



Adobe Systems (NYSE: ADBE)
Technology Sector – Beta Group

Stock Rating:
April 16th, 2023

HOLD

Analysts

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Investment Thesis

We recommend a HOLD rating. Based on our three valuation models: DCF, DDM, and Relative PE; we concluded that Adobe is slightly overvalued at the current share price of \$375.35 as of 04/16/22. This price is less than a 5% increase to our target price range which results in a HOLD rating due to the relative proximity to the market value. As a company, Adobe is a household name, in addition to being considered a blue-chip stock by most financial reporters.

Drivers of Thesis:

- Adobe has been around for over 40 years, and it is more pronounced today than anytime previous in its history. As it applies to our evaluation this is a strong indication of consistent earnings resulting in a relatively low-risk investment. Evidence of this can be found in Adobe's financial statements where it reported record numbers in total revenue (17,606 million) and gross profit (14,585) million in 2022.
- Adobe's success stems in part due to its variety of products. Its wide scope of software products allows the industry leader to compete in many markets; meaning it is not overly reliant on a single service or consumer demographic.
- In 2011 Adobe adopted its Software as a Service or SaaS model. This is a subscription-based business model which produces steady cash flows. Consistent earnings are generally positive to any investor, but as it applies to our valuation it means Adobe is unlikely to greatly exceed earnings to jump above a hold rating.

Risks of Thesis:

- The software sector is historically volatile meaning Adobe may be susceptible to a shift in the ever-changing market.
- Despite gains in revenue and gross profit in 2022, its net income dropped slightly for the second consecutive year. While it wasn't a substantial decrease, we fear this may be an indication that Adobe has saturated its user base and will soon be unable to generate consistent growth.

Stock Performance



Source: FactSet

Target Price: \$360.36-\$367.64

Model Prices

DCF	\$364.12
DDM	\$364.00
Relative PE	\$349.51

Price Data

<u>Current Price</u>	\$375.35
52-week Low	\$274.73
52-week High	\$451.15

Key Statistics

Market Capitalization	\$174.0 B
Shares Outstanding	458.7 M
EPS (2023E)	\$15.49
EPS (TTM)	\$10.17
P/E Ratio (TTM)	37.38
Forward P/E Ratio	24.57
Current Ratio	110.68%
Asset Turnover Ratio	64.81%
Operating Revenues (TTM)	\$18 B

Financial Ratios

ROE	26.36%
ROA	14.32%
Debt/EBITDA	2.51x
Debt/Equity	0.93x

Company Description

Adobe Inc. is a leading American software company headquartered in California, the same state in which it was founded in 1982 by John Warnock and Charles Geschke. Adobe is divided into three primary segments: Digital Media, Digital Experience, and Publishing and Advertising. Digital Media, responsible for roughly 75% of Adobe's revenue, is a cloud computing program that provides users access to Adobe's many virtual products, most notably Adobe Photoshop, Adobe Illustrator, and Adobe Premiere Pro. Adobe's mission is "Changing the world through digital experiences." Today, Adobe's Creative Cloud has 30 million users and counting.

Executive Summary

Our hold recommendation on Adobe stock as of April 16th, 2023, is largely based on the outcome of our valuation models. Since 2013 when our company analysis began, its stock price has risen from \$45.14 on May 1st, 2013, to \$375.35 today. We strongly believe that the current price of Adobe stock, which is \$375.35, is correctly valued. Adobe can maintain a stable revenue and has enough cash flow to support its business operations.

Software companies generally assume few liabilities and overhead due to the very nature of internet-based businesses. Based on our economic analysis we feel that Adobe's ability to generate revenue is relatively immune to market fluctuations. Since 2013, Adobe has reported annual increases in revenue and gross profit every year. It is important to note that growth increased during the 2020 recession, catapulting the industry leader to a 172-billion-dollar market cap.

Based on our valuation, Adobe's ability to generate revenue remains strong, but this is not reflected in its stock price variance. On 11/19/21 Adobe's stock peaked at \$688.37 a share before dropping in the following three consecutive financial quarters. Why? Its acquisition of Figma for \$20 billion.

While no company exists in a vacuum of competition, Adobe offers a very distinct service with little direct competition. When it comes to Adobe's flagship products like Photoshop, Acrobat, and Illustrator, the only legitimate alternative providers are Microsoft and Google. The competitive advantage is the holistic offering of services included in Adobe's Creative Cloud suite of products and the superiority of Adobe's products.

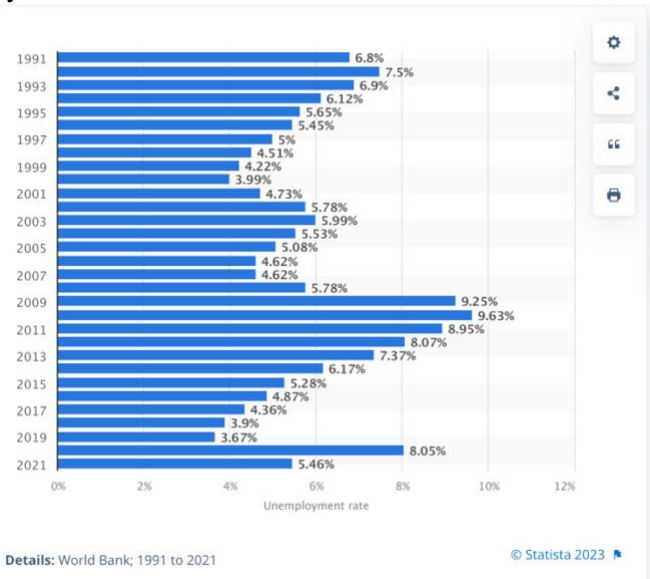
Adobe's innovative technologies are used by an extensive range of consumers varying from personal consumers to industry professionals and businesses of all sizes. This is made possible by Adobe's flexible, convenient subscription pricing.

Economic Analysis

Unemployment

Unemployment affects the technology sector by, driving disposable income in consumers, and the need for skilled workers in technology manufacturing. 2022 consumer spending was just over \$500 billion up nearly \$90 billion

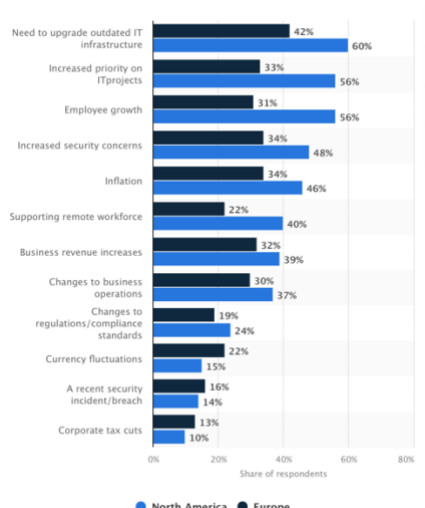
from 2020. The unemployment increase seen in 2020 in the graph below highlights the decrease in consumer spending on technology in 2020 and 2021 due to the unemployment increase following the COVID-19 pandemic. Technology creation and assembly also require certain skills from workers which makes finding technology sector employees hard during high unemployment. The scale of the technology sector also has impacts on unemployment. In the past 3 months, large tech companies like Meta and Twitter have made significant layoffs. This increased unemployment and fueled economic recession which could lead to further layoffs.



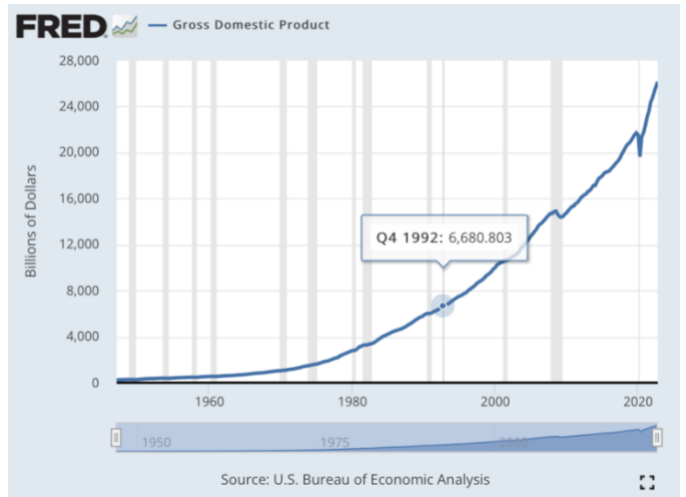
We predict an increase in the unemployment rate to 3.6%-3.9% in the short term due to the federal rate hikes, and an increase of 4.2-4.7% in the long term due to historical trends and increases in AI and automation. These forecasted unemployment increases would have multiple negative impacts on the technology sector. As mentioned before, rising unemployment would decrease consumer spending which would decrease consumer technology sales. Rising unemployment would also signal recession which may lead to further layoffs in the technology sector which has also been a recent trend.

Inflation

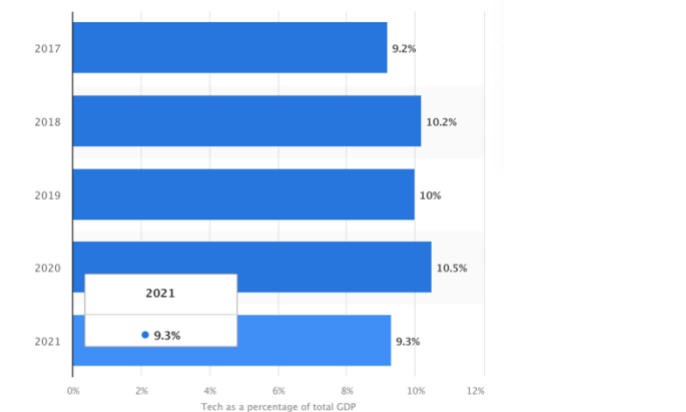
Inflation impacts the cost of technology products for consumers and for companies that use technology on a day-to-day basis. Inflation was a driver for 46% of IT budget changes in technology companies in North America in 2022, showing the impact of the recent rise of inflation on the technology industry.



tech has consistently contributed to about 10% of the country's total GDP (Statista). There is also a positive, direct relationship between the growth of IT services and technology companies, and average GDP growth in developing, emerging, and developed countries.



