



Adobe Inc. (ADBE)

Spellman Fund Security Review

Final Report

Joshua Fredrick, Tony DiPiazza, Will Schlingman, Jackson Welsh

Executive Summary

Adobe Inc. (ADBE): SELL

Current Price (5/05/2022): \$397.63/share

12-month Target Price: \$414.20

52-week Price Range: \$382.82 - \$699.54

Adobe Inc. (ADBE)			
	EPS	P/E	ROE
2019	6.07	51.49	28.03%
2020	10.94	43.65	39.66%
2021	10.10	61.10	32.59%

Proposed Transaction

- **Sell** 30 shares held of ADBE
- Hold cash from sale

Reasoning For Transaction

According to our portfolio analysis and valuation measures for Adobe, we have found that the Spellman Fund is overweighted in growth stocks and the lack of upside gives is a poor outlook for future growth of the company.

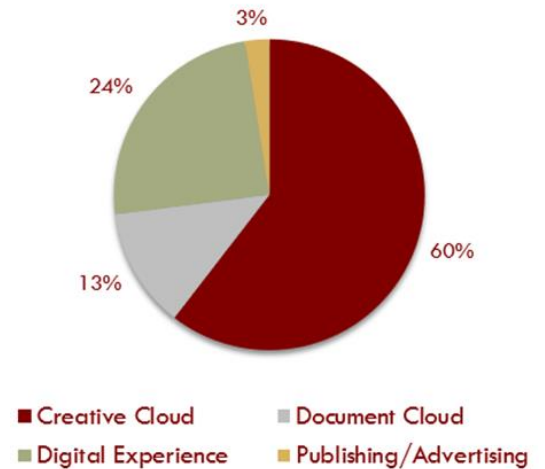
Company Overview

- Adobe Inc. founded in 1982 as an American multinational company based in San Jose, California
- Computer software & programming industry

Company Segments

- Digital Media – Creative Cloud & Document Cloud
- Digital Experience – Experience Cloud
- Publishing – Consulting & Licensing

2021 Revenue



ADBE Stock Price



Key Company Aspects

1. **Creative Cloud** – Creative Cloud is the flagship product that has been driving the company's revenue numbers for Adobe. 92% of revenue based off subscriptions for software products such as Photoshop, Premiere Pro, After Effects, etc. which are all leaders in the design software industry.
2. **Digital Experience** – Digital Experience segment has been the fastest growing segment for Adobe in recent years with the launch of the Experience Cloud a cross-channel marketing optimization tool. Key to companies' overall growth.

Board of Directors

- Shantanu Narayen, age 58 – Chief Executive Officer (2007)
Chairman of Board (2017)
- 12-member board – Mostly independent
- 8 Male and 4 Female board members



SWOT Analysis

Strengths

- Very strong financial statements – Good standing
- Leadership team rated World's Best Workplace for last 6 years
- Portfolio of Products within Creative Cloud are top of line in industry

Weaknesses

- Partakes in large amounts of multi-national business which can lead to foreign exposure risk
- Expensive product line for a subscription-based software

Opportunities

- Digital Marketing will be a large part of the future growth of Adobe with the launch of the Experience Cloud services which provides this new product line.
- Partnership with Microsoft -

Threats

- Adobe hasn't faced much competition as they have held the line as top products in the industry. Competition is increasing within the Digital Media segment and is entering a very competitive industry within the Digital Experience segment with the recent launch of
- Off-brand open-source applications have been released as free products that offer many of the products involved in Adobes main revenue drivers.

EPS Projections

Baseline EPS Projections					
Year	2021	2022	2023	2024	2025
EPS	\$ 10.11	\$ 11.65	\$ 13.47	\$ 15.63	\$ 18.18

Company Overview

Adobe Inc. (ADBE) is an American multinational company based in San Jose, California involved in the computer software & programming industry. Adobe Inc. is the leader in specialized software applications involving photo editing, graphic design, web development, photography, and video editing. But has recently expanded services into digital marketing software in 2021.

Adobe Inc. was founded in 1982 by John Warnock and Charles Geschke after leaving Xerox PARC to pursue the development of a new computer language, page description language (PDL) which eventually was licensed to Apple for their LaserWriter printers which started to bring value to the desktop publishing innovation. Since have made acquisitions, acquiring Macromedia which gave them the rights to Adobe Premiere and Adobe Flash and the rest is history. Adobe is now lead by Shantanu Narayen who is the Chief Executive officer, Chairman of the Board, and President of the company. The board of directors for Adobe Inc. are very well diversified spreading out through many different industries which allow a broad perspective overall. Some of the companies the board are employees of are Comcast Corp, Walmart, Coca-Cola, and Netflix.

