JOHNS HOPKINS
TECHNOLOGY VENTURES

DILUTION OF STARTUP EQUITY

Startup investments are considerably more risky than investments in established businesses. Consequently, in exchange for providing early capital, startup investors typically expect a portion of the business – or "equity," partial ownership in the company – in return.

Over time, as startups continue to raise "rounds" of capital, existing shareholders' ownership in a startup decreases as new shares are issued. This is known as **equity dilution**.

The table below shows an example of equity dilution. In this case, the founders initially own 100 percent of the company. As the company attracts more investors, however, the founders' equity drops to 20 percent.

GROUP	PRE-SEED	POST-SEED	POST-SERIES A	POST-SERIES B
Founders	100%	85%	30%	20%
Seed Investors		15%	10%	5%
Series A Investors			50%	31 1/3%
Series B Investors				31 1/3%
Option Pool			10%	12 1/3%
Total	**100%**	**100%**	**100%**	**100%**

FOUNDER SHARE

Because of dilution, founders of university startups may feel as though their contribution is diminished or devalued over time. This company would be nothing without my technology! Indeed, ceding equity in a company can feel like a loss of control and financial interest. In fact, while founders' percentage of total ownership may decline, the value of the founders' stake may increase as the company grows and as investors provide capital.

Founders also commonly remain involved in the company by providing critical input into the strategic and scientific activities of the company. A founder who is a faculty member can be a top executive in the startup provided there is a corresponding reduction of university responsibilities and a division-approved management plan.

UNIVERSITY SHARE

Johns Hopkins University can take equity in startups as well as convertible debt (a loan that can turn into equity). This percentage is negotiated during the licensing process (e.g., 5 percent equity might be issued to the university as an upfront license consideration). The value of the equity is initially theoretical and depends on assumptions made about the business. Rather than get overly focused on percentages that may or may not have any value (100 percent of $0 is $0, after all), entrepreneurs are encouraged to develop an understanding of the value of their business. A true valuation can help the startup and the university have an informed negotiation.

JHTV will hold equity in the startup until the first opportunity for liquidation (selling equity shares for cash). If/when a liquidation event occurs, JHTV will distribute the proceeds according to the university's IP policy. See the chart below. (Note the inventors' personal share takes into account all inventors. That is, if four people are credited as inventors, the 35 percent share is divided four ways.)

ANNUAL NET REVENUE	INVENTORS' PERSONAL SHARE	INVENTORS' RESEARCH SHARE	INVENTORS' DEPT(S)* SHARE	SCHOOL SHARE*	UNIVERSITY SHARE
First $300K	35%	15%	15%	30%	5%
Over $300K	35%	15%	15%	25%	10%

For more information, please see The Johns Hopkins University's IP policy:
ventures.jhu.edu/IP-POLICY

Adapted from "Research to Revenue: A Practical Guide to University Start-Ups"

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