The tech sector as a percentage of total gross domestic product (GDP) in the United States from 2017 to 2021:



In the short term, we predict GDP growth to decrease slightly. The historical trend shows a slight dip in GDP after a period of high growth. U.S. GDP growth was 2.9% in Q4 of 2022 and 3.2% in Q3, we predict this to drop slightly to 1.4-1.9%. This is due to the end of the high growth period and to reflect growing interest rates.

In the long term, we predict GDP growth to level out and remain at approximately 2.1-2.4% for a period. This is due to high growth in GDP following the COVID-19 pandemic, which we predict will end soon and GDP growth will remain somewhat constant at the predicted 2.1-2.4%.

These GDP forecasts will affect the technology sector by reducing production output in the technology sector following the GDP growth decrease. However, although there is a large correlation between GDP and the

We predict inflation to fall to around 4.5%-4.0% in the short term. This is due to the fed recent rate hikes causing a decrease in overall demand. Supply chain issues have also been going away, but are not completely gone yet, and will still be lingering for a while. However, this is still not at the level that the feds want which is around 2% inflation per year. But in the long run, we believe that the inflation rate will return to the Fed's target rate of 2% by 2025. Supply chain issues from COVID should be gone by then, and the impact on consumer goods from the Russia-Ukraine conflict should be decreasing. The Fed will keep working to slowly bring the inflation rate down through rate hikes and falling demand, and a general slowing of the economy.

A slow decline in inflation will have a positive effect on the technology industry as it will bring the cost of production back down. It will also free up the pockets of consumers who will begin to spend again on technology products.

GDP

The technology industry contributes to a large amount of the total GDP in the United States each year. Since 2017,

technology sector if current production trends in the technology sector maintain the tech sector will continue to fuel GDP growth.

Industry Analysis

The software industry's main products/services can be split into operating systems, software-as-a-service (SaaS), application software, database and analytics software, and system infrastructure software. The money is made through the development, distribution, and maintenance of these products and services. Companies in the Software Industry can differentiate through pricing, quality of the product/service, having unique features designed for specific customers, and creating new innovative products through research and development.

Some recent trends and developments in the software industry include cloud computing, artificial intelligence, and the Internet of Things. Many companies are creating code that can act on its own and make its own decisions through "training" of massive amounts of data. Companies also upgrade some of this software or systems so that they can run all phases of an enterprise's operation to facilitate cooperation and coordination of work across the enterprise. The automatic programs will be able to do the tasks that people consider to be very boring, stressful for long periods, or emotionally unpleasant.

Peer Comparisons

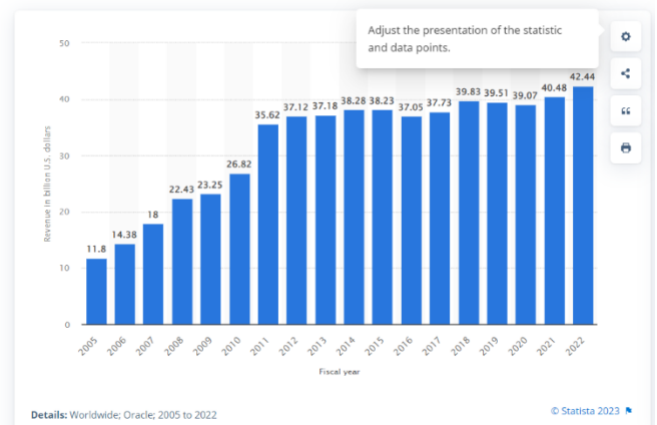
Adobe has many peer companies, such as Autodesk Inc, Salesforce Inc, and Oracle corporation. These companies offer various products and services that compete with Adobe's offerings, such as design software, customer relationship management tools, enterprise software, and cloud services.

In our analysis of peer companies, we choose Oracle Corporation as one of our targets. Oracle Corporation and Adobe Inc. are both software technology companies, but they operate in different segments of the software industry. Oracle is primarily focused on enterprise software, while Adobe is focused on creative software and digital media solutions. In terms of revenue and market share, Oracle is larger than Adobe. In 2022, Oracle reported \$42.44 billion while Adobe only reported \$17.606 billion. However, if we take a look at the revenue trend over the past five years, we can see that Adobe's growth is much faster than Oracle's growth.

Technology & Telecommunications > Software

Oracle's revenue from FY2005 to FY2022

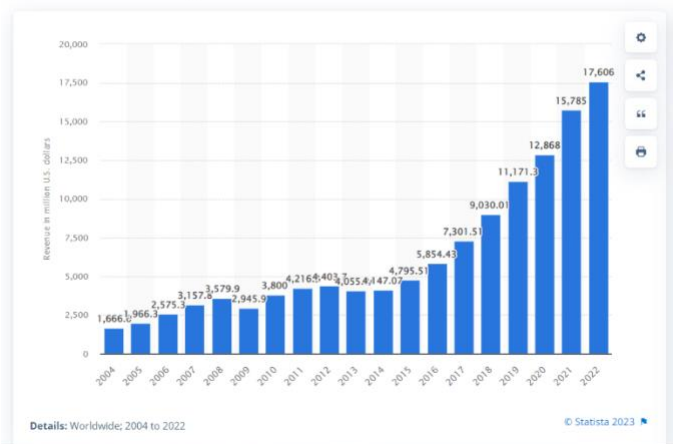
(in billion U.S. dollars)



Technology & Telecommunications > Software

Annual revenue of Adobe Inc. from 2004 to 2022

(in million U.S. dollars)



Source: Statista

Overall, Adobe showed a very fast-growing trend. Even though Oracle and many other companies have been the largest enterprise software providers for a long time, Adobe managed to become a leader in the creative software and digital media space within a short time.

Company Analysis

SaaS

In 2011 adobe transitioned from a single-purchase business model to a software-as-a-service model. This is reported by Adobe as "Subscription Revenue" on their income statement, which makes up 93% of their revenue. Today, this is commonly referred to as Adobe's Creative Cloud feature which has completely changed the way consumers get their software. The "Creative Cloud" encompasses the entire suite of software offered by Adobe in a single program hub where all features are

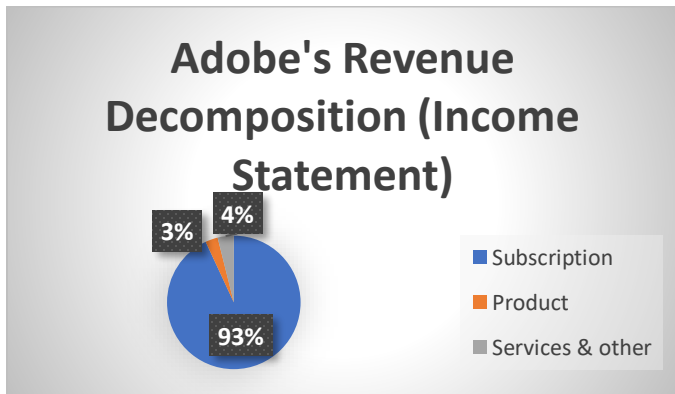
accessible to a user in the same place for a single subscription price. Instead of a one-time program purchase, Adobe has a consistent revenue stream of monthly subscription payments. Adobe's new cloud-based business model allowed them to reach millions of consumers who were previously unable to afford to buy the company's expensive products which quickly dated.

The Digital Experience sector provides tools and solutions such as content analytics and digital marketing primarily to businesses. Publishing and Advertising is an online advertising platform used to facilitate business advertising needs.

Business Structure

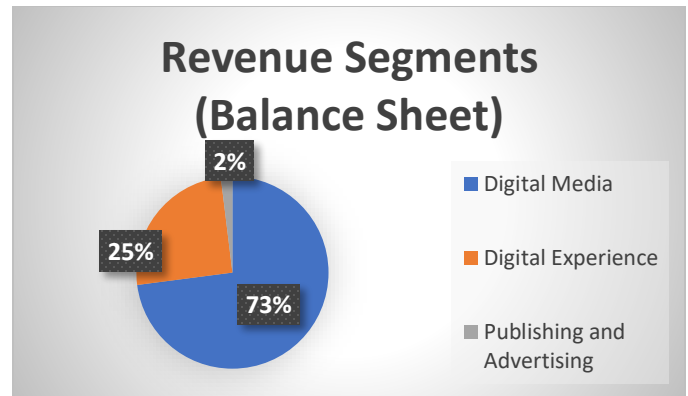
One interesting thing to note about the financial makeup of Adobe is the variance between its self-reported business segments and revenue decomposition. As previously mentioned, the vast majority of revenue is generated as a part of its “Subscription” based business model. The graphs following illustrate Adobe’s distinct revenue segments as well as portray how this relates to their fiscal revenue earnings. Adobe’s 16 billion in 2022 revenue is divided between Digital Media and Digital Experience which work together to develop and maintain Adobe’s Creative Cloud.

The following graph is a graphical representation of Adobe's three revenue streams based on the company’s 2022 10-K income statement.



Source: Adobe’s 2022 10-K

We included this next graph to portray the fact that Adobe’s revenue is not synonymous with its three distinct business segments.



Source: Adobe’s 2022 10-K

Acquisitions

Throughout its history, Adobe has been very active in the M&A space to capitalize on artificial growth. This is on par with the tech sector which heavily utilizes M&A activity to increase growth. Despite their impressive track record of internally developing and innovating their impressive collection of products, they have acquired dozens of companies over the last 40 years to remain competitive.