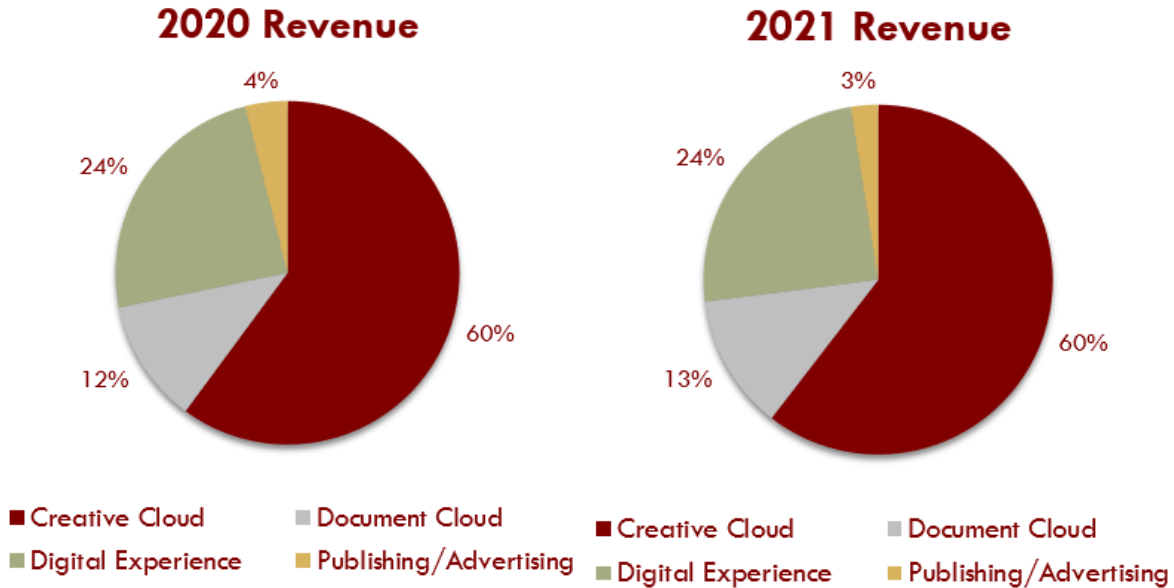
Adobe Inc. Market Segments

- Digital Media – Tools and solutions that enable individuals, small and medium sized businesses, and enterprises to create, publish, and promote and monetize their digital content.
- Digital Experience – Provides solutions and services for how digital advertising and marketing are created, managed, executed, measured, and optimized.
- Publishing – Addresses market opportunities ranging from the diverse authoring and publishing needs of technical and business publishing to its legacy type and original equipment manufacturing printing businesses.

Sales Breakdown

Revenue

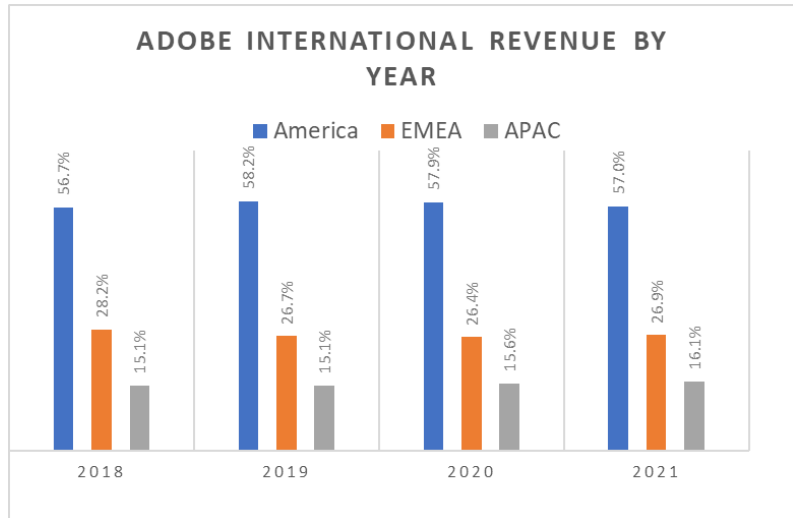
In terms of revenue Adobe brings in each year, the digital media segment of the company weights 72.5% of total revenue of the three reported segments. Here is how it can be broken down by the last two years:



