need to grow and survive, as described below.

University funds for securing IP

Many companies spin off from Swiss universities. Some interviewees noted the Swiss ecosystem could benefit from additional financial support to these institutions, to cover the cost of securing and maintaining patents. Funding can be particularly challenging for smaller universities and those pursuing international protection.

Enhancing Swiss VC and VD markets, particularly for later finance rounds

There have been a few calls from the interviewed experts regarding how to improve the Swiss VC markets overall, noting foremost that the Swiss VC funders are good at supporting early startup phases. However, when it comes to later funding rounds, US funds in particular are then said to take over. 46 Also, it was noted that VD funding is not a domain of Swiss financing organizations, which could be a disadvantage for Swiss startups. The introduction of the Limited Qualified Inventor Fund (L-QIF) is expected to spur the development of the local Swiss startup market.

Discussions around the subject of a Swiss innovation fund

Some of our interview partners suggested the introduction of a Swiss innovation fund to improve framework conditions and to bridge a finance gap in later-stage VC finance. This has also been discussed recently in Swiss media. ⁴⁷ Such a fund could be, according to some of our interview partners, a vehicle particularly to overcome the barriers for later-stage funding.

The latest information from the media reveals that the proposal for a state innovation fund for startups has so far been unsuccessful in the Swiss Federal Council. However, a decision on the matter has been postponed.⁴⁸ The current media discussion highlights the challenges of establishing such a fund in Switzerland, where there is a prevailing stance that substantial evidence of market failures is required to justify state intervention. There is speculation that developments in other countries may eventually prompt the creation of such a fund, which could potentially incorporate elements of IP support and finance.⁴⁹

Maintain continuous awareness and training activity

Awareness raising and education have been and continue to be anchor points for improving the situation of good use of IP, including using IP for finance purposes. Targets for these efforts include future entrepreneurs while in university, startups and other businesses. Investors also need to be well educated on IP. In essence, it is necessary to keep up the level of awareness raising and education on IP, as a continuous challenge, due to new generations of entrepreneurs and investors coming up.

Conclusion

The Swiss system to support IP finance continues to evolve, driven by market demand. So far, actors – as interviewed for this report – have seen little value in placing specific and strong emphasis on new support measures targeting IP finance alone. Rather, the general portfolio of IP support services – which covers IP topics in an integrated way – is being enhanced.

In 2020, a systematic review of these support services was conducted.⁵⁰ With the mostly positive appraisal, and considering the strong belief in market forces, only few adaptations were needed. These include the creation of checklists for licensing and IP strategy development for SMEs by the IPI, which describe important antecedents for IP finance and commercialization. In addition, there is considerable positive expectation for the new L-QIF law, to drive additional activity in local VC investment. The discussion around the state innovation fund is more fundamental in that it carries a strong industrial policy perspective.

Annex: List of contributing experts

Banking

Name	Position	Company or affiliation
Patrick Hug	Head of Business Clients	Zürcher Kantonalbank
Oliver Huggenberger	Deputy Head of Startup Finance	Zürcher Kantonalbank

Government

Name	Position	Company or affiliation
Dominique Gruhl-Bégin	Head of Startups and Next-Generation Innovators	InnoSuisse
Dannie Jost	Scientific Officer, Project and Program Funding Division	InnoSuisse
Martina Looser	Deputy Manager	Technologiefonds (Swiss Clean Technology Fund)
Daniel Schwander	Managing Director	BG OST-SÜD Bürgschaftsgenossenschaft für KMU (guarantee cooperative for SMEs)

Private equity

Name	Position	Company or affiliation
Markus Hosang	General Partner	BioMedPartners
Jean-Philippe Tripet	Founder/Chairman	aravis

Firms supporting startups and SMEs

Name	Position	Company or affiliation
Christian Bückle	Associate	BV4
Christian Ebner	Patent Attorney	Rentsch Partner AG
Adrian Fischbacher	Patent Attorney	Rentsch Partner AG
Pascal Honold	Partner	Wenger Vieli AG
Bernhard Hostettler	Managing Director	IPROMA
Karim Maizar	Partner	Kellerhals Carrard
Christoph Saam	CEO, Swiss and European Patent Attorney	P&TS Intellectual Property

Universities and research institutions

Name	Position	Company or affiliation
Silvio Bonaccio	Head of ETH Transfer	ETH Transfer
Wolfgang Henggeler	Deputy Managing Director	unitectra