Adobe has acquired numerous competitors to help them get into a new niche market or service. Evidence of this can be found when looking at Adobe’s portfolio of products. Many of the services contained within the creative cloud did not originate from Adobe at all. Instead, it often acquires a company and rebrands its service, before adding it to its already extensive collection of editing software. For example, many of Adobe’s more notable products such as In Design, After Effects and even Photoshop previously belonged to competitors before being acquired by Adobe.

Adobe has recently made 3 major acquisitions in the past 3 years, with each transaction being valued at over one billion dollars. The most notable of which is Figma, Adobe’s largest acquisition to date. Figma is a web-based design platform that Adobe intends to integrate Figma into its “Digital Media” segment. Adobe acquired Figma for \$20 billion in September of 2022. The 20-dollar valuation is 50 times Figma’s annual revenue. The effects of this purchase were strongly reflected in Adobe’s stock price which fell 24% in the week following. Investors were very skeptical of Figma’s valuation which is the largest contributing factor to a drop in share price of roughly 50% since 2021.

In the 2022 fiscal year, a total of \$570 million in cash was used for investing activities, “primarily for ongoing capital expenditures and business acquisitions. (Page 47

of 2022 10-K)” These acquisitions demonstrate Adobe’s investment in technology. They are not complacent with their natural growth, instead spending billions to acquire technology foreign to their internal R&D.

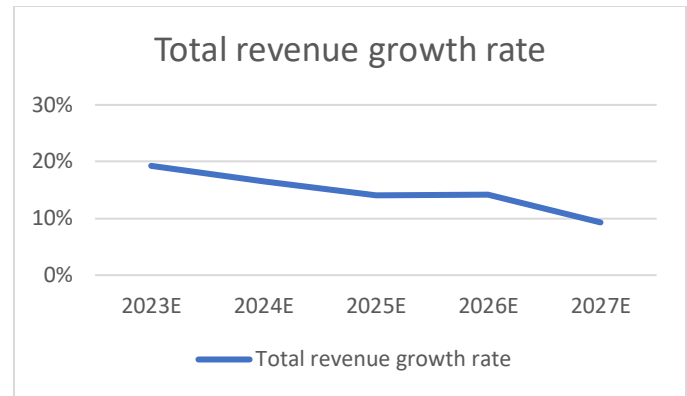
Expect Outlook

Adobe continues to grow by finding new innovative ways to improve its products and create new ones to serve a bigger market. Currently, Adobe is doing this by targeting businesses to improve their digital image. They are shifting their marketing towards corporations to demonstrate the potential impact of their software. Previously they have marketed their service towards individual consumers through their low-cost subscription model. However, we feel it is likely they have saturated this market and will no longer be able to achieve consistent growth, the solution is to target a different type of consumer. Their aforementioned competitive advantage of the sophistication of some of their products allows them to also serve industry professionals and corporations.

Another important catalyst for growth to note is Adobe's shift toward cloud computing. In 2011 Adobe released the Creative Cloud subscription model, requiring users to pay a monthly fee to retain the use of Adobe software. This shift was a great decision as it generated a steady cash flow rather than a single-purchase sales model. Although this change occurred a decade ago, it is important to mention because it has allowed Adobe’s share price to prosper from \$30 per share in 2012 to \$377 today.

Adobe also sees the value of cross-platform services, introducing easy-to-use apps on mobile devices. This is very smart for a company in the technology services sector. Over the last decade, Adobe invested heavily to expand and improve its software horizontally. Now they see the value of integrating their products vertically with different users.

We project low but consistent growth through 2027 as they approach the maturity stage of the business life cycle. To incorporate this into our model, we projected revenue growth to slow in the next five years. Below is a graphical representing the projected slowing of revenue growth:



Source: Model

Valuation Analysis

Based on our valuation of Adobe we have reached a target price of \$360 to \$367 after a comprehensive analysis of Adobe historical financial reports, the outlook of the technology sector, and our financial projections based on conclusions of how adobe has performed relative to the overall market. This supports our recommendation of a hold rating on Adobe as we estimate it’s common stock to be around a 3-5% premium to the market. Key assumptions made in our financial modeling include a beta of 1.27, a risk-free rate of 3.60% and a cost of equity at 9.53%. We are projecting Adobe Inc. to have continued revenue growth through 2027 before stabilizing at a 6.00% continuing growth in perpetuity. We expect the revenue to grow by 9% from \$17,606 billion in 2022 to \$19,290 billion in 2023.

WACC

In our weighted average cost of capital calculation for Adobe we had to start by making some cost assumptions. For the cost of equity, we used the 3.60% interest rate on a 5-year treasury bond as our risk-free rate, a 5-year monthly beta of 1.27, and derived an equity risk premium of 5.10% from the geometric average of the last 94 years (1928-2022) which resulted in a **cost of equity of 10.08%**.

For the cost of debt, we use the same risk-free rate of 3.60%, the pre-tax cost of debt of 4.32% from the yield to maturity on a bond maturing in 2030 to arrive at an implied default premium of 0.72%. After incorporating a 14.0% marginal tax rate we arrived at a **3.72% after-tax cost of debt**.

The market value of common equity calculation was straightforward. We multiplied the total number of shares outstanding (458.7 million) by Adobe’s stock price.

For the market value of debt calculation, we took the total of short-term debt, long-term debt, and PV of operating leases to arrive at the market value of total debt at **4,633.00** compared to an MV of Equity of **174,021.61**.

The market value of equity accounted for a surprising 97.41 percent of the firm's market value which tells us that Adobe is highly unlevered. Based on the weight and cost of both debt and equity we estimated **WACC to be 9.91%**.

DCF & EP

The economic profit model (EP model) is a model used to assess the profitability of a business by comparing its total revenue to its total costs, including both explicit costs and implicit costs. We forecasted Adobe's annual economic profit until 2027 and discounted these values back to the present day at the weighted average cost of capital (10.37%). After summing the PV of these estimates, we added the invested capital figure from the last fiscal year's end together with other non-operating assets such as short-term investments, equity, and other investments. In the end, our EP model of Adobe concluded that the implied price of Adobe's stock should be \$364. This is a key point why we recommend a hold on Adobe's stock.

In order to verify our EP model result and give us more confidence in our recommendations, we revalued Adobe's stock price using discounted cash flow model (DCF Model). This model is often used to estimate the intrinsic value of an investment. For our DCF Valuation Model, we discounted the free cash flow for each of the five forecasted years in our model to arrive at the total value of our operating assets. We then added the value of the non-operating assets. Finally, our DCF model suggests that the implied price of Adobe's stock should be \$364.12. This result is only \$0.12 higher than the price given by our EP model, which is too small to have any impact. Therefore, we can say that our EP model and DCF model give us the same result.

DDM & Relative PE Valuation

Based on our future stock price calculation and a cost of equity of 9.53% we arrived at an implied price of \$127.57 in our dividend discount model calculation. The problem is Adobe does not offer a dividend and we don't believe they we anytime soon. This makes the DDM an unreliable indicator of Adobe's implied stock price as we cannot factor dividends per share into our calculation.

The relative price-to-earnings ratio is a unique valuation method in that it compares Adobe to our selected

comparable companies in its relative value calculation rather than using Adobe's historical financial information. We used price to sales and earnings per share information from 8 comparable companies to Adobe. We also took an average of economic value and earnings before the income tax ratio to arrive at an EV/EMIT of 4.68. We then multiplied Adobe's EV of 14,051 to get an implied EV of \$65,825.03; which comes put to an implied price of \$349.51 per share. This is lower than our DCF and DDM estimations, but it supported our thesis that Adobe's stock price was at a slight discount, resulting in a hold recommendation for Adobe's stock.

Sensitivity Analysis

Pre-tax Cost of Debt and WACC

When a company's pre-tax cost of debt increases, its WACC does the same. These variables are responsible for the cash flow discount rate of Adobe. We chose these two variables because we wanted to what effect their relation had as cash flow discount rate is critical to our financial models. This makes it more difficult for a company to raise money in both debt and capital. In the table below we decided to measure WACC sensitivity by a whole percent and debt sensitivity by .1% to get the best spread in price. Based on the results of this table Adobe's stock price is more sensitive to changes in WACC compared to debt. This means investors are very sensitive to the risk associated with Adobe stock.

		Pre-tax Cost of Debt						
		4.02%	4.12%	4.22%	4.32%	4.42%	4.52%	4.62%
WACC	364.00	402.42	402.25	402.09	401.92	401.75	401.58	401.42
	8.87%	387.93	387.76	387.59	387.43	387.26	387.09	386.93
	9.37%	375.41	375.24	375.08	374.91	374.75	374.58	374.41
	9.87%	364.49	364.33	364.16	364.00	363.83	363.67	363.50
	10.37%	354.89	354.72	354.56	354.39	354.23	354.06	353.90
	10.87%	346.37	346.21	346.04	345.88	345.71	345.55	345.38
	11.37%	338.77	338.60	338.44	338.28	338.11	337.95	337.78
	11.87%							

Source: Model

CV Growth of NOPLAT and Avg. Depreciation Rate

Since NOPLAT is the numerator in the ROIC equation, increasing the NOPLAT would mean that we increased the implied stock price of Adobe. However, one of the steps in calculating ROIC is to add back the depreciation. Therefore, increasing the depreciation rate can balance back the boost in the implied stock price caused by the increase in NOPLAT. In this table, we are experimenting with both of these numbers to find a rate that is reasonable to use in our predictions, and at the same time, would not cause too many fluctuations in our result.