As you can see from the pie charts above, Creative Cloud provides 60% of the company’s revenue. This is a key part of their business as they have dominated in the industry since 2012 with little to no competition. Experience Cloud has been seeing rapid growth since it’s launch of new products in 2018, recently hitting over \$1 billion dollars in revenue in Q3 2021 for the first quarter ever. While this is good for the company, Experience Cloud has yet to grow into a mass revenue producer for Adobe yet. The digital solutions industry is a very tough market to penetrate with a lot of competition within it.

Sales by Region

International sales are very important for Adobe. Sales outside of the U.S. are reported as 43% percent of revenue. Doing international business comes associated with many different risks. One of the major risks in present day would be the Russian invasion of Ukraine. This situation is expected to lower the sales and growth of the EMEA (Europe, Middle East, and Russia) by 4.6% in 2022. This is going to put a damper on growth within these regions as uncertainty of the situation is rather high.



Another important factor in international business is foreign exchange risk. Adobe has dealt with foreign exchange risk in the past having to change prices due to fluctuations within the currency exchanges ranging up to 73% increase in subscription costs in specific countries.

Key Strengths and Weaknesses

Strengths

- No Inventory
 - Since they do not hold any inventory, it allows them to hold a high percentage of their assets in Cash (14.11%) and short-term investments (7.17%).
- High Market Share
 - Not holding inventory helps allow funds to be allocated at acquiring customers
 - Over the last 3 years Adobe's total revenue has increased
 - 41.3% from \$11,171 Million in 2019
 - \$15,785 Million 2021
 - Comparative to their COGS increasing by only 30.3% from \$3,268 Million in 2019 to \$5,802 Million in 2021.
- Another strength of the company is their steady operating expense growth
 - Over the last three years Adobe's operating expenses have grown by 10.89% between 2019 and 2020 and 17.50% between 2020 and 2021.
 - This when looking at the revenue growth is miniscule leading to an increase in operating profits by 77.53% over the last 3 years.
- Another key strength that they have is shown when looking at strictly their customers. Adobe does not a single customer that represents more than 10% of net revenue or trades receivable.

Weaknesses

- Low barriers to entry
 - Anyone with a sophisticated coding background can create an editing software and sell it
 - Leading to increased competition in a relatively niche market.
- Subscription-based model
 - Losses from the pandemic will not be seen until future periods.
- Reliance on the subscription revenue
 - In 2021 their subscriptions accounted for 92% of their total revenue which was up from 90% in 2020, and 86% in 2019.
 - They have started to phase out their consulting services with a decline of revenue from \$889 Million in 2019 to \$735 Million in 2020 and \$657 Million in 2021.

Corporate Governance

Shantanu Narayan is the Chief Executive Officer and Chairman of the Board of Directors. Narayan has served as CEO since 2007 and was elected Chairman in 2017.

Board of Directors

- Shantanu Narayan, age 58 – Chief Executive Officer (2007) Chairman of Board (2017)
- 12-member board

- 8 Male and 4 Female board members
- Shantanu Narayen (CEO and Chairman) and John Warnock (Co-Founder and Retired CEO and Chairman) are the only two dependent directors on the board

Positive ESG Factors:

- Adobe achieved global pay parity in 2018 between employees of both genders
- Actively improving standards in data privacy and security measures
- Diverse Board of Directors

Negative ESG Factors:

- Failure to sell and promote more cleantech product lines
- Performs poorly among competitors in corporate governance

Adobe is looked at as a favorable company in terms of ESG. Adobe's innovation of cloud-based software delivery, paperless workflows, and virtual collaboration leads to reducing physical waste and cutting emissions.

