



TenU

University Equity Stakes in Spin-Outs

A quick start guide

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How much equity should a university receive from spin-outs? Indeed, why does it appear that university equity varies so widely, ranging between 5 and 50 per cent or more? Why can't all universities receive just 5 per cent of equity all of the time?

In light of these recurrent questions, TenU has designed this quick start guide, outlining the main reasons why there is no one-size-fits-all approach to sharing equity from a university's perspective, and why in fact most of the approaches taken are often more equivalent than they would appear. The guide illustrates the complexity inherent in allocating equity in an easy and comprehensible way. For more detailed explanations refer to the suggested literature in each section.

At a glance

- 1. Types of equity:** Equity for the intellectual property (IP), Equity for university support in company formation, and Equity for financial investment. [Read](#)
- 2. The maturity of the entrepreneurial ecosystem:** The degree of an ecosystem's maturity determines the support required from a university for company formation. [Read](#)
- 3. Dilution levels:** Universities may seek larger dilutable stakes or smaller non-dilutable stakes—both approaches lead to comparable outcomes. [Read](#)
- 4. Other parts of the licensing package:** Universities may exchange equity for other financial provisions leading to comparable outcomes. [Read](#)
- 5. Stage of development of the technology and pathway to exit:** Equity terms should recognise both the support already provided by the university and the anticipated further support required from investors prior to an exit event: low levels of university support to spin-out and exit translate into lower university equity stakes and vice versa. [Read](#)
- 6. The relative experience and preferences of individual inventors:** Universities must ensure that the treatment and reward of a wide range of academic inventors is commensurate with individual contribution. [Read](#)
- 7. Different expectations of funders:** Universities must honour the return-on-investment policies of a wide range of funders. [Read](#)

A note on terminology

For the purposes of this quick start guide, a **spin-out** is a company formed with university IP, regardless of whether the company is in its early stages or has become a large, established company. **Start-up** is the generic term for young companies.

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1. Types of equity

It is important to distinguish between three different types of equity when considering university equity:

1. Equity for the intellectual property (IP): Academic inventors are university employees and in many cases those university policies dictate that the IP belongs to the universities. The rules on how inventors are rewarded and other guiding principles specific to each university and its particular cultural and economic circumstances are set out in the university's IP policy.
2. Equity for university support in company formation: Depending on the particular circumstances of each university and of the academic inventors involved, universities may seek remuneration for the relative support offered in the process of company formation. More on this is set out below in the sections on ecosystems and inventors.
3. Equity for financial investment: Where universities have venture funds they may also receive equity for their specific financial investment in the spin-out. The greater the investment, the greater the equity is likely to be, as it is expected of any other investment.

Read more: [IP Pragmatics 2020](#)

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2. The maturity of the entrepreneurial ecosystem

The maturity of the ecosystem dictates the relative support offered by a university to the company formation.

In uniquely mature ecosystems, such as Silicon Valley, Boston and New York, a company may be formed with support from the many actors surrounding a university, involving very-early-stage investment firms, as well as law firms, accounting firms, business advisors and others keen to advise academic inventors-turned-founders with a view to having them as paying clients when the companies mature. The university can then focus on licensing the inventions to the newly formed companies, as is the case at MIT, Stanford and Columbia.

In the less mature ecosystems in which the majority of universities reside, a university may need to support the academic inventors through all the stages of company formation, development and investment. For instance, the university may provide real estate for the company to start and grow; legal services to help with incorporation; access to university core facilities, etc. The university will then also license the invention to the newly formed company.

Universities may therefore seek equity as remuneration for the relative support offered, in addition to the IP licenced and, when it is the case, the capital invested.

Read more: [Nelsen & Ku 2016](#)

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3. Dilution levels

Companies raise money by issuing new shares for new investors at each funding round. When issuing new shares, the proportion of the existing shareholders' holding is reduced. At the same time, it is expected that the value of each share increases. This process is known as dilution.

Investors at any stage may negotiate shares with special conditions, such as non-dilution protection. Non-dilution protects the shares from dilution until certain conditions are reached. Founders may accept these terms in return for key contributions to the company, such as extraordinary investments or advice from an influential investor. However, some investors are opposed to non-dilutable equity, as it can cause complexity in future rounds or at an IPO.

Depending on local investment approaches, universities may seek either larger dilutable stakes or smaller non-dilutable stakes. It is important to note that these different approaches lead to fairly equivalent outcomes.

Read more: [VC/TTO Roundtable 2020](#) [Hockaday 2020](#)

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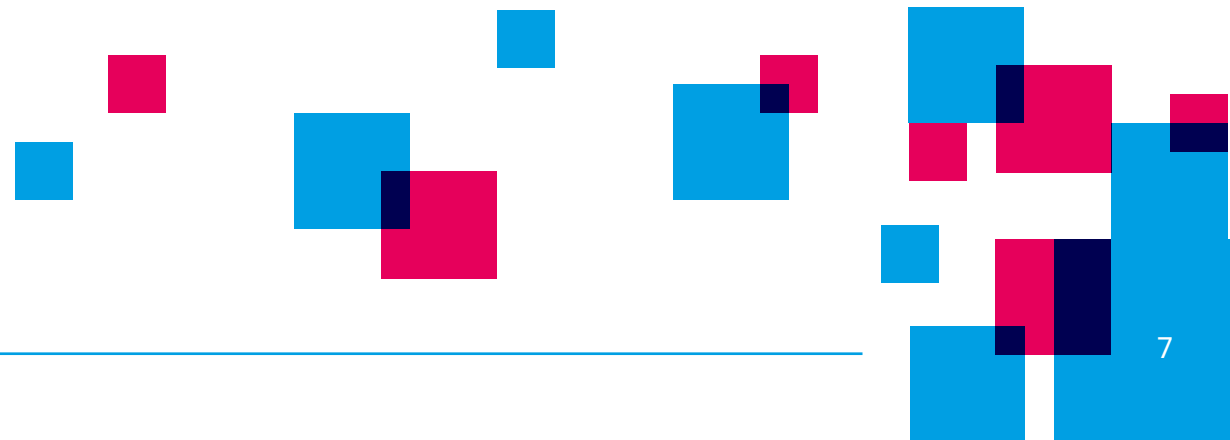
4. Other parts of the licensing package

Licensing to start-ups is similar to licensing to established companies. Common financial provisions may include the reimbursement of patent costs, upfront payments, annual payments, milestone payments, and royalties.