		CV Growth of NOPLAT							
		364.00	2.20%	2.30%	2.40%	2.50%	2.60%	2.70%	2.80%
Avg. Depreciation Rate	20.18%	360.78	362.28	363.82	365.40	367.01	368.67	370.38	
	21.18%	360.29	361.79	363.33	364.91	366.53	368.19	369.89	
	22.18%	359.83	361.33	362.87	364.44	366.06	367.72	369.42	
	23.18%	359.38	360.88	362.42	364.00	365.61	367.28	368.98	
	24.18%	358.95	360.45	361.99	363.57	365.19	366.85	368.55	
	25.18%	358.54	360.04	361.58	363.16	364.78	366.44	368.15	
	26.18%	358.14	359.65	361.19	362.77	364.39	366.05	367.76	

Source: Model

Cost of Equity and WACC

WACC of weighted average cost of capital is the average cost of all sources of a company's capital while the cost of equity is a component of WACC. We wanted to see how sensitive Adobe's average cost of capital was to its equity component. The results of the sensitivity table analysis were interesting as there was an inverse correlation. Unsurprisingly every percent increase in the cost of equity resulted in a higher average cost of capital. The effect was not strong as we first thought. As you can see in the chart below, one whole percentage point increase in the cost of equity only raised the WACC by an average of \$2.22 per share.

		Cost of Equity							
		364.00	6.53%	7.53%	8.53%	9.53%	10.53%	11.53%	12.53%
WACC	8.87%	395.24	397.47	399.70	401.92	404.13	406.33	408.53	
	9.37%	380.99	383.14	385.29	387.43	389.56	391.68	393.80	
	9.87%	368.68	370.76	372.84	374.91	376.97	379.03	381.08	
	10.37%	357.95	359.97	361.99	364.00	366.00	367.99	369.98	
	10.87%	348.50	350.47	352.44	354.39	356.34	358.28	360.22	
	11.37%	340.13	342.05	343.97	345.88	347.78	349.67	351.56	
	11.87%	332.65	334.53	336.41	338.28	340.14	341.99	343.84	

Source: Model

Subscription Cost as a % of Revenue and Marginal Tax Rate

This table was the most sensitive to fluctuations in the given inputs ranging from a high of 424.81 to a low of 306.81. The subscription cost as a % of revenue was an input we generated to predict future revenue. Since subscription costs were responsible for the largest portion of Adobe's cost of revenue it made sense to include it in a table and view the stock's sensitivity. The average marginal tax rate varied greatly over the past 10 years, ranging from around 24 to 8 percent in our prediction. Subscription cost has a slightly larger effect on the overall share price when compared to marginal tax rate; an interesting conclusion considering subscription cost is a single expense, but subscriptions make up such a large share of the revenue.

		Subscription Cost as a % of Revenue							
		364.00	7.28%	8.28%	9.28%	10.28%	11.28%	12.28%	13.28%
Marginal Tax Rate	7.87%	424.81	411.61	398.41	385.22	372.02	358.82	345.63	
	9.87%	417.09	404.15	391.22	378.29	365.36	352.42	339.49	
	11.87%	409.20	396.54	383.87	371.21	358.55	345.88	333.22	
	13.87%	401.14	388.76	376.37	363.98	351.59	339.20	326.82	
	15.87%	392.92	380.81	368.71	356.60	344.49	332.39	320.28	
	17.87%	384.53	372.71	360.89	349.07	337.25	325.43	313.61	
	19.87%	375.97	364.45	352.92	341.39	329.86	318.33	306.81	

Source: Model

Avg. Depreciation Rate and Avg. Long-Term Debt %

In our final sensitivity analysis table, we wanted to test to inputs even though they are not correlated. There is no direct relation between the average depreciation rate and average long-term debt percentage; however, they are both important financial metrics to measure the profitability of a company. Adobe has a high rate of both depreciation and LTD which made us curious as to each impact on the stock price of each metric. Changes to Adobe's average LTD% unsurprisingly had little impact on their stock price as they carry little debt on their balance sheet. We did not expect the depreciation rate to have such a small impact even after raising the input increment to two whole percentage points.

		Avg. Depreciation Rate							
		364.00	15.68%	18.18%	20.68%	23.18%	25.68%	28.18%	30.68%
Avg. LongTerm Debt %	23.02%	368.83	367.39	366.10	364.94	363.90	362.96	362.12	
	25.02%	368.52	367.07	365.78	364.62	363.58	362.65	361.82	
	27.02%	368.20	366.76	365.47	364.31	363.27	362.34	361.51	
	29.02%	367.88	366.44	365.15	364.00	362.96	362.03	361.20	
	31.02%	367.56	366.12	364.84	363.68	362.65	361.72	360.89	
	33.02%	367.24	365.81	364.52	363.37	362.34	361.41	360.58	
	35.02%	366.92	365.49	364.21	363.06	362.03	361.10	360.28	

Source: Model

Important Disclaimer

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Adobe Inc.
Revenue Decomposition

Fiscal Years Ending Dec / 2	2018	2019	2020	2021	2022	2023E	2024E	2025E	2026E	2027E
Adobe's Revenue Segments (Income Statement)										
Revenue:										
Subscription	\$ 7,922	\$ 9,994	\$ 11,626	\$ 14,573	\$ 16,388	\$ 18,027	\$ 19,829	\$ 21,812	\$ 23,994	\$ 26,393
Subscription % of total revenue	87.73%	89.47%	90.35%	92.32%	93.08%	93.45%	93.80%	94.14%	94.45%	94.75%
Product	622	648	507	555	532	\$ 543	\$ 553	\$ 565	\$ 576	\$ 587
Product % of total revenue	6.89%	5.80%	3.94%	3.52%	3.02%	2.81%	2.62%	2.44%	2.27%	2.11%
Services & other	486	529	735	657	686	\$ 720	\$ 756	\$ 794	\$ 834	\$ 876
Services & other % of total revenue	5.38%	4.74%	5.71%	4.16%	3.90%	3.73%	3.58%	3.43%	3.28%	3.14%
Total revenue	9,030	11,171	12,868	15,785	17,606	19,290	21,139	23,171	25,403	27,856
Adobe's Revenue Segments (10K Notes)										
<u>Digital Media:</u>										
Creative Cloud			7,736	9,546	10,459	12,551	15,061	17,320	19,918	21,910
Document Cloud			1,479	1,974	2,838	3,264	3,753	4,129	4,541	4,769
Total Digital Media revenue	6,325	7,077	9,233	11,520	12,842	15,815	18,814	21,449	24,460	26,678
Digital Media revenue growth rate		11.89%	30.46%	24.77%	11.48%	23.15%	18.97%	14.00%	14.04%	9.07%
<u>Digital Experience:</u>										
Total Digital Experience revenue	2,444	3,206	3,125	3,867	4,422	4,864	5,351	6,153	7,076	7,784
Digital Experience growth rate		31.18%	-2.53%	23.74%	14.35%	10.00%	10.00%	15.00%	15.00%	10.00%
<u>Publishing and Advertising:</u>										
Total Publishing and Advertising revenue	-	-	510	398	342	318	296	311	326	359
Publishing and Advertising growth rate				-21.96%	-14.07%	-7.00%	-7.00%	5.00%	5.00%	10.00%
<u>Publishing (Discontinued):</u>										
Total Publishing revenue	261	258	-	-	-	-	-	-	-	-
Publishing growth rate		-1.15%								
Revenue:										
Digital Media percentage of total revenue	70.04%	67.14%	71.75%	72.98%	72.94%	75.32%	76.92%	76.84%	76.77%	76.62%
Digital Experience percentage of total revenue	27.07%	30.41%	24.29%	24.50%	25.12%	23.17%	21.87%	22.04%	22.21%	22.35%
Publishing and Advertising percentage of total revenue	0.00%	0.00%	3.96%	2.52%	1.94%	1.51%	1.21%	1.11%	1.02%	1.03%
Publishing percentage of total revenue	2.89%	2.45%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent of total revenue	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Total revenue	9,030	10,541	12,868	15,785	17,606	20,997	24,461	27,912	31,862	34,821
Total revenue growth rate		16.73%	22.08%	22.67%	11.54%	19.26%	16.50%	14.11%	14.15%	9.29%