Porter's 5 Forces

Threat of New Entrants

- Industry entry requires a large amount of capital and resources
- Licensing and legal requirements must be met before selling of products
- Limited number of skilled workers in industry pose challenges for new entrants

Threat of Substitutes

- Prolonged use of one software creates strong brand loyalty, so customer turnover is low
- Differentiation is high and not all companies offer the software to switch effortlessly
- Switching products is a hassle and there can be a long learning process of new software

Bargaining Power of Suppliers

- Suppliers for this industry are not very applicable

Bargaining Power of Buyers

- As switching costs are high, consumers that have already adopted a specific software have little bargaining power

Competitive Rivalry

- Differentiation is high and different competitors may offer a better software in a specific segment of the industry
- Small number of firms in the industry overtaking a large amount of the market share
- Industry is growing at a fast rate, but large companies still overtake the market share
- Consumers switching costs are high

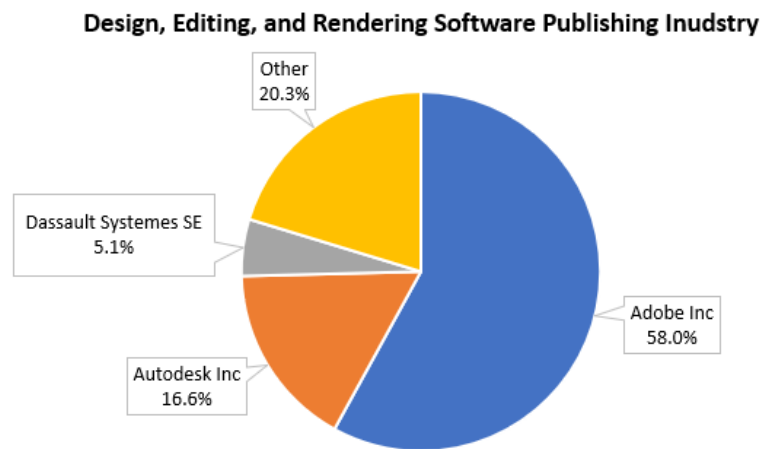
Industry Overview & Competition

Software industry

- The software industry began in the late 1960's
- Evolved to become one of the most profitable industries in the world
- Many humans are reliant on software products to complete their day-to-day tasks.
- Software applications are a necessity for almost all business operations and if the software is to fail, businesses and individuals may be severely affected.

Design, Editing, and Rendering Software Industry

- Adobe can be narrowed down into the design, editing, and rendering software publishing industry
- Industry has a total revenue of \$16.8 billion.
- 5.9% annual growth from 2016-2021
- Estimated growth of 3.1% 2021-2026.
- The market is made up of 3 major players that hold 79.7% of the market share, seen above. The other 20.3% are made up of other competitors such as Apple, Microsoft, and other companies with a minimal market share.



Industry Outlook

- Industry Outlook → Average
 - Growth expected to slow down
 - 5.9% to 3.1% on average over the next 5 years compared to the last 5 years
 - Due to the demand for movies and video production reducing by 9.7% over the last 5 years.
 - While growth projections are lowered, plenty of room to expand
 - Due to innovation in the industry, always room for growth
 - Ex. 3D printing, and virtual reality (VR) are two new booming businesses that will create an increased demand for these products as they grow

Financial Analysis

Adobe Inc. (ADBE) Financials									
Fiscal year end Dec. 3 2021									
	EPS	P/E	PEG	P/B	D/E	ROE	ROA	NPM	
2019	6.07	51.49	1.20	14.59	0.97	28.03%	14.22%	26.42%	
2020	10.94	43.65	0.84	17.46	0.83	39.66%	21.66%	40.88%	
2021	10.10	61.10	1.57	20.06	0.84	32.59%	17.70%	30.55%	
TTM	10.14	44.93	1.54	15.59	0.89	35.04%	18.58%	29.90%	

Adobe's high P/E of almost three times the market average, along with its high P/B ratio suggest that Adobe is a growth stock. Growth stocks are overrepresented in the fund, especially as the Spellman Fund policy statement says that we are value investors. Adobe's PEG ratio is right around the industry average, but its forward PEG of 2.47 is much higher due to the fact that we see much less growth in the coming years than they saw in the recent past. Net profit margins are high across the industry as they don't have inventory costs, but Adobe's NPM is less than the industry average. In 2020 the company had deferred tax assets that were recognized in this fiscal year which increased its profit margin significantly but came right back down the following year.

Growth Drivers

Adobe has potential growth opportunities in a few areas. Their goal is to become the leading provider of cloud-based solutions. Adobe's market opportunities will be increasing into 2024 according to their financial analyst presentation on December 16. Adobe has ample room to grow in cloud-based solutions with its Creative Cloud, Document Cloud, and Experience Cloud.