Endnotes

- 1 World Intellectual Property Organization (WIPO) (2023). Global Innovation Index 2023: Innovation in the face of uncertainty. Geneva: WIPO. DOI 10.34667/tind.48220
- 2 Startupticker.ch and Swiss Private Equity & Corporate Finance Association (SECA) (2023). Swiss Venture Capital Report 2023 (hereinafter "Swiss VC Report 2023"), p. 33.
- 3 Swiss VC Report 2023, p. 7.
- 4 Structural Business Statistics (STATENT) of the Federal Statistical Office (FSO), https://www.kmu.admin.ch/kmu/en/home/concrete-know-how/facts-and-figures/figures-smes/companies-and-jobs.html
- WIPO (2022). Global Innovation Index 2022 Switzerland, www.wipo.int/edocs/pubdocs/en/wipo_pub_2000_2022/ch.pdf; Rychener, M. and Bergmann, H. (2022). The Future of SME Financing. A SIX White Paper in cooperation with KMU-HSG.
- 6 SME portal of SECO. Figures on SMEs: Sources of Funds, https://www.kmu.admin.ch/kmu/en/home/concrete-know-how/facts-and-figures/figures-smes/sources-of-funds.html
- Dietrich, A., Wernli, R. and Berchtold, N. (2021). Studie zur Finanzierung der KMU in der Schweiz 2021: Hochschule Luzern – Wirtschaft. Institut für Finanzdienstleistungen Zug IFZ; Rychener, M. and Bergmann, H. (2022). The Future of SME Financing. A SIX White Paper in cooperation with KMU-HSG.
- 8 Ihid
- 9 For example, government programs provide guarantees for loan amounts up to CHF 1 million. www.kmu.admin.ch/kmu/en/home/concrete-know-how/finances/financing/public-aid/guarantees.html
- 10 Dudenbostel, T. and Radauer, A. (2021). IP-Unterstützungsdienstleistungen für KMU in der Schweiz (IP support services for SMEs in Switzerland), www.ige.ch/fileadmin/user_upload/dienstleistungen/publikationen_institut/ Schlussbericht_Technopolis_2021-01.pdf [Management Summary available in English].
- 11 Levrat, J. and Müller, V. (2022). The Venture Capital Law Review: Switzerland, https://thelawreviews.co.uk/title/the-venture-capital-law-review/switzerland [accessed March 5, 2023].
- 12 Ibid.
- 13 Ibid.
- 14 Ibid.
- 15 These included regulated intermediaries, certain insurance companies, public entities, high net worth individuals and certain other investors. See Art. 10 Para. 3 of the Swiss Federal Collective Investment Schemes Act (CISA).
- Rieder, S. et al. (2021). Regulierungsfolgenabschätzung zur Schaffung einer Rechtsgrundlage für eine allfällige Revision des schweizerischen Mobiliarsicherungsrechts, p. 67f, www.seco.admin.ch/seco/de/home/Publikationen_ Dienstleistungen/Publikationen_und_Formulare/Regulierung/regulierungsfolgenabschaetzung/vertiefte-rfa/ mobiliarssicherungsrecht_2021/rfa_mobiliarssicherungsrecht.html [accessed March 10, 2023].
- 17 Based on interviews conducted.
- 18 Hauptbank für Schweizerinnen und Schweizer [in German] <u>www.kantonalbank.ch/de-CH/Kantonalbanken/</u> Portrait/Hauptbank
- 19 Zürcher Kantonalbank. Start-Up Financing, www.zkb.ch/en/lps/start-up-financing.html
- 20 Based on interviews conducted.
- 21 Innosuisse. Mission, www.innosuisse.ch/inno/en/home/about-us/mission.html
- 22 Innosuisse. Get Started, www.innosuisse.ch/dam/inno/en/dokumente/ueberuns/Angebotsflyer/innosuisse-angebotsuebersicht.pdf.download.pdf/Innosuisse_Angebotsuebersicht_EN.pdf
- $23 \quad Innosuisse. Start-Up\ Coaching, www.innosuisse.ch/inno/en/home/support-for-start-ups/startup-coaching.html$
- 24 Innosuisse. Facts and Figures, https://2022.discover-innosuisse.ch/en/facts-and-figures#startup
- 25 Startupticket.ch. (Sep. 1, 2022). Planted Closes CHF 70 million Series B Financing Round, www.startupticker.ch/en/news/planted-closes-chf-70-million-series-b-financing-round
- 26 Mitchell, I. (Sep. 8, 2021). Planted Foods Wins the Top Prize at the TOP 100 Swiss Startup Award 2021. Top 100 Swiss Startups, www.top100startups.swiss/Planted-Foods-wins-the-top-prize-at-the-TOP-100-Swiss-Startup-Award-2021
- 27 Heib, A. (May 4, 2022). A Strategy for Success: How a Swiss Start-Up Protects Its Inventions. IPI, www.ige.ch/en/blog/blog-article/mit-strategie-zum-erfolg-wie-ein-schweizer-startup-seine-erfindungen-schuetzt
- 28 Startupticket.ch. (Sep. 1, 2022). Planted Closes CHF 70 million Series B Financing Round, www.startupticker.ch/en/news/planted-closes-chf-70-million-series-b-financing-round
- Wemger Vieli (n.d.). Venture Debt as Financing Instrument for Start-ups: What Founders Need to Know in a Nutshell, https://www.wengervieli.ch/getattachment/00477091-f43e-4d98-887a-f1c391cf984b/Venture-Debt-as-a-Financing-Instrument-for-Startups-What-Founders-Need-to-Know-in-a-Nutshell.aspx [accessed April 18, 2022].
- 30 Venturelab. About, www.venturelab.swiss/about
- 31 Ibid.
- 32 Venturelab. Doodle AG, www.venturelab.swiss/Doodle
- 33 Lux, T. (Dec. 10, 2018). How Doodle Went from Being a Private Scheduling Tool to 30 Million Users. OMR, https://omr.com/de/daily/doodle-tamedia
- 34 Birrer, T., Bauer, M. and Amrein, S. (2019). Unternehmensfinanzierung mit Private Debt in der Schweiz. Lucerne University of Applied Sciences and Arts, https://hub.hslu.ch/retailbanking/wp-content/uploads/sites/7/2019/06/Unternehmensfinanzierung-mit-Private-Debt-in-der-Schweiz-2.pdf
- 35 Based on expert interviews.
- 36 Based on expert interviews.
- 37 Based on expert interviews.
- 38 Based on expert interviews.
- 39 Based on expert interviews.
- 40 SECO. Loan Guarantees for SMEs, www.seco.admin.ch/seco/en/home/Standortfoerderung/KMU-Politik/Buergschaften_fuer_KMU.html
- 41 For example, Ocean Tomo, https://oceantomo.com/services/royalty-securitizations
- 42 Based on expert interviews.
- 43 Based on expert interviews.
- 44 Based on expert interviews.

