

Dropbox: A Misunderstood Quality Business

In the first quarter of 2022, broad market volatility presented the fund with an opportunity to buy two high-quality companies at discounted prices. **Dropbox** was one of them. We had owned Dropbox when the fund started in February of 2021 but decided to sell in September at ~\$30 a share when a better opportunity presented itself. That opportunity was in the form of **Take-Two Interactive**, a stock we still hold today.

When Dropbox stock fell ~30% in Q1, we decided to sharpen our pencils and reevaluate the company. After about a week of research and looking through our old files, we came to the conclusion that Dropbox was the same high-quality company we had looked at in early 2021, but trading at a much cheaper valuation.

Given our limited circle of competence, a valuation mismatch for a high-quality company we understand does not come around often. So we decided to act, making Dropbox a 5% position at a cost basis of \$20.62 a share.

Our reasoning for the purchase is outlined below.

Dropbox is a quality company

(In this section, we will outline why Dropbox is a quality company. The next section will go through valuation and expected return scenarios)

Dropbox is well known for sharing and storing files in the cloud. But today, the platform is much more than that, offering digital signatures (HelloSign acquisition), document tracking and analytics (DocSend acquisition), robust document/file search, collaboration tools, and plenty more. The company's goal is to become a valuable hub for virtual first/remote workers, whether they are individuals, freelancers, or small businesses.

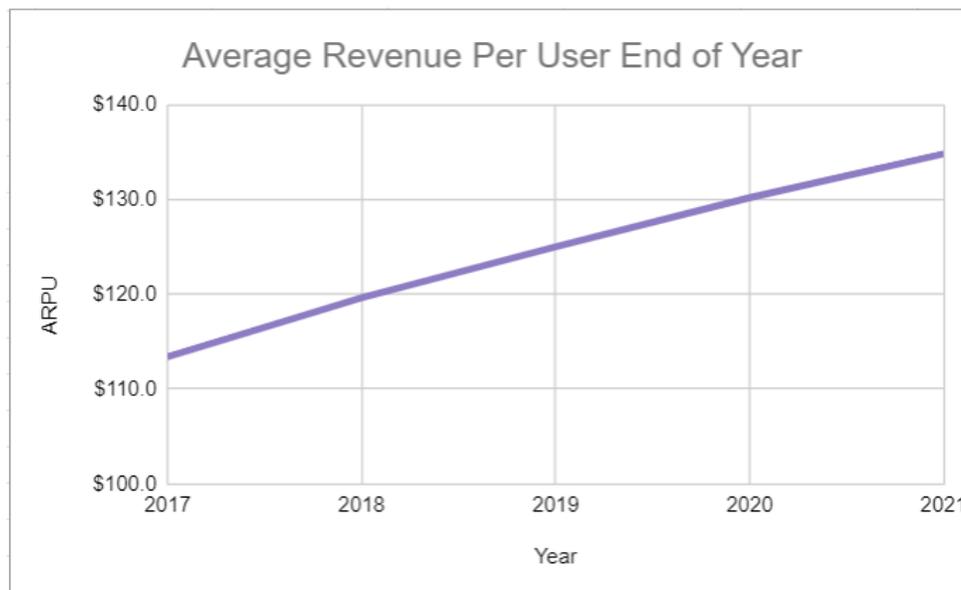
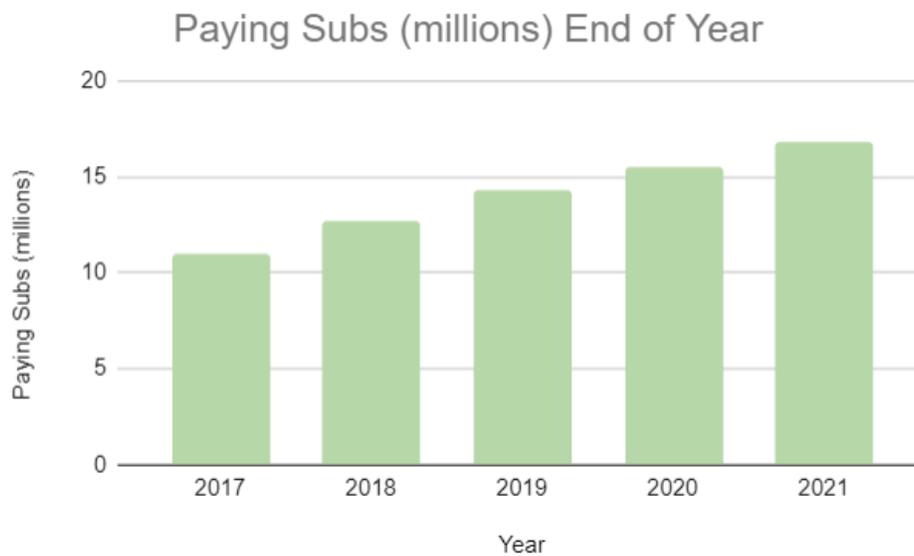
The unit economics work like this. An individual or small business signs up for one of Dropbox's various premium plans and pays either a monthly or annual subscription. Storage and other costs of revenue come in at 20%, giving the business a gross margin of 80%. 20% of revenue is spent on marketing to acquire/keep these paying customers, and 10% is spent on general and administrative expenses. That gives Dropbox 50% of every dollar it brings in to either reinvest (R&D) or let fall to the bottom line. In 2021, management decided to spend 35% of revenue on R&D, leaving a GAAP operating margin of 12.7% (some of the numbers above were rounded).