Adobe Creative Cloud

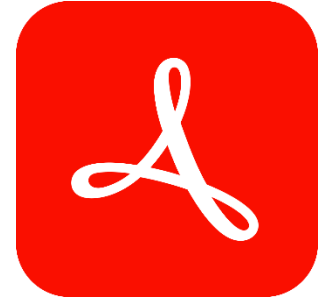
- Adobe's most well-known product line
- Adobe Creative Cloud Product Line
 - Photoshop, Illustrator, Premier Pro, After Effects, etc.
- The market for Creative Cloud is increasing leading to potential growth for the product
- Growth Opportunities
 - Continued momentum in creative job growth.
 - Careers in digital designers and web developers are projected to grow at 13% from 2020-2030, which is higher than average.
 - Adobe predicts that the market for creative professionals will lead to a \$25 billion total addressable market in 2024



- Rise of content creation among students, marketers, and small businesses can lead to growth for this product, with a total addressable market of \$31 billion in 2024, this is one of the biggest growth opportunities for Creative Cloud.

Adobe Document Cloud

- Adobe Document Cloud Product Line
 - Adobe Acrobat Reader DC, Adobe Sign, and mobile applications
- Potential growth opportunities
 - Document Cloud total addressable market for 2024 is projected at \$32 billion. \$14 billion from document services and API's.
 - Seamless integration with line of business apps along with market expansion that is a driven by remote/hybrid work and emerging market growth
 - Knowledge workers also use Document Cloud for high frequency and industry-specific use cases.
 - The expanding use of PDF for business, personal, and education tasks also contribute to this potential growth.



Adobe Experience Cloud

- Experience Cloud has largest growth opportunity for Adobe's future
- Experience Cloud Product Line
 - Adobe Commerce, Adobe Analytics, Adobe Experience Manager, etc.
- New market that Adobe has recently started to penetrate
- Growth Opportunities
 - Adobe's using top-of-the-line software development and usability the expected total addressable market for the Experience Cloud to be approximately \$110 billion dollars in 2024
 - Adobe is looking to gain revenue through expanding its services to data insights & audiences, content & commerce, customer journeys, and marketing workflows with \$33 billion, \$49 billion, \$18 billion, and \$10 billion respectively in total addressable market for these different subsets
 - In 2021 the Experience Cloud grew 300% Y/Y for customers on the platform showing demand for the products within the Experience Cloud
 - Partnership with Microsoft to pursue experience platform
- Very competitive industry
 - This is a new market for Adobe and competitors such as SAP, Acquia, and Contentstack hold large portion of the total addressable market



Overall, with the combination of Creative Cloud, Document Cloud, and Experience Cloud, Adobe is looking at a total addressable market of \$205 billion in 2024 between the three services. This shows large growth potential in landing new customers when expanding new services. Through these expanding services and innovations, it sets up Adobe to keep growing as a company

Baseline Scenario

Creative Cloud					
<i>(dollars in millions except rev per subscriber)</i>					
	2021	2022	2023	2024	2025
Number of subscribers	24.00	27.12	30.65	34.63	39.13
Average rev per sub	\$ 397.75	\$ 420.42	\$ 444.39	\$ 469.72	\$ 496.49
Rev for creative cloud	\$9,546.00	\$11,401.84	\$13,618.47	\$16,266.04	\$19,428.32
Creative cloud N/I	\$2,916.30	\$ 3,483.26	\$ 4,160.44	\$ 4,969.27	\$ 5,935.35

Document Cloud					
<i>(dollars in millions except rev per subscriber)</i>					
	2021	2022	2023	2024	2025
Number of subscribers	12.66	13.70	14.83	16.04	17.36
Average rev per sub	\$ 155.88	\$ 159.78	\$ 163.77	\$ 167.87	\$ 172.06
Rev for doc cloud	\$1,974.00	\$ 2,189.26	\$ 2,428.00	\$ 2,692.78	\$ 2,986.43
Document cloud N/I	\$ 603.06	\$ 668.82	\$ 741.76	\$ 822.64	\$ 912.35

Digital Experience					
<i>(dollars in millions except rev per subscriber)</i>					
	2021	2022	2023	2024	2025
Revenue	\$3,867.00	\$ 4,280.77	\$ 4,738.81	\$ 5,245.86	\$ 5,807.17
Net Income	\$1,181.37	\$ 1,307.77	\$ 1,447.71	\$ 1,602.61	\$ 1,774.09