Adobe Inc.
Balance Sheet

Fiscal Years Ending Dec / 2	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023E	2024E	2025E	2026E	2027E
ASSETS															
Current Assets:															
Cash & cash equivalents	\$ 835	\$ 1,117	\$ 877	\$ 1,011	\$ 2,306	\$ 1,643	\$ 2,650	\$ 4,478	\$ 3,844	\$ 4,236	\$ 7,310	\$ 10,940	\$ 15,240	\$ 20,281	\$ 26,133
Short-term investments	2,339	2,622	3,112	3,750	3,514	1,586	1,527	1,514	1,954	1,860	1,927	1,996	2,068	2,143	2,220
Trade receivables, net	600	592	672	833	1,218	1,316	1,535	1,398	1,878	2,065	2,639	2,892	3,170	3,475	3,811
Prepaid expenses & other current assets	272	271	162	245	210	312	783	756	993	835	986	1,080	1,184	1,298	1,423
Total current assets	4,046	4,602	4,822	5,840	7,248	4,857	6,495	8,146	8,669	8,996	12,862	16,908	21,662	27,197	33,587
Property & equipment, net	660	785	787	816	937	1,075	1,293	1,517	1,673	1,908	1,943	1,971	1,994	2,012	2,026
Operating lease right-of-use assets, net	207	80	80	80	-	-	-	487	443	407	415	421	425	429	432
Goodwill	4,772	4,722	5,367	5,406	5,822	10,581	10,691	10,742	12,668	12,787	12,787	12,787	12,787	12,787	12,787
Purchased & other intangibles, net	605	470	510	414	386	2,069	1,721	1,359	1,820	1,449	1,073	742	447	305	201
Deferred income taxes	-	-	-	-	-	-	-	1,370	1,085	777	123	140	160	186	211
Other assets	90	126	160	150	144	187	563	663	883	841	874	958	1,050	1,151	1,262
Total fixed assets	6,334	6,184	6,905	6,867	7,288	13,912	14,267	16,138	18,572	18,169	17,214	17,018	16,863	16,869	16,918
Total assets	\$ 10,380	\$ 10,786	\$ 11,726	\$ 12,707	\$ 14,536	\$ 18,769	\$ 20,762	\$ 24,284	\$ 27,241	\$ 27,165	\$ 30,076	\$ 33,927	\$ 38,524	\$ 44,066	\$ 50,505
LIABILITIES AND STOCKHOLDERS' EQUITY															
Current Liabilities:															
Trade payables	\$ 62	\$ 68	\$ 93	\$ 88	\$ 114	\$ 186	\$ 209	\$ 306	\$ 312	\$ 379	\$ 359	\$ 393	\$ 431	\$ 473	\$ 518
Accrued expenses	663	701	680	740	994	1,163	1,399	1,422	1,736	1,790	2,222	2,435	2,669	2,926	3,209
Debt	-	603	-	-	-	-	3,149	-	-	500	165	181	199	218	239
Deferred revenue	776	1,098	1,434	1,946	2,406	2,916	3,378	3,629	4,733	5,297	5,642	6,183	6,778	7,430	8,148
Income taxes payable	10	24	6	38	14	36	56	63	54	75	13	15	17	20	23
Operating lease liabilities	15	-	-	-	-	-	-	92	97	87	89	88	88	88	88
Total current liabilities	1,526	2,494	2,214	2,812	3,527	4,301	8,191	5,512	6,932	8,128	8,490	9,296	10,182	11,155	12,224
Long-term liabilities:															
Debt	1,499	911	1,907	1,902	1,881	4,125	989	4,117	4,123	3,629	4,996	4,939	4,894	4,895	4,910
Deferred revenue	53	57	51	69	89	138	123	130	145	117	220	241	264	290	318
Accrued restructuring	8	5	-	-	-	-	-	-	-	-	-	-	-	-	-
Income taxes payable	133	126	256	184	173	644	616	529	534	530	731	834	954	1,107	1,256
Operating lease liabilities	-	-	-	-	-	-	-	499	453	417	425	431	436	440	443
Deferred income taxes	376	342	208	218	280	47	140	10	-	-	-	-	-	-	-
Other liabilities	62	74	89	97	125	152	173	223	257	293	324	355	389	427	468
Total liabilities	3,656	4,010	4,725	5,282	6,076	9,407	10,232	11,020	12,444	13,114	15,186	16,096	17,118	18,313	19,618
Stockholders' equity:															
Common Equity	3,393	3,778	4,185	4,616	5,082	5,685	6,505	7,357	8,428	9,868	11,810	13,752	15,694	17,636	19,578
Retained earnings (accumulated deficit)	6,929	6,924	7,253	8,115	9,574	11,816	14,829	19,611	23,905	28,319	32,224	36,678	41,774	47,686	54,393
Accumulated other comprehensive income (loss)	46	(8)	(169)	(174)	(112)	(148)	(188)	(158)	(137)	(293)	(293)	(293)	(293)	(293)	(293)
Treasury stock, at cost	(3,643)	(3,919)	(4,268)	(5,132)	(6,084)	(7,991)	(10,615)	(13,546)	(17,399)	(23,843)	(27,918)	(31,993)	(36,068)	(40,143)	(44,218)
Total stockholders' equity (deficit)	6,725	6,776	7,002	7,425	8,460	9,362	10,530	13,264	14,797	14,051	15,823	18,144	21,108	24,887	29,460
Total liabilities and stockholders' equity	\$ 10,380	\$ 10,786	\$ 11,726	\$ 12,707	\$ 14,535	\$ 18,769	\$ 20,762	\$ 24,284	\$ 27,241	\$ 27,165	\$ 31,009	\$ 34,240	\$ 38,226	\$ 43,200	\$ 49,078

Adobe Inc.

Forecasted Cash Flow Statement

Fiscal Years Ending Dec / 2	2023E	2024E	2025E	2026E	2027E
Cash flows from operating activities:					
Net income	\$ 3,905	\$ 4,454	\$ 5,097	\$ 5,912	\$ 6,706
Adjustments to reconcile net income to net cash provided by operating activities:					
Depreciation and amortization	818	781	752	604	570
Operating lease right-of-use assets	(8)	(6)	(5)	(4)	(3)
Deferred income taxes	654	(17)	(20)	(26)	(25)
Changes in operating assets and liabilities, net of acquired assets and assumed liabilities:					
Trade receivables, net	(574)	(253)	(278)	(305)	(336)
Prepaid expenses and other assets	(151)	(95)	(104)	(114)	(125)
Trade payables	(20)	34	38	42	46
Accrued expenses and other liabilities	432	213	234	257	283
Income taxes payable (short-term)	(62)	2	2	3	3
Income taxes payable (long-term)	201	103	120	153	149
Deferred revenue	345	541	594	653	717
Net cash provided by operating activities	5,542	5,757	6,430	7,175	7,985
Cash flows from investing activities:					
Capital Expenditures	35	28	22	18	14
Short-term investments	(67)	(69)	(72)	(74)	(77)
Net cash used for investing activities	(32)	(41)	(49)	(57)	(63)
Cash flows from financing activities:					
Repurchases of common stock	(4,075)	(4,075)	(4,075)	(4,075)	(4,075)
Proceeds from re-issuance of treasury stock	1,942	1,942	1,942	1,942	1,942
Short-term debt	(335)	16	17	19	21
Long-term debt					
Other liabilities	31	31	34	38	41
Net cash used for financing activities	(2,437)	(2,086)	(2,081)	(2,076)	(2,071)
Net change in cash and cash equivalents	3,074	3,630	4,300	5,042	5,851
Cash and cash equivalents at beginning of year	4,236	7,310	10,940	15,240	20,281
Cash and cash equivalents at end of year	7,310	10,940	15,240	20,281	26,133

Adobe Inc.

Historical Cash Flow Statement

Fiscal Years Ending Dec / 2	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Cash flows from operating activities:										
Net income	\$ 290	\$ 268	\$ 630	\$ 1,169	\$ 1,694	\$ 2,591	\$ 2,951	\$ 5,260	\$ 4,822	\$ 4,756
Adjustments to reconcile net income to net cash provided by operating activities:										
Depreciation and amortization	321	314	339	332	326	346	737	757	788	856
Stock-based compensation	329	334	336	350	451	610	788	909	1,069	1,440
Reduction of operating lease right-of-use assets	-	-	-	-	-	-	-	87	73	83
Deferred income taxes	30	(26)	(70)	24	52	(469)	3	(1,501)	183	328
Unrealized losses (gains) on investments, net	29	(0)	(31)	3	(5)	1	(48)	(11)	(4)	29
Other non-cash items	28	2	1	2	5	7	14	40	7	10
Changes in operating assets and liabilities, net of acquired assets and assumed liabilities:										
Trade receivables, net	34	8	(80)	(160)	(187)	(2)	(188)	106	(430)	(198)
Prepaid expenses and other assets	(56)	(2)	(8)	(71)	28	(77)	(531)	(288)	(475)	(94)
Trade payables	7	6	23	(6)	(45)	55	23	96	(20)	66
Accrued expenses and other liabilities	35	46	(23)	65	154	44	172	86	162	7
Income taxes payable	(59)	11	30	(32)	(34)	479	4	(72)	2	19
Deferred revenue	201	326	321	525	475	445	497	258	1,053	536
Net cash provided by operating activities	1,152	1,287	1,470	2,200	2,913	4,029	4,422	5,727	7,230	7,838
Cash flows from investing activities:										
Capital Expenditures	(256)	(166)	(208)	(262)	(208)	(285)	(443)	(434)	(390)	(488)
Purchases of short-term investments	(2,058)	(2,014)	(2,065)	(2,285)	(1,931)	(566)	(700)	(1,071)	(1,533)	(909)
Maturities of short-term investments	360	272	372	769	760	766	700	915	877	683
Proceeds from sales of short-term investments	1,450	1,444	1,176	861	1,394	1,709	86	167	191	270
Acquisitions, net of cash acquired	(705)	(30)	(826)	(48)	(460)	(6,314)	(101)	-	(2,682)	(126)
Purchases of property and equipment	(188)	(148)	(185)	(204)	(178)	(267)	(394)	(419)	(348)	(442)
Purchases of long-term investments, intangibles and other assets	(68)	(18)	(23)	(58)	(30)	(19)	(49)	(15)	(42)	(46)
Proceeds from sale of long-term investments and other assets	30	4	62	6	2	5	3	9	-	-
Net cash used for investing activities	(1,178)	(491)	(1,488)	(960)	(443)	(4,685)	(456)	(414)	(3,537)	(570)
Cash flows from financing activities:										
Repurchases of common stock	(1,100)	(600)	(625)	(1,075)	(1,100)	(2,050)	(2,750)	(3,050)	(3,950)	(6,550)
Proceeds from re-issuance of treasury stock	501	228	164	146	158	191	233	270	291	278
Taxes paid related to net share settlement of equity awards	41	53	68	75	(240)	(393)	(440)	(681)	(719)	(518)
Proceeds from issuance of debt	26	-	989	-	-	2,248	-	3,144	-	-
Repayment of debt	(26)	(15)	(602)	(0)	(2)	(2)	-	(3,150)	-	-
Other financing activities, net	-	-	-	-	-	-	11	(21)	77	(35)
Net cash used for financing activities	(559)	(507)	(201)	(1,091)	(1,184)	(6)	(2,946)	(3,488)	(4,301)	(6,825)
Effect of foreign currency exchange rates on cash and cash equivalents	(5)	(7)	(21)	(14)	9	(2)	(13)	3	(26)	(51)
Net change in cash and cash equivalents	(590)	283	(241)	135	1,295	(663)	1,007	1,828	(634)	392
Cash and cash equivalents at beginning of year	1,425	835	1,117	877	1,011	2,306	1,643	2,650	4,478	3,844
Cash and cash equivalents at end of year	\$ 835	\$ 1,117	\$ 877	\$ 1,011	\$ 2,306	\$ 1,643	\$ 2,650	\$ 4,478	\$ 3,844	\$ 4,236

Adobe Inc.