- 45 An exact estimate of the share of university startups compared to overall startups is hard to make. Using the figures from the latest swiTT report for the period 2011 to 2020 as a basis (aggregate number of startups: 759) and comparing them to the number of Swiss startups listed on crunchbase (1,342), one would yield a share of 57 percent.
- 46 See also, for example, Schöchli, H. (Jan. 26, 2023). Schweizer Jungfirmen erhielten 2022 total 4 Milliarden Franken Risikokapital braucht es trotzdem einen Staatsfonds? Neue Zürcher Zeitung, www.nzz.ch/wirtschaft/schweizer-jungfirmen-erhielten-2022-total-4-milliarden-franken-risikokapital-braucht-es-trotzdem-einenstaatsfonds-ld.1723090
- 47 For example, ibid.; Schöchli, H. (2022). Der Markt wird es nicht richten,; see also, Levrat, J. and Müller, V. (Sep. 7, 2022). The Venture Capital Law Review: Switzerland. The Law Reviews, https://thelawreviews.co.uk/title/the-venture-capital-law-review/switzerland [accessed March 5, 2023].
- 48 Vogt, R. (Jan. 12, 2023). Doch noch keine bundesrätliche Hilfe für Startups. Inside IT, www.inside-it.ch/doch-noch-keine-bundesraetliche-hilfe-fuer-startups-20230112
- 49 Mattmann, M. et al. (June 23, 2022). Ein öffentlicher Innovationsfonds für die Schweiz? Die Volkswirtschaft, https://dievolkswirtschaft.ch/de/2022/06/ein-oeffentlicher-innovationsfonds-fuer-die-schweiz/
- 50 Dudenbostel, T. and Radauer, A. (2021). IP-Unterstützungsdienstleistungen für KMU in der Schweiz (IP support services for SMEs in Switzerland), www.ige.ch/fileadmin/user_upload/dienstleistungen/publikationen_institut/Schlussbericht_Technopolis_2021-01.pdf [Management Summary available in English].