Publishing and Advertising					
<i>(dollars in millions except rev per subscriber)</i>					
	2021	2022	2023	2024	2025
Revenue	\$ 398.00	\$ 317.41	\$ 253.13	\$ 201.87	\$ 160.99
Net Income	\$ 121.59	\$ 96.97	\$ 77.33	\$ 61.67	\$ 49.18
Total Net Income	\$4,822.32	\$ 5,556.82	\$ 6,427.24	\$ 7,456.20	\$ 8,670.98

Creative Cloud Growth Predictions

As stated in the growth opportunities, the estimated growth for careers in digital designers and web developers are projected to grow at 13% from 2020-2030. That number was used to grow the number of subscribers for the Creative Cloud segment. The average revenue per subscriber is projected to grow by 5.7%, which was found using previous price increases. The Net Profit Margin for Adobe as a firm is 30.55%.

Creative Cloud Growth rates	
Careers Growth	13%
Price Growth	5.7%
Net Profit Margin	30.55%

Document Cloud & Digital Experience Growth Predictions

The growth for Document Cloud & Digital Experience is based off the predicted annual PC growth across the world for 2020-2030, 8.2%. That number was used to grow the number of subscribers for these segments. The average revenue per subscriber is projected to grow by 2.5%, which was found using previous price increases. As stated in the Creative Cloud Growth Predictions the Net Profit Margin for Adobe is 30.55%.

Document Cloud and Digital Experience Growth Rates	
PC Growth	8.2%
Price Growth	2.50%
Net Profit Margin	30.55%

Publishing and Advertising Growth Predictions

Publishing and Advertising is a segment that Adobe is trying to eliminate. Taking that into consideration we are projecting its average revenue to grow by a -2.5% year over year.

Publishing and Advertising Growth Rates	
Growth	-2.50%
Net Profit Margin	30.55%

Optimistic Scenario

Creative cloud					
(dollars in millions except rev per subscriber)					
	2021	2022	2023	2024	2025
Number of subscribers	24.00	27.84	32.29	37.46	43.46
Average rev per sub	\$ 397.75	\$ 420.42	\$ 444.39	\$ 469.72	\$ 496.49
Rev for creative cloud	\$ 9,546.00	\$ 11,648.54	\$ 14,295.17	\$ 17,596.26	\$ 21,575.13
Creative cloud N/I	\$ 2,916.30	\$ 3,558.63	\$ 4,367.18	\$ 5,375.66	\$ 6,591.20

Document Cloud					
(dollars in millions except rev per subscriber)					
	2021	2022	2023	2024	2025
Number of subscribers	12.66	13.70	14.83	16.04	17.36
Average rev per sub	\$ 155.88	\$ 159.78	\$ 163.77	\$ 167.87	\$ 172.06
Rev for doc cloud	\$ 1,974.00	\$ 2,170.26	\$ 2,409.00	\$ 2,692.78	\$ 2,986.43
Document cloud N/I	\$ 603.06	\$ 663.02	\$ 735.95	\$ 822.64	\$ 912.35

Digital Experience					
(dollars in millions except rev per subscriber)					
	2021	2022	2023	2024	2025
Revenue	\$ 3,867.00	\$ 4,667.47	\$ 5,633.64	\$ 6,799.80	\$ 8,207.36
Net Income	\$ 1,181.37	\$ 1,425.91	\$ 1,721.08	\$ 2,077.34	\$ 2,507.35

Publishing and Advertising					
(dollars in millions except rev per subscriber)					
	2021	2022	2023	2024	2025
Revenue	\$ 398.00	\$ 317.41	\$ 253.13	\$ 201.87	\$ 160.99
Net Income	\$ 121.59	\$ 96.97	\$ 77.33	\$ 61.67	\$ 49.18
Total NI	\$ 4,822.32	\$ 5,744.52	\$ 6,901.53	\$ 8,337.31	\$ 10,060.08

Creative Cloud Optimistic Scenario

Creative Cloud Growth rates	
Careers Growth	16.00%
Price Growth	5.70%
Net Profit Margin	30.55%

Document Cloud Optimistic Scenario

Document Cloud Growth	
PC Growth	8.20%
Price Growth	2.50%
Net Profit Margin	30.55%

