Learning about Adobe

January 17, 2020
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I am writing this post to force myself to think deeper about Adobe and other subscription software businesses. In recent years many of them have delivered outstanding shareholder returns and I want to understand why.

While reading, keep in mind that I am not an expert in analyzing SaaS companies. If you have additional insights, please email me at direk.khanijou@gmail.com

Adobe

Adobe makes money from selling its creativity software products via cloud-based subscriptions. Its most popular bundle – Creative Cloud – gives users access to over 20 applications such as Photoshop, Lightroom, Illustrator, Acrobat, Premier Pro, XD, etc. In FY 2020, these applications generated $7.7 billion in sales – about 60% of Adobe's total sales.

The Creative Cloud bundle costs $53/month which is less than 3% of a user's salary. An excellent value proposition, in my opinion. The low absolute and relative price gives Adobe pricing power because it means users will be insensitive to price increases.

Adobe has competition in each of its products. Photoshop competes with Affinity Photo ($50 one-time purchase). Premier Pro competes with Final Cut Pro ($300 one-time purchase). But only Adobe offers a full suite of creativity software. A full-suite offering makes it very difficult for other software vendors to compete. This approach is nothing new. Microsoft has done the same thing by offering a variety of productivity software such as Word, Excel, PowerPoint, OneNote, Teams, etc. To dominate in a software niche, you need to have something for everybody.

I don't have the statistics to prove it but I believe Adobe has a monopoly in the digital media software market. Its products are *the* industry standard and critical to the workflow of creative professionals, content creators, film studios, and marketers.

Adobe's remaining revenue comes from Digital Experience (26%) and Document Cloud (12%). Digital Experience provides customers with analytics, advertising, and marketing solutions. I don't understand this side of the business as well as the creative side but I believe there are some synergies between the two segments.

In FY 2021 Adobe is expected to do $15 billion in revenue with about 90% coming from subscriptions. Since December 2007, the company is led by Shantanu Narayen.

Shift to subscription

In December 2011, Adobe became one of the first companies to announce that it was transitioning to a cloud-based subscription model. Management said that a reason for this was because the company was growing through price increases, not from the number of users.

A subscription model can help a business grow the number of users through price tiering which makes software affordable to more people. For example, previously users would have to pay $120 for an Office 365 perpetual license whereas today they can subscribe for as little as $5/month.

During the transition, revenue growth turned negative and operating earnings fell. This is because transitioning to a SaaS model is complex and requires big upfront investments. As Adobe eventually got its users to switch, its sales growth and margins recovered – to even higher levels.

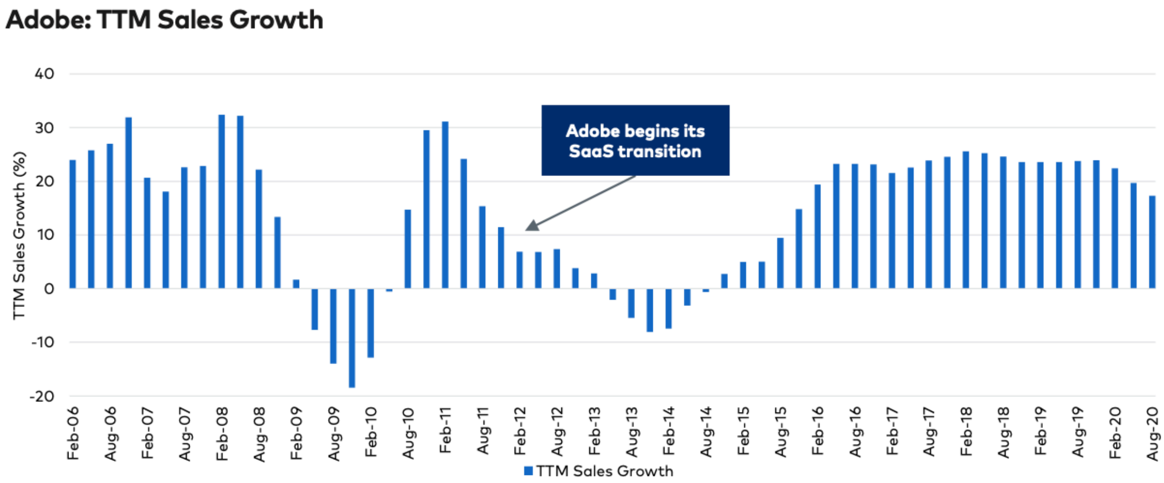


Figure 4: Source: FactSet.