However, since Dropbox has overstated depreciation relative to its capital expenditure needs and is a heavy user of stock-based compensation, its non-GAAP operating margin is much higher than 12.7% (in 2021, it was 30%). And because it has a working capital advantage due to its subscription model, it generally has free cash flow margins slightly higher than its non-GAAP operating margins (in 2021, it was 33%). With strong cash conversion and efficient marketing spending, Dropbox's unit economics indicate to us that it is a quality business.

But what gives Dropbox an advantage that allows it to have such high margins? It definitely isn't economies of scale (its competitors are literally worth trillions of dollars) or intellectual property. To us, we think it is a combination of switching costs, virality, and a funnel of free users:

- **Switching costs:** Workplace software like Dropbox is a pain for anyone to switch off, and unless there is a compelling solution multiple times better (there isn't), existing customers are not likely to churn because they've found a different product.
- **Virality:** When someone signs up as a paid Dropbox user, it is typically as an individual or an employee at a business. When the person starts sending files and sharing stuff using the service, it can slowly go "viral" across their family or company. While not the classic land-and-expand model of a software company (Dropbox only has a small direct sales team), it is another easy way to grow paying users. And once more and more people in an extended family or company use Dropbox, the more of a pain it is to switch to a competing product.
- **Funnel:** The 700 million free registered users for Dropbox give the company an efficient marketing funnel to onboard paying users. This freemium model is likely why Dropbox has been able to maintain solid profit margins while continuing to reinvest and grow the business.

A classic argument against Dropbox is that it is "nothing special" and that "big tech is just giving away an equivalent product." But if that were true, why have Dropbox's paying users and average revenue per user (ARPU) grown steadily over the last five years *in spite* of Google Drive, Microsoft One Drive, and Apple iCloud? Big tech has attacked Dropbox repeatedly over the past decade. So far, it has survived this moat test.



It is hard to define a quality company, and we're sure many will disagree with us that Dropbox is one. But with stellar margins and consistent growth in the face of an onslaught of big tech competition, we think Dropbox likely fits into this rarified air.

How we get to 15% compounded returns

Our goal with any investment in the fund is to achieve a 15% compound annual growth rate (CAGR) over three to five years. With conservative assumptions for fundamental growth, we believe Dropbox can put up a 20.6% CAGR through 2026 if the market decides to give it a

price-to-free cash flow (P/FCF) multiple of 15 five years from now. If the market decides to give it a P/FCF of 10, returns will be 11.2% under our assumptions.

Here are what we think are conservative assumptions for how Dropbox's financials will evolve over the next five years:

- 5% annual revenue growth (historical growth rate has been closer to 10%+)
- 32% non-GAAP operating margin in 2022 expanding to 35% in 2026
- 105% conversion from non-GAAP operating margin to free cash flow each year
- \$300 million annual stock-based compensation headwind (\$287 million in 2021)
- All excess cash spent on share repurchases (at a growing share price each year)
- 2026 convertible notes convert to stock by the end of 2026, creating a 17 million share count headwind

With these assumptions, annual free cash flow per share (FCF/s) will reach \$3.51 in 2026. A P/FCF of 15 gives a share price of \$52.63, which is a 5-year CAGR of 20.6% from our cost basis of \$20.62. And if you don't believe this is conservative, in our model annual free cash flow only goes above \$1 billion in 2026. Management's own goal is to hit \$1 billion in free cash flow by 2024. What this means is that even if Dropbox misses its internal targets, we still can get outsized returns in the stock. If they hit or exceed these targets, it is likely our forward returns from our cost basis will hit 25% a year.

As we mentioned above, if the market/investors decide to give Dropbox a P/FCF of 10 in 2026 (which we think is highly unlikely), our returns will be 11.2% a year under our assumptions. This is under our hurdle rate, but we would be perfectly happy with this as a downside scenario if either the business stalls out or the market gets increasingly pessimistic about Dropbox. The upside to this scenario is that, since Dropbox has a heavy share repurchase program, the lower the multiple it trades at the higher forward returns will be, all else equal.

Unless this business falls off the wagon, it will be hard for the fund to lose money on our Dropbox investment over a long enough time horizon.

Where we could be wrong

Outside of terminal valuation multiple, there is one way we could be wrong about investing in Dropbox: the underlying business deteriorates. This risk comes with every stock we buy. The only question is how big of a risk it is.

Since Dropbox is a purely digital company excluding its data centers, the only macroeconomic headwinds that could hurt margins (and therefore forward returns) are rising capital expenditures

and inflation in employee compensation. The most concerning to us would be inflation in employee salaries. However, given Dropbox's healthy use of stock-based compensation and high gross margins, we think it has a lot more wiggle room than other companies (especially start-ups) to weather rising salaries.

Dropbox hasn't experienced a huge downturn in the economy yet as it was only a tiny company back in the later stages of the GFC. If we go through a sustained recession and more small businesses start filing for bankruptcy, Dropbox's churn will likely increase. **This is probably the biggest risk to Dropbox's business over the next five years.** It is unknowable when a recession will come, but if it comes, our forward returns will be worse than what we are modeling above.

We will know if the business is deteriorating if paying users and/or ARPU start declining. We believe this is unlikely given that both metrics grew before the pandemic, during the pandemic, and with a large competitor (Google Drive) giving a somewhat equivalent product away to its billion+ users. Unless a company starts paying people to use its file-sharing service or a start-up comes up with something multiple times better than Dropbox, we believe it is unlikely paying users or ARPU will decline in the next five years.

Conclusion

With minimal downside risks and major upside potential, we think Dropbox is a fantastic investment at these prices. Unless the valuation gets way out of hand, we find an even more compelling opportunity, or the business clearly deteriorates in quality, we plan on holding our shares of Dropbox for many years.