Digital Experience Optimistic Scenario

Digital Experience Growth Rates	
PC+Price growth	20.70%
Net Profit Margin	30.55%

Publishing and Advertising Optimistic Scenario

Publishing and Advertising Growth Rates	
Growth Rates	-20.25%
Net Profit Margin	30.55%

Pessimistic Scenario

Creative cloud					
(dollars in millions except rev per subscriber)					
	2021	2022	2023	2024	2025
Number of subscribers	24.00	26.74	29.78	33.18	36.96
Average rev per sub	\$ 397.75	\$ 420.42	\$ 444.39	\$ 469.72	\$ 496.49
Rev for creative cloud	\$ 9,546.00	\$ 11,184.04	\$ 13,178.70	\$ 15,583.34	\$ 18,348.76
Creative cloud N/l	\$ 2,916.30	\$ 2,952.59	\$ 3,479.18	\$ 4,114.00	\$ 4,844.07

Document Cloud					
(dollars in millions except rev per subscriber)					
	2021	2022	2023	2024	2025
Number of subscribers	12.66	13.56	14.52	15.56	16.66
Average rev per sub	\$ 155.88	\$ 159.78	\$ 163.77	\$ 167.87	\$ 172.06
Rev for doc cloud	\$ 1,974.00	\$ 2,147.94	\$ 2,359.73	\$ 2,611.22	\$ 2,866.44
Document cloud N/l	\$ 603.06	\$ 567.06	\$ 622.97	\$ 689.36	\$ 756.74

Digital Experience					
(dollars in millions except rev per subscriber)					
Revenue	\$ 3,867.00	\$ 4,195.42	\$ 4,551.73	\$ 4,938.31	\$ 5,357.71
Net Income	\$ 1,181.37	\$ 1,107.59	\$ 1,201.66	\$ 1,303.71	\$ 1,414.44

Publishing and Advertising					
(dollars in millions except rev per subscriber)					
Revenue	\$ 398.00	\$ 313.01	\$ 246.17	\$ 193.61	\$ 152.26
Net Income	\$ 121.59	\$ 82.64	\$ 64.99	\$ 51.11	\$ 40.20

Creative Cloud Pessimistic Scenario

Creative Cloud Growth Rates	
Careers Growth	11.40%
Price growth	5.70%
Net Profit Margin	26.40%

Document Cloud Pessimistic Scenario

Document Cloud Growth Rates	
PC Growth	7.10%
price growth	2.50%
Net Profit Margin	26.40%

Digital Experience Pessimistic Scenario

Digital Experience Growth Rates	
Growth Rates	8.50%
Net Profit Margin	26.40%

Publishing and Advertising Pessimistic Scenario

Publishing & Advertising Growth Rates	
Growth Rates	-20.25%
Net Profit Margin	26.40%

Valuation

Adobe's price estimate is \$414.19. Currently Adobe is trading at \$458.19 creating a target return of (\$44) which is (9.6%) return. The weight of 70% on the P/E method is because it reflects the current price more accurately. The FCF method appears to be too low of an estimate. We cannot just exclude this from our findings, so it is listed as 30% of our weight. Our estimated 2022 P/E ratio for the calculation was created by taking the last 5 years of reported P/E on Value line and averaging them for a total of 41.

Baseline Valuation				
Method	Estimate	Average FCF	Weight	Price Estimate
FCFF	262.07	266.13	30%	414.19
FCFE	270.19			
P/E	477.65	---	70%	

Profitability

- Adobe 2021 Profit Margin - 30.55%
 - Higher than average profit margins
 - High profit margin industry

Valuation of Optimistic Growth

Optimistic Valuation				
Method	Estimate	Average FCF	Weight	Price Estimate
FCFF	299.17	303.28	30%	524.94
FCFE	307.39			
P/E	619.9396	---	70%	

- The 2023 P/E ratio we decided to use was 45.2. We raised the P/E ratio for our optimistic approach to this because digital experience accounts for 24% of total revenue. An increase of 10% in the growth rate of digital experience will lead to increased earnings of Adobe.
- When taking an optimistic approach, we grew the Digital Experience segment at a 10% higher rate than the previous outlook. Digital Experience includes the newly developed experience cloud that Adobe has recently launched.
- Final growth rates:
 - Creative Cloud careers growth: 13%
 - Document Cloud PC growth: 8.2%
 - Digital Experience PC + Price growth rate: 20.7%
 - Publishing and Advertising growth rