# **Equity Allocation in Startups:**How to Cut a Pie When There Is Only a Crust

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Idea Exit

#### Topic Relevance by Timeline

## **Summary**

- Founders should not necessarily split equity evenly among cofounders; unequal splits can help prevent team dissonance and renegotiations as the company develops.
- The timing of equity splits is critical, with most experts favoring early discussions of ownership.
- Companies should strive for capitalization tables that are simple in structure and easy to understand.
- Capitalization tables should have equity pools set aside to anticipate non-founder compensation of new hires.
- Equity dilution from future investors should be viewed in terms of the business's overall financial strategy.

#### Introduction

Discussions of ownership are critical in the genesis of a company. In their early stages, most companies are not revenue-generating entities; rather, the potential of future value in equity ownership drives interest and motivation. Given the chance of a high-value upside, founders must allocate ownership strategically. Despite this criticality, academic entrepreneurs— particularly within complex ecosystems, such as academic medical centers—may struggle with this decision. Poorly defined splits can plague a company's future success as founder disagreements arise and can ultimately lead to a startup's demise. This chapter will discuss strategic choices behind equity splits. Specific attention will be given to how and when to split equity, as well as common pitfalls

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to avoid when making those decisions. The capitalization table will also be discussed as a tool to help organize equity structure for founders and non-founders within the startup. While not all-encompassing, example scenarios will be discussed to introduce the concepts at play.

### **Equity Splits**

Equity that is equitably allocated rarely takes the form of an even split. Although it is often the case that two to five cofounders launch a startup, founders should avoid the temptation to split equity in an arithmetically even fashion. While this may avoid difficult and often emotionally charged discussions, it is rarely in the best long-term interests of the entity. Even in scenarios in which there are two founders, experienced entrepreneurs argue that uneven (e.g., 51% to 49%) divisions may be more prudent. The rationale is that cofounders almost always bring different contributions to the table. When discussing the relative contributions of cofounders, aspects such as effort in prior research, involvement in ideation or intellectual property, past financial and time investments, domain expertise, career risks, and entrepreneurial track record should be considered (see the chapters "Intellectual Property: Ownership and Protection in a University Setting" and "Understanding Conflict of Interest for Academic Entrepreneurs"). In effect, founders should look both backward and forward in time to get a full understanding of the contribution of each founder and the relative value they would bring to the company (see the chapter "Building a Successful Startup Team"). While frank discussion of these topics may be difficult to broach, team consensus building early on can help prevent conflicts down the road. In addition, unequal splits help startups avoid binds of indecision as the startup continues to develop. That is, in unequal splits, less ambiguity exists in determining who holds final say in executing decisions. Of course, some companies do successfully navigate the path of an even split. A common rationale posed by equally split startups is that unequal divisions would irreversibly erode trust between cofounders and therefore would be doing more harm than good. Ultimately, the key message is that founders should be thoughtful about their equity splits and should avoid the novice reflex to split ownership evenly.

# Timing of Equity Allocation

Another key consideration is the timing of equity allocation. Splitting equity early seems daunting, as roles may not be well defined and the future direction of a company may be difficult to predict. Delayed allocation affords the advantage of better understanding relative contributions of the founders to the company and therefore allows more informed decisions to be made about ownership. By postponing, the founding team can also turn its attention to further developing the company's business model. Dividing stock ownership later in the company's development may also be particularly helpful in allowing novice founders a chance to demonstrate their worth to the company, essentially earning their share of the company. Finally, a delayed approach can also prevent equity renegotiations if disagreements on relative share allocations arise later. Since legal

fees associated with renegotiations are nontrivial to cash-poor startups, avoiding this pitfall is critical.

Despite these advantages, however, most startups allocate ownership within the first month or two of founding. A clear advantage of early allocation is that it allows the founders to solidify roles and expectations. More importantly, early ownership for cofounders helps motivate the team. If a founder has ownership in the startup, they may prioritize value creation in the new company versus spending time on other endeavors. Yet another advantage of early discussions of equity allocation is the low-stakes negotiating environment it affords. As companies develop and realize their value in the market, ownership decisions can grow exponentially more contentious. Therefore, settling on equity allocation early on can avoid unnecessary conflict. In addition, since many cofounders have at least some prior experience working with each other, relative contributions may be well known within the first few weeks of founding. This familiarity can facilitate earlier rather than later decision-making on how to cut the pie. Finally, memorializing separation terms in the early stages can prevent financially burdensome and distracting breakups should the founding relationships not work out in the long term.

Another important time aspect of equity allocation is vesting, which refers to the time course over which equity is provided. When allocating equity, portions may be immediately vested or vested over a period of time (the vesting schedule). Vesting restrictions delay when equity holders can realize the value of their asset. In this way, outside investors, such as venture capitalists, can derisk the company by reducing the early flight risk of founders. Equity with vesting ensures continuity and cohesiveness of the team toward a shared goal of value generation. In a similar vein as vesting, prudent cofounders should consider dynamic equity splits versus static ones. Given that founding teams are often in flux, with relative contributions constantly changing, founders can renegotiate terms and contingency tables that would allow for reallocation of equity. Uncertainty in entrepreneurship is inevitable, and building in some degree of flexibility can prevent painful renegotiations requiring legal counsel.

### Capitalization Tables

When it finally comes down to defining who owns what, founders use capitalization tables. At its essence, a capitalization table, also referred to as a "cap" table, is simply a list of shareholders and their relative share allocation. The generally accepted rule among successful entrepreneurs is to avoid the "messy cap table syndrome." For instance, novice entrepreneurs may feel pressured to find early investors to support their new company with relatively small cash infusions (e.g., friends and family members). However, governance over multiple small investors can quickly grow cumbersome and may act as a repellent to larger, more sophisticated investors. Therefore, founders and early investors should always be aiming to keep the capitalization table as simple as possible.

Table 1 demonstrates an example cap table of a startup that has a license agreement for its intellectual property with an associated university.

**Table 1. Sample Capitalization Table.** 

| Capitalization Table     |           |     |  |  |  |  |
|--------------------------|-----------|-----|--|--|--|--|
| Common Stock             | Shares    | %   |  |  |  |  |
| Founder A                | 700,000   | 70  |  |  |  |  |
| Founder B                | 250,000   | 25  |  |  |  |  |
| University (IP Licensed) | 50,000    | 5   |  |  |  |  |
| Total                    | 1,000,000 | 100 |  |  |  |  |

## The Option Pool

As companies proceed with financing, it is important to understand that equity takes the form of either common or preferred stock. Common stock is typically issued to founders and employees, while preferred stock is typically issued to outside funding entities. In the event of liquidation, preferred stock is paid out first and represents an asset with return on capital with interest. Most venture capitalists will only invest in preferred stock, given its protection from a downturn (see the chapter "Seeking Venture Capital Investment"). Cofounders must be aware that their common stock will be paid after preferred stock is paid out. This payout hierarchy, referred to as preferences, can have a significant impact on the final pro-rata distribution of proceeds upon a liquidation event. Another important concept critical to the cap table is the option pool. Typically Series A investors will require 10%-15% of equity be set aside for the option pool. The pool represents equity assets that offer the option to purchase common stock at a fair market price, and this form of equity is used as incentive compensation when recruiting new hires. Early-stage companies should consider the projected hiring plan and the option pool size that they will need to hire the talent (i.e., management and technical expertise) required to carry the company to the next milestone (see the chapter "Conducting Insightful Market Research"). If careful consideration is not given to the option pool allocation, cofounder equity can be diluted during financing rounds.

### **Equity Dilution**

This brings us to the concept of equity dilution, which will be illustrated by an example. Let us consider a very simple example of a company that is valued at \$1 million (i.e., pre-money valuation) and receives an additional \$1 million investment, bringing it to a post-money valuation of \$2 million. Table 2 demonstrates how issuing additional shares for the outside investors "dilutes" the ownership of the original founders, in this case by 50%. There are two important concepts to consider here. One is the percent dilution and the other is the eventual sale price of the company at liquidation. At first glance, a 50% dilution may seem like a major drop in overall cofounders' future wealth; that is not necessarily true. If the \$1 million investment at play helps the company achieve the next milestone and therefore increase its value to the market, co-equity-holding founders stand to benefit. In the example shown in Table 2, a favorable outcome of a sale of this company at \$10 million after the investment would mean cofounders A and B walk away with \$3.5 million and \$1.25 million, respectively, even though their ownership was diluted by 50% for each one by the investor. The university would receive \$250,000. However, if the cofounders refused the investment and eventually sold the company at its pre-money valuation (i.e., the investment was not used to further develop their company), the cofounder team would have only made \$700,000 and \$250,000, respectively.

A further nuanced understanding of equity dilution is demonstrated in Table 3. One might ask: What influences my dilution? The amount cofounder equity is diluted by depends on the premoney valuation and the amount that is invested. Table 3 explains this concept with iterations. Overall, academic entrepreneurs must think through the scenarios of how equity dilution links to the financing strategy and, in turn, how the financing is linked to the operations strategy needed to value milestones. It is a connected puzzle.

Table 2. Pre/Post Valuation.

| Capitalization Table |                               |     |                             |      |          |  |  |
|----------------------|-------------------------------|-----|-----------------------------|------|----------|--|--|
|                      | Pre-money<br>valuation = \$1M |     | Post-money valuation = \$2M |      | Dilution |  |  |
| Common Stock         | Shares                        | %   | Shares                      | %    |          |  |  |
| Founder A            | 700,000                       | 70  | 700,000                     | 35   |          |  |  |
| Founder B            | 250,000                       | 25  | 250,000                     | 12.5 | 50%      |  |  |
| University           | 50,000                        | 5   | 50,000                      | 2.5  |          |  |  |
| Investor             |                               |     | 1,000,000                   | 50   |          |  |  |
| Total                | 1,000,000                     | 100 | 2,000,000                   | 100  |          |  |  |

Table 3. Dilution and Exit.

| Capitalization Table   |               |            |          |            |  |  |  |
|------------------------|---------------|------------|----------|------------|--|--|--|
| Pre-money <sup>∆</sup> | Amount raised | Post-money | Dilution | Exit at 5x |  |  |  |
| \$3M                   | \$2M          | \$5M       | 40%      | \$25M      |  |  |  |
| \$6M                   | \$2M          | \$8M       | 25%      | \$40M      |  |  |  |
| \$3M                   | \$1M          | \$4M       | 25%      | \$20M      |  |  |  |
| \$6M                   | \$3M          | \$9M       | 33%      | \$45M      |  |  |  |

Δ Assumes 100% founder equity pre-money

#### Conclusion

Equity allocation is a crucial step in forming a startup. While reflex decision-making might draw founders to equal splits that are static in time, a thoughtful approach can help prevent the team from the pitfalls that lead to equity disputes, which are highly disruptive at best and can lead to the demise of the entity at worst. To this end, using a capitalization table in an iterative fashion can help to align the team and to better plan for financing rounds.

#### Resources

- 1. Reward Dilemmas: Equity Splits and Cash Compensation
  - a. Wasserman, Noam. "Reward Dilemmas: Equity Splits and Cash Compensation," *The Founder's Dilemmas: Anticipating and Avoiding the Pitfalls That Can Sink a Startup.* Princeton University Press, 2012, pp. 145–85.
  - b. An overview of major considerations of equity splits with examples and summary data drawn from thousands of startups.
- 2. The Very First Mistake Most Startup Founders Make
  - a. Wasserman, Noam, and Thomas Hellmann. "The Very First Mistake Most Startup Founders Make." *Harvard Business Review*, 23 Feb. 2016, https://hbr.org/2016/02/the-very-first-mistake-most-startup-founders-make.
  - b. A brief review of common perils to avoid when splitting startup equity.

- 3. How to Allocate Stock to Founders and Early Team Members
  - a. "How to Allocate Stock to Founders and Early Team Members." Cooley GO, 8 Sept. 2015, cooleygo.com/how-to-allocate-stock-to-founders-early-teammembers/.
  - b. Describes how to structure capitalization tables to include non-founding members. This source also includes helpful videos and article links.
- 4. How to Make a Cap Table
  - a. "How to Make a Cap Table." Venture Hacks, 27 Feb. 2014, venturehacks.com/articles/cap-table.
  - b. Includes the mechanics of how to create your own capitalization table with an embedded YouTube video example spreadsheet and various dilution scenarios.
- 5. Co-Founder Equity Split
  - a. "Co-Founder Equity Split: A New Framework to Objectively Divide Startup Ownership and Get Back to Building a Business." The Gust Blog, 15 Dec. 2017, http://blog.gust.com/cofounder-equity-split-framework-objectively-divide-equity/.
  - b. A simple-click through tool that helps cofounders apply a framework to derive their equity splits. While the outcome is of less importance, the metrics summarized in the framework are valuable in understanding relative cofounder contributions. Ultimately, the final percentages should be discussed by the founding team.

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