Common Size Balance Sheet

Fiscal Years Ending Dec / 2	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023E	2024E	2025E	2026E	2027E
Revenue/Sales:	4,055.24	4,147.07	4,795.51	5,854.43	7,301.51	9,030.01	11,171.30	12,868.00	15,785.00	17,606.00	19,289.74	21,139.29	23,171.12	25,403.36	27,855.94
ASSETS															
Current Assets:															
Cash & cash equivalents	20.58%	26.94%	18.28%	17.27%	31.58%	18.19%	23.72%	34.80%	24.35%	24.06%	37.90%	51.75%	65.77%	79.84%	93.81%
Short-term investments	57.68%	63.23%	64.88%	64.05%	48.12%	17.57%	13.67%	11.77%	12.38%	10.56%	9.99%	9.44%	8.93%	8.43%	7.97%
Trade receivables, net	14.79%	14.27%	14.01%	14.23%	16.68%	14.57%	13.74%	10.86%	11.90%	11.73%	13.68%	13.68%	13.68%	13.68%	13.68%
Prepaid expenses & other current assets	6.71%	6.53%	3.37%	4.19%	2.88%	3.46%	7.01%	5.88%	6.29%	4.74%	5.11%	5.11%	5.11%	5.11%	5.11%
Total current assets	99.76%	110.98%	100.55%	99.75%	99.26%	53.79%	58.14%	63.30%	54.92%	51.10%	66.68%	79.99%	93.49%	107.06%	120.57%
Property & equipment, net	16.27%	18.93%	16.42%	13.94%	12.83%	11.91%	11.57%	11.79%	10.60%	10.84%	10.07%	9.33%	8.60%	7.92%	7.27%
Operating lease right-of-use assets, net	5.11%	1.94%	1.68%	1.37%	0.00%	0.00%	0.00%	3.78%	2.81%	2.31%	2.15%	1.99%	1.84%	1.69%	1.55%
Goodwill	117.67%	113.86%	111.91%	92.35%	79.73%	117.18%	95.70%	83.48%	80.25%	72.63%	66.29%	60.49%	55.19%	50.34%	45.90%
Purchased & other intangibles, net	14.93%	11.33%	10.64%	7.08%	5.28%	22.91%	15.40%	10.56%	11.53%	8.23%	5.56%	3.51%	1.93%	1.20%	0.72%
Deferred income taxes	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	10.65%	6.87%	4.41%	0.64%	0.66%	0.69%	0.73%	0.76%
Other assets	2.22%	3.05%	3.33%	2.56%	1.97%	2.07%	5.04%	5.15%	5.59%	4.78%	4.53%	4.53%	4.53%	4.53%	4.53%
Total fixed assets	156.20%	149.11%	143.98%	117.30%	99.81%	154.06%	127.72%	125.41%	117.66%	103.20%	89.24%	80.51%	72.77%	66.41%	60.74%
Total assets	255.96%	260.08%	244.53%	217.05%	199.08%	207.85%	185.85%	188.72%	172.58%	154.29%	155.92%	160.49%	166.26%	173.47%	181.31%
LIABILITIES AND STOCKHOLDERS' EQUITY															
Current Liabilities:															
Trade payables	1.53%	1.65%	1.95%	1.50%	1.55%	2.06%	1.88%	2.38%	1.98%	2.15%	1.86%	1.86%	1.86%	1.86%	1.86%
Accrued expenses	16.35%	16.90%	14.18%	12.63%	13.61%	12.88%	12.52%	11.05%	11.00%	10.17%	11.52%	11.52%	11.52%	11.52%	11.52%
Debt	0.00%	14.55%	0.00%	0.00%	0.00%	0.00%	28.19%	0.00%	0.00%	2.84%	0.86%	0.86%	0.86%	0.86%	0.86%
Deferred revenue	19.12%	26.47%	29.91%	33.23%	32.95%	32.29%	30.24%	28.20%	29.98%	30.09%	29.25%	29.25%	29.25%	29.25%	29.25%
Income taxes payable	0.25%	0.58%	0.13%	0.66%	0.19%	0.40%	0.50%	0.49%	0.34%	0.43%	0.07%	0.07%	0.07%	0.08%	0.08%
Operating lease liabilities	0.36%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.71%	0.61%	0.49%	0.46%	0.42%	0.38%	0.35%	0.31%
Total current liabilities	37.62%	60.15%	46.16%	48.03%	48.31%	47.63%	73.32%	42.83%	43.92%	46.17%	44.01%	43.98%	43.94%	43.91%	43.88%
Long-term liabilities:															
Debt	36.97%	21.97%	39.77%	32.49%	25.77%	45.68%	8.85%	31.99%	26.12%	20.61%	25.90%	23.36%	21.12%	19.27%	17.63%
Deferred revenue	1.31%	1.38%	1.07%	1.18%	1.21%	1.52%	1.10%	1.01%	0.92%	0.66%	1.14%	1.14%	1.14%	1.14%	1.14%
Accrued restructuring	0.19%	0.13%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Income taxes payable	3.27%	3.03%	5.34%	3.15%	2.37%	7.13%	5.52%	4.11%	3.38%	3.01%	3.79%	3.94%	4.12%	4.36%	4.51%
Operating lease liabilities	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.88%	2.87%	2.37%	2.20%	2.04%	1.88%	1.73%	1.59%
Deferred income taxes	9.26%	8.25%	4.34%	3.72%	3.83%	0.52%	1.25%	0.08%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other liabilities	1.52%	1.78%	1.85%	1.66%	1.71%	1.69%	1.55%	1.73%	1.63%	1.66%	1.68%	1.68%	1.68%	1.68%	1.68%
Total liabilities	90.15%	96.69%	98.53%	90.23%	83.21%	104.17%	91.59%	85.64%	78.83%	74.49%	78.72%	76.14%	73.88%	72.09%	70.43%
Stockholders' equity:															
Common Equity	83.66%	91.11%	87.27%	78.85%	69.60%	62.96%	58.23%	57.17%	53.39%	56.05%	61.22%	65.05%	67.73%	69.43%	70.28%
Retained earnings (accumulated deficit)	170.86%	166.97%	151.25%	138.60%	131.12%	130.85%	132.74%	152.40%	151.44%	160.85%	167.05%	173.51%	180.29%	187.72%	195.26%
Accumulated other comprehensive income (loss)	1.14%	-0.20%	-3.53%	-2.97%	-1.53%	-1.64%	-1.68%	-1.23%	-0.87%	-1.66%	-1.52%	-1.39%	-1.26%	-1.15%	-1.05%
Treasury stock, at cost	-89.84%	-94.50%	-88.99%	-87.67%	-83.33%	-88.49%	-95.02%	-105.27%	-110.22%	-135.43%	-144.73%	-151.34%	-155.66%	-158.02%	-158.74%
Total stockholders' equity (deficit)	165.82%	163.39%	146.00%	126.82%	115.86%	103.68%	94.26%	103.08%	93.74%	79.81%	82.03%	85.83%	91.09%	97.97%	105.76%
Total liabilities and stockholders' equity	255.97%	260.08%	244.53%	217.05%	199.08%	207.85%	185.85%	188.72%	172.58%	154.29%	160.75%	161.97%	164.97%	170.06%	176.18%