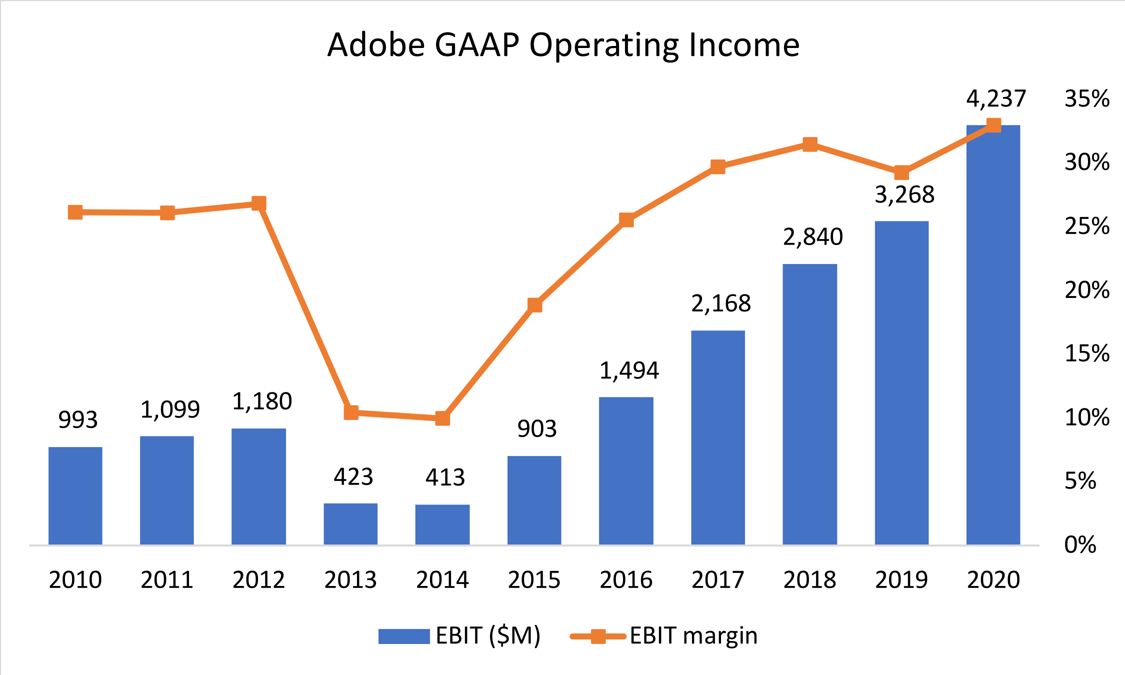
Source: Polen Capital

Operating leverage

A great software subscription business has high gross margins, high customer retention, and minimal cost of revenue for the incremental customer. But they must make significant investments in Sales and Marketing and R&D.

$M	2015	2016	2017	2018	2019	2020	Increase
Subscription rev.	3,223	4,584	6,133	7,922	9,994	11,626	+260%
Sales and Marketing	1,683	1,910	2,197	2,620	3,244	3,591	+113%
%	52	42	36	33	32	31	

The table above shows the increase in the profitability spread between Adobe's subscription revenue and marketing expense. This is operating leverage in action. The result is an expansion in operating income and operating margin.



Counterintuitively, a great time to invest in Adobe was in 2013/14 when its financial results looked the worse. What was needed was an understanding that the company would reach an inflection point where recurring subscription revenues would outgrow recurring costs resulting in hockey-stick growth figures.

Subscription model is win-win

The cloud-based subscription model has many benefits. For starters, the company must always be in beta mode and make sure that it delivers the best possible experience because users can cancel anytime. Users benefit by getting access to the latest features (no more version skipping) while the company receives a recurring revenue stream.

Subscription software companies can also choose to share their scale economies with their users – similar to Costco and Google. Costco shares its efficiencies by lowering prices for its members whereas Google uses the data it collects to improve the search experience. Adobe can also do it by continuously rolling out new features.

Limitations of GAAP accounting

The success of Amazon, Netflix, and Adobe has shown that there is no simple, linear relationship between GAAP earnings and intrinsic business value.

Today's internet companies are asset-light. They don't need to buy machines and depreciate them on their books. Their biggest expense is usually sales and marketing, followed by R&D. Accounting rules require that these are immediately expensed on the income statement. The result is that many of them show operating losses or very low reported profits. This explains why companies such as Amazon, Salesforce, Netflix, and Autodesk trade at optically high earnings multiples.

But what if marketing and R&D allow the business to grow and take market share? Shouldn't this be viewed as an investment? I think so. Investors can add back the portion that they think should be classified as investments. Therefore, under GAAP accounting, reported earnings at successful internet companies understates their true earning power.

Non-GAAP metrics

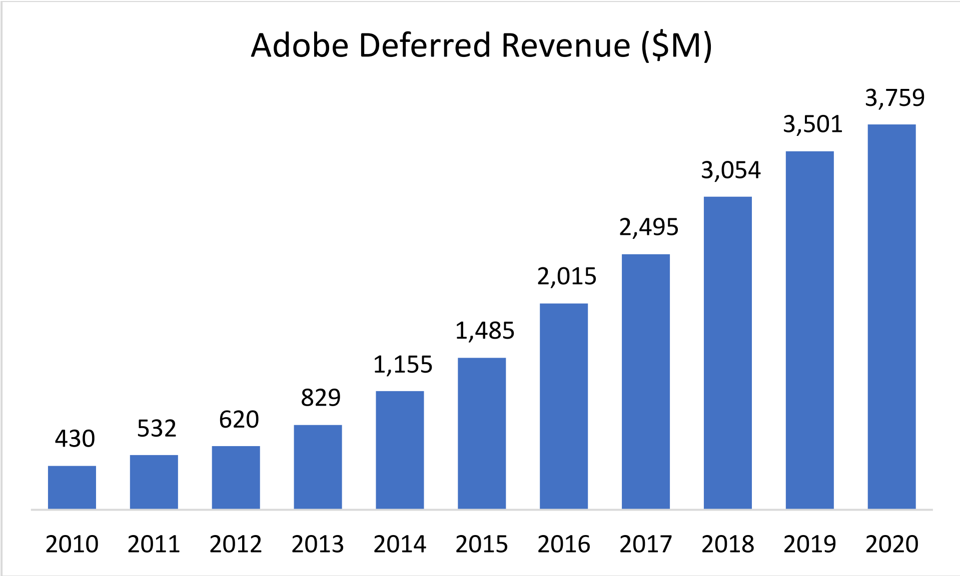
Like many software companies, Adobe reports non-GAAP results. The company's non-GAAP operating income *excludes* stock-based compensation expense and amortization of acquisition-related intangibles. By adding back these items, Adobe reported non-GAAP operating income that was 30% higher than GAAP operating income. I believe stock-based compensation is a very real expense and should at least be booked.

Deferred revenue

The health of a subscription business can be found in the balance sheet under "deferred revenue." Deferred revenue is listed as a liability but it is not a liability the same way debt is. It is money the company has received in advance for the service it is obligated to deliver.

For example, a customer prepays $600 for a one-year Creative Cloud subscription. Even though Adobe has received the full $600 – it can't book this as revenue because it must still deliver the software for the rest of the year. After the first month, $50 will be recognized as revenue, and the remaining $550 will be recorded as a liability called deferred revenue. At the end of the year, the entire $600 will have been gradually booked as revenue on the income statement at a rate of $50 per month.

Growth in deferred revenue indicates that more customers are pre-paying for subscriptions. According to my calculations, Adobe will start FY 2021 with 30% of its revenues locked in.



Conclusion

Adobe is a great business. It has an advantaged business model, high margins, and low capital requirements. Their software products have pricing power, high switching costs, and network effects. However, at a $220 billion market cap, the business is selling at very high multiples of sales and profits. For now, it's a pass.

Notes

SaaS = software-as-a-service
GAAP = Generally Accepted Accounting Principles

Special thanks to Narisa Phinichkusolchit, Goh Tee Leng and Dusita Khanijou for providing feedback on this post.