However, unlike established companies, start-ups are cash-poor at the beginning and are more likely to have cash flow problems in the first few years, especially if they are in ecosystems that are less mature with less venture capital available.

For this reason, universities may seek equity in exchange or part-exchange for other aspects of financial consideration, such as a lower than usual upfront payment or deferred patent expenses.

Read more: [VC/TTO Roundtable 2020](#)



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5. Stage of development of the technology and pathway to exit

Not all inventions are born equal. Inventions may be clear patent candidates, may be protected by other types of intellectual property such as copyright, or may not need formal protection. Inventions may require high upfront investments and more at growth stage, or may get by with little investment. Inventions may require many years of development before the company is ready for exit or acquisition, or may make it to exit in only a few years.

Different industry sectors tend to exhibit different characteristics in the type of technology being developed. Pharmaceutical spin-offs typically involve patentable inventions, requiring high upfront investments, many years of development and therefore a long-term commitment from founders and investors. The opposite can be said of software spin-outs, which underlying inventions might not be protected by patents, may require a relatively low amount of investment and may be acquired rapidly.

Universities may offer equity terms commensurable with the stage of development and pathway to potential exit: lower levels of university support needed to spin-out and exit translate into lower equity stakes and vice versa.

Read more: [Imperial's Founders Choice 2020](#)

[UCLB Portico Ventures Ulrichsen 2019](#)

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6. The relative experience and preferences of individual inventors

Academic inventors have different preferences and entrepreneurial experience. Some inventors prioritise their research and prefer to leave the process of commercialisation to others. Some inventors are keen to build a patent portfolio as part of their career strategy and are happy to have it licensed. Some others have entrepreneurial flair and invest their time and resources to start a company. Of those, some are starting a company for the very first time without any prior business experience whilst some have the skills, knowledge and networks to transform their invention into a profitable company.

Often, these different types of inventors are found in one single team behind one invention. Technology transfer offices typically cater to the full range of academic inventors, ensuring that the treatment and reward is equitable to all and commensurate with their contribution, as suggested by the university's IP policy.

Universities may therefore seek equity reflecting the composition of the team in terms of both relative support and reward offered to individual inventors through the process of licensing and/or company formation.

Read more: [Cambridge Enterprise Revenue Sharing Policy](#)

At a glance

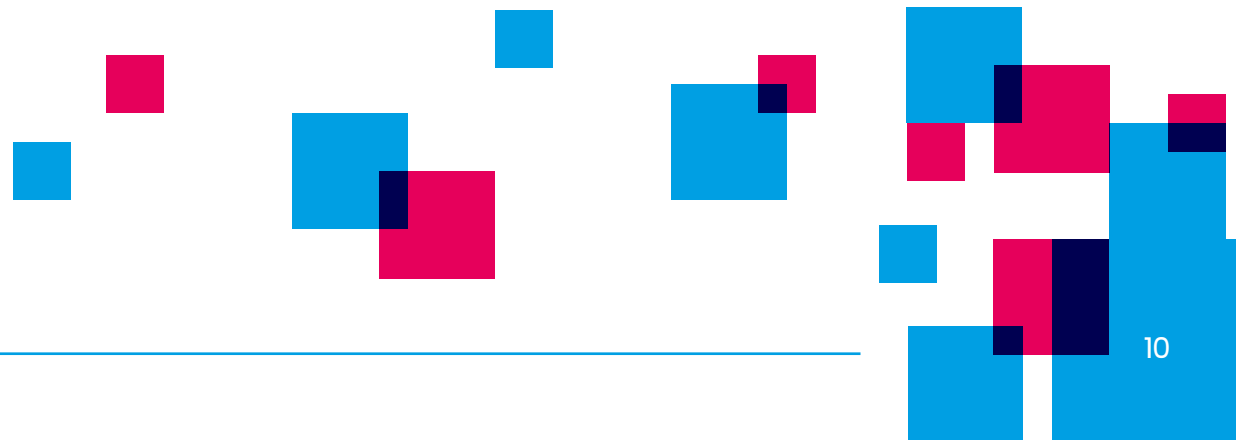
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7. Different expectations of funders

Research is typically funded by a wide range of external funders in the public, private and not-for-profit sectors. Often funders, particularly charities and hospitals, expect return on their investment to reinvest in their continued charitable or healthcare activities. The return, outlined in the IP policy of each of the funders, usually comes through an agreed share of the university's returns.

Universities may therefore seek equity that balances their obligations to these funders and the rewards to the founders, whose opportunity has been enabled by the different range of funders.

Read more: [Association of Medical Research Charities](#)



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TenU is a transatlantic collaboration formed to capture effective practices in research commercialisation and share these with UK and US governments and higher education communities, in order to increase the societal impact of research.

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Contact us

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The background is a dark, low-key photograph of a person standing on a balcony or walkway at night. The scene is heavily stylized with a grid of semi-transparent blue and red squares overlaid on it. The person is mostly obscured by these squares, with only their head and shoulders visible through a central opening. The overall mood is mysterious and modern.