Adobe Inc.
Value Driver Estimation

Fiscal Years Ending Dec. 31	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023E	2024E	2025E	2026E	2027E
NOPLAT:															
Operating Revenues	4,055	4,147	4,796	5,854	7,302	9,030	11,171	12,868	15,785	17,606	19,290	21,139	23,171	25,403	27,856
Less: Subscription expense	278	335	409	462	623	807	1,223	1,108	1,374	1,646	1,853	2,038	2,242	2,467	2,713
Less: Product expense	138	97	90	69	57	46	40	36	41	35	38	38	39	40	41
Less: Services & other expense	170	190	245	289	330	342	411	578	450	484	527	553	581	610	640
Less: Depreciation and Amortization	321	314	339	332	326	346	737	757	788	856	818	781	752	604	570
Less: Research & development expenses	827	844	863	976	1,224	1,538	1,930	2,188	2,540	2,987	3,405	3,731	4,090	4,484	4,917
Less: Sales & marketing expenses	4,020	1,652	1,683	1,910	2,198	2,621	3,244	3,591	4,321	4,968	6,157	6,748	7,396	8,109	8,892
Less: General & administrative expenses	520	543	532	578	625	745	881	968	1,085	1,219	1,792	1,964	2,153	2,360	2,588
Less: Amortization of purchased intangibles	52	52	69	79	77	91	175	162	172	169	237	260	285	312	343
Add: Implied interest on operating leases	9	3	3	3	-	-	-	21	19	18	18	18	18	19	19
EBITA	(2,281)	116	562	1,157	1,842	2,494	2,531	3,459	4,995	5,224	4,445	5,007	5,615	6,400	7,134
Income tax provision	66	93	244	266	444	203	253	(1,084)	883	1,252	629	717	820	952	1,080
Plus: Tax shield on interest expense	3	21	68	31	82	49	20	(109)	107	193	87	99	114	132	150
Less: Tax on interest income	(3)	(14)	(18)	(8)	(14)	(21)	(12)	(12)	(14)	(17)	(25)	(31)	(31)	(31)	(31)
Less: Tax on investment income	(0)	0	0	(0)	1	1	4	1	2	(3)	35	51	70	92	118
Less: Tax on non-operating income	0	2	9	2	7	9	3	4	-	6	-	-	-	-	-
Total Adjusted Taxes	72	126	320	305	531	263	278	(1,187)	1,002	1,459	706	796	895	1,022	1,141
Change in deferred taxes	30	(26)	(70)	24	52	(469)	3	(1,501)	183	328	654	(17)	(20)	(26)	(25)
NOPLAT	(2,323)	(37)	172	877	1,363	1,762	2,256	3,145	4,176	4,094	4,393	4,194	4,700	5,352	5,968
Invested Capital (IC):															
Net Operating Working Capital															
Operating Current Assets:															
Normal Cash	81	83	96	117	146	181	223	257	316	352	386	423	463	508	557
Trade receivables	600	592	672	833	1,218	1,316	1,535	1,398	1,878	2,065	2,639	2,892	3,170	3,475	3,811
Prepaid expenses and other current assets	272	271	162	245	210	312	783	756	993	835	986	1,080	1,184	1,298	1,423
Total operating current assets	953	946	930	1,196	1,574	1,809	2,541	2,411	3,187	3,252	4,010	4,395	4,817	5,281	5,791
Operating Current Liabilities:															
Trade payables	62	68	93	88	114	186	209	306	312	379	359	393	431	473	518
Accrued expenses	663	701	680	740	994	1,163	1,399	1,422	1,736	1,790	2,222	2,435	2,669	2,926	3,209
Deferred revenue	776	1,098	1,434	1,946	2,406	2,916	3,378	3,629	4,733	5,297	5,642	6,183	6,778	7,430	8,148
Income taxes payable	10	24	6	38	14	36	56	63	54	75	13	15	17	20	23
Operating Lease Liabilities	15	-	-	-	-	-	-	92	97	87	89	88	88	88	88
Total operating current liabilities	1,526	1,891	2,214	2,812	3,527	4,301	5,042	5,512	6,932	7,628	8,325	9,115	9,983	10,937	11,985
Net operating working capital	(573)	(945)	(1,284)	(1,616)	(1,953)	(2,492)	(2,500)	(3,101)	(3,745)	(4,376)	(4,315)	(4,720)	(5,166)	(5,656)	(6,194)
Net PP&E	660	785	787	816	937	1,075	1,293	1,517	1,673	1,908	1,943	1,971	1,994	2,012	2,026
Operating lease right of use assets	207	80	80	80	-	-	-	487	443	407	415	421	425	429	432
Purchased & other intangibles	605	470	510	414	386	2,069	1,721	1,359	1,820	1,449	1,073	742	447	305	201
Other Assets	90	126	160	150	144	187	563	663	883	841	874	958	1,050	1,151	1,262
Total other operating assets	903	676	750	645	529	2,256	2,283	2,509	3,146	2,697	2,361	2,120	1,922	1,885	1,895
Deferred revenue (long-term)	53	57	51	69	89	138	123	130	145	117	220	241	264	290	318
Other liabilities	62	74	89	97	125	152	173	223	257	293	324	355	389	427	468
Total other operating liabilities	115	131	140	167	214	290	296	353	402	410	544	596	653	716	786
Total Invested Capital	875	385	114	-322	-701	548	780	572	672	-181	-554	-1225	-1904	-2476	-3059
Free Cash Flow (FCF):															
NOPLAT	(2,323)	(37)	172	877	1,363	1,762	2,256	3,145	4,176	4,094	4,393	4,194	4,700	5,352	5,968
Change in IC	(490)	(271)	(436)	(379)	1,249	232	(208)	99	(853)	(373)	(373)	(671)	(679)	(572)	(583)
FCF	453	443	1,312	1,742	513	2,024	3,353	4,077	4,946	4,767	4,865	5,379	5,924	6,551	
Return on Invested Capital (ROIC):															
NOPLAT	(2,323)	(37)	172	877	1,363	1,762	2,256	3,145	4,176	4,094	4,393	4,194	4,700	5,352	5,968
Beginning IC	875	385	114	(322)	(701)	548	780	572	672	672	(181)	(554)	(1,225)	(1,904)	(2,476)
ROIC	-4.21%	44.70%	768.33%	-423.56%	-251.36%	411.50%	403.04%	729.64%	609.44%	-2428.87%	-756.84%	-383.73%	-281.17%	-241.05%	
Economic Profit (EP):															
Beginning IC	875	385	114	(322)	(701)	548	780	572	672	672	(181)	(554)	(1,225)	(1,904)	(2,476)
x (ROIC - WACC)	-14.58%	34.33%	757.96%	-433.93%	-261.73%	401.13%	392.67%	719.27%	599.07%	-2439.24%	-767.21%	-394.10%	-291.54%	-251.42%	
EP	(127.52)	132.15	864.79	1,396.14	1,834.66	2,199.45	3,063.94	4,116.81	4,023.92	4,412.09	4,251.26	4,827.09	5,549.52	6,224.52	

Adobe Inc.*Weighted Average Cost of Capital (WACC) Estimation***Cost of Equity:**

Risk-Free Rate	3.60%
Beta	1.27
Equity Risk Premium	5.10%
Cost of Equity	10.08%

ASSUMPTIONS:

5-year Treasury Bond
 5-year monthly beta
 Geometric average 1928-2022

Cost of Debt:

Risk-Free Rate	3.60%
Implied Default Premium	0.72%
Pre-Tax Cost of Debt	4.32%
Marginal Tax Rate	14%
After-Tax Cost of Debt	3.72%

5-year Treasury Bond
 YTM on bond maturing 1/2/2030

Market Value of Common Equity:

Total Shares Outstanding	458.7
Current Stock Price	\$379.38
MV of Equity	174,021.61

MV Weights

97.41%

Market Value of Debt:

Short-Term & Current Portion of LTD	500
Long-Term Debt	3629
PV of Operating Leases	504
MV of Total Debt	4,633.00

2.59%

Market Value of the Firm

178,654.61

100.00%

Estimated WACC

9.91%

Adobe Inc.

Discounted Cash Flow (DCF) and Economic Profit (EP) Valuation Models

Key Inputs:

CV Growth of NOPLAT	2.50%
CV Year ROIC	-241.05%
WACC	10.37%
Cost of Equity	9.53%

<i>Fiscal Years Ending Dec / 2</i>	2023E	2024E	2025E	2026E	2027E
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DCF Model:

Free Cash Flow (FCF)	4,766.57	4,864.53	5,378.77	5,924.30	76,616.06
Continuing Value (CV)					76,616.06
PV of FCF	4,318.72	3,993.36	4,000.64	3,992.39	51,631.61

Value of Operating Assets:	67936.7
Non-Operating Adjustments	90257.76

Value of Equity	158194.5
Shares Outstanding (as for April 2023)	459000000.0
Intrinsic Value of Last FYE	\$ 344.65
Implied Price as of Today	\$ 364.12

EP Model:

Economic Profit (EP)	4,412.09	4,251.26	4,827.09	5,549.52	
Continuing Value (CV)					79,568.46
PV of EP	3,997.55	3,489.92	3,590.31	3,739.83	53,621.23

Total PV of EP	68438.8
Invested Capital (last FYE)	-554.1
Value of Operating Assets:	67884.7
Non-Operating Adjustments	90257.76

Value of Equity	158142.5
Shares Outstanding (as for April 2023)	459000000.0
Intrinsic Value of Last FYE	\$ 344.54
Implied Price as of Today	\$ 364.00

Because the number are in millions, B39 needs to be multiplied by 1,000,000 before doing the division

Adobe Inc.*Dividend Discount Model (DDM) or Fundamental P/E Valuation Model*

Fiscal Years Ending Dec / 2	2023E	2024E	2025E	2026E	2027E
EPS	\$ 8.26	\$ 9.34	\$ 10.60	\$ 12.20	\$ 13.72
Key Assumptions					
CV growth of EPS	2.50%				
CV Year ROE	22.76%				
Cost of Equity	9.53%				
					ROE = Net Income / Beg.TSE
Future Cash Flows					
P/E Multiple (CV Year)					12.66
EPS (CV Year)					\$ 13.72
Future Stock Price					\$ 173.79
Dividends Per Share	0	0	0	0	0
Discounted Cash Flows					\$ 120.75
Intrinsic Value as of Last FYE	\$ 120.75				
Implied Price as of Today	\$ 127.57				

No dividends makes the DDM unusable

Adobe Inc.

Relative Valuation Models

Ticker	Company	Price	Sales per Share FY1	Sales per Share FY2	P/S FY1	P/S FY1	Est. 5yr EPS gr.	PEG 23	PEG 24	EV	EBIT	EV/ EBIT
CRM	Salesforce	\$199.78	\$34.54	\$38.40	5.78	5.20	10.0	0.58	0.52	58,359	1,858	31.41
INTU	Intuit	\$445.83	\$50.50	\$56.16	8.83	7.94	10.0	0.88	0.79	16,441	2,666	6.17
ORCL	Oracle	\$92.92	\$18.47	\$19.82	5.03	4.69	10.0	0.50	0.47	(6,220)	13,931	(0.45)
NOW	ServiceNow	\$464.72	\$43.66	\$53.21	10.64	8.73	10.0	1.06	0.87	5,032	355	14.17
SNPS	Synopsys	\$386.25	\$38.01	\$42.52	10.16	9.08	10.0	1.02	0.91	5,516	1,125	4.90
CDNS	Cadence Design Systems	\$210.09	\$14.79	\$16.34	14.20	12.86	10.0	1.42	1.29	2,745	1,074	2.56
VMW	VMware A	\$124.85	\$33.20	\$35.70	3.76	3.50	10.0	0.38	0.35	1,534	2,030	0.76
WDAY	Workday A	\$206.54	\$27.81	\$32.62	7.43	6.33	10.0	0.74	0.63	5,586	(240)	(23.31)
			Average		8.23	7.29		0.82	0.73			4.68

ADBE	Adobe Inc.	\$379.38	\$38.54	\$40.12	9.8	9.5	10.0	1.0	0.9	14,051	5,928	2.37
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Implied Relative Value:

P/E (EPS23)	\$	317.16
P/E (EPS24)	\$	292.53
PEG (EPS23)	\$	317.16
PEG (EPS24)	\$	292.53
Implied EV	\$	65,825.03
Implied Price	\$	349.51

Adobe Inc.
Key Management Ratios

<i>Fiscal Years Ending Dec / 2</i>	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023E	2024E	2025E	2026E	2027E
Liquidity Ratios:															
Current Ratio - Current Assets / Current Liabilities	265.17%	184.50%	217.83%	207.70%	205.47%	112.92%	79.29%	147.79%	125.06%	110.68%	151.49%	181.89%	212.75%	243.82%	274.76%
Quick Ratio - (Cash + Customer Receivables + Other Receivables) / Current Liabilities	94.02%	68.52%	69.96%	65.60%	99.90%	68.78%	51.09%	106.60%	82.54%	77.52%	117.18%	148.79%	180.81%	212.97%	244.96%
Cash Ratio - Cash / Current Liabilities	54.70%	44.80%	39.60%	35.97%	65.37%	38.19%	32.36%	81.24%	55.45%	52.12%	86.10%	117.68%	149.68%	181.82%	213.78%
Asset-Management Ratios:															
Asset Turnover Ratio - Net Revenue / Total Assets	39.07%	38.45%	40.89%	46.07%	50.23%	48.11%	53.81%	52.99%	57.95%	64.81%	64.14%	62.31%	60.15%	57.65%	55.15%
Total Asset Turnover Ratio - Net Revenue / Average Total Assets	39.19%	42.60%	47.92%	53.60%	54.23%	56.52%	57.13%	61.27%	64.72%	67.40%	66.06%	63.96%	61.52%	58.91%	
Fixed Asset Turnover Ratio - Net Revenue / Average Fixed Assets		64.79%	63.37%	69.64%	82.72%	68.88%	64.09%	73.48%	74.15%	85.93%	99.52%	112.70%	124.79%	137.38%	150.37%
Financial Leverage Ratios:															
Debt to Equity Ratio - Total Liabilities / Total Shareholder Equity	0.54	0.59	0.67	0.71	0.72	1.00	0.97	0.83	0.84	0.93	0.96	0.89	0.81	0.74	0.67
Debt to Capital Ratio - Total Liabilities / (Total Liabilities + Total Shareholder Equity)	35.22%	37.18%	40.29%	41.57%	41.80%	50.12%	49.28%	45.38%	45.68%	48.28%	48.97%	47.01%	44.78%	42.39%	39.97%
Debt to EBITA Ratio - Total Liabilities / EBITA	-1.60	34.72	8.41	4.57	3.30	3.77	4.04	3.19	2.49	2.51	3.42	3.21	3.05	2.86	2.75
Profitability Ratios:															
Return on Equity - Net Income / Beg TSE		-0.67%	4.28%	11.96%	18.42%	26.53%	23.66%	42.76%	30.41%	26.36%	27.79%	28.15%	28.09%	28.01%	26.95%
Return on Assets - Net Income / Beg Total Assets		-0.44%	2.69%	7.14%	10.77%	15.44%	11.80%	21.69%	16.61%	14.32%	14.38%	14.81%	15.02%	15.35%	15.22%
Operating Income Margin - Operating Income / Revenue	2.50%	2.39%	11.75%	19.85%	25.23%	27.62%	22.66%	27.04%	31.76%	29.77%	23.14%	23.77%	24.31%	25.26%	25.68%

Adobe Inc.

Present Value of Operating Lease Obligations

Fiscal Years Ending Dec / 2	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Year 1	300.0	310.0	320.0	330.0	340.0	350.0	360.0	370.0	380.0	390.0	400.0
Year 2	250.0	260.0	270.0	280.0	290.0	300.0	310.0	320.0	330.0	340.0	350.0
Year 3	225.0	230.0	235.0	240.0	245.0	250.0	255.0	260.0	265.0	270.0	275.0
Year 4	175.0	180.0	185.0	190.0	195.0	200.0	205.0	210.0	215.0	220.0	225.0
Year 5	100.0	104.0	108.0	112.0	116.0	120.0	124.0	128.0	132.0	136.0	140.0
Thereafter	290.0	300.0	310.0	320.0	330.0	340.0	350.0	360.0	370.0	380.0	390.0
Total Minimum Payments	1340.0	1384.0	1428.0	1472.0	1516.0	1560.0	1604.0	1648.0	1692.0	1736.0	1780.0
Less: Cumulative Interest	179.5	185.4	191.2	197.0	202.9	208.7	214.6	220.4	226.2	232.1	237.9
PV of Minimum Payments	1160.5	1198.6	1236.8	1275.0	1313.1	1351.3	1389.4	1427.6	1465.8	1503.9	1542.1
Implied Interest in Year 1 Payment		50.1	51.8	53.4	55.1	56.7	58.4	60.0	61.7	63.3	65.0
Pre-Tax Cost of Debt	4.32%	4.32%	4.32%	4.32%	4.32%	4.32%	4.32%	4.32%	4.32%	4.32%	4.32%
Years Implied by Year 6 Payment	2.9	2.9	2.9	2.9	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Expected Obligation in Year 6 & Beyond	100	104	108	112	116	120	124	128	132	136	140
Present Value of Lease Payments											
PV of Year 1	287.6	297.2	306.7	316.3	325.9	335.5	345.1	354.7	364.3	373.8	383.4
PV of Year 2	229.7	238.9	248.1	257.3	266.5	275.7	284.9	294.0	303.2	312.4	321.6
PV of Year 3	198.2	202.6	207.0	211.4	215.8	220.2	224.6	229.0	233.4	237.8	242.2
PV of Year 4	147.8	152.0	156.2	160.4	164.7	168.9	173.1	177.3	181.5	185.8	190.0
PV of Year 5	80.9	84.2	87.4	90.7	93.9	97.1	100.4	103.6	106.8	110.1	113.3
PV of 6 & beyond	216.3	223.8	231.3	238.8	246.4	253.9	261.4	269.0	276.5	284.0	291.5
Capitalized PV of Payments	1160.5	1198.6	1236.8	1275.0	1313.1	1351.3	1389.4	1427.6	1465.8	1503.9	1542.1

Adobe Inc.

Sensitivity Tables

Pre-tax Cost of Debt

	364.00	4.02%	4.12%	4.22%	4.32%	4.42%	4.52%	4.62%
WACC	8.87%	402.42	402.25	402.09	401.92	401.75	401.58	401.42
	9.37%	387.93	387.76	387.59	387.43	387.26	387.09	386.93
	9.87%	375.41	375.24	375.08	374.91	374.75	374.58	374.41
	10.37%	364.49	364.33	364.16	364.00	363.83	363.67	363.50
	10.87%	354.89	354.72	354.56	354.39	354.23	354.06	353.90
	11.37%	346.37	346.21	346.04	345.88	345.71	345.55	345.38
	11.87%	338.77	338.60	338.44	338.28	338.11	337.95	337.78

Subscription Cost as a % of Revenue

	364.00	7.28%	8.28%	9.28%	10.28%	11.28%	12.28%	13.28%
Marginal Tax Rate	7.87%	424.81	411.61	398.41	385.22	372.02	358.82	345.63
	9.87%	417.09	404.15	391.22	378.29	365.36	352.42	339.49
	11.87%	409.20	396.54	383.87	371.21	358.55	345.88	333.22
	13.87%	401.14	388.76	376.37	363.98	351.59	339.20	326.82
	15.87%	392.92	380.81	368.71	356.60	344.49	332.39	320.28
	17.87%	384.53	372.71	360.89	349.07	337.25	325.43	313.61
	19.87%	375.97	364.45	352.92	341.39	329.86	318.33	306.81

CV Growth of NOPLAT

	364.00	2.20%	2.30%	2.40%	2.50%	2.60%	2.70%	2.80%
Avg. Depreciation Rate	20.18%	360.78	362.28	363.82	365.40	367.01	368.67	370.38
	21.18%	360.29	361.79	363.33	364.91	366.53	368.19	369.89
	22.18%	359.83	361.33	362.87	364.44	366.06	367.72	369.42
	23.18%	359.38	360.88	362.42	364.00	365.61	367.28	368.98
	24.18%	358.95	360.45	361.99	363.57	365.19	366.85	368.55
	25.18%	358.54	360.04	361.58	363.16	364.78	366.44	368.15
	26.18%	358.14	359.65	361.19	362.77	364.39	366.05	367.76

Avg. Depreciation Rate

	364.00	15.68%	18.18%	20.68%	23.18%	25.68%	28.18%	30.68%
Avg. Long-Term Debt %	23.02%	368.83	367.39	366.10	364.94	363.90	362.96	362.12
	25.02%	368.52	367.07	365.78	364.62	363.58	362.65	361.82
	27.02%	368.20	366.76	365.47	364.31	363.27	362.34	361.51
	29.02%	367.88	366.44	365.15	364.00	362.96	362.03	361.20
	31.02%	367.56	366.12	364.84	363.68	362.65	361.72	360.89
	33.02%	367.24	365.81	364.52	363.37	362.34	361.41	360.58
	35.02%	366.92	365.49	364.21	363.06	362.03	361.10	360.28

Cost of Equity

	364.00	6.53%	7.53%	8.53%	9.53%	10.53%	11.53%	12.53%
WACC	8.87%	395.24	397.47	399.70	401.92	404.13	406.33	408.53
	9.37%	380.99	383.14	385.29	387.43	389.56	391.68	393.80
	9.87%	368.68	370.76	372.84	374.91	376.97	379.03	381.08
	10.37%	357.95	359.97	361.99	364.00	366.00	367.99	369.98
	10.87%	348.50	350.47	352.44	354.39	356.34	358.28	360.22
	11.37%	340.13	342.05	343.97	345.88	347.78	349.67	351.56
	11.87%	332.65	334.53	336.41	338.28	340.14	341.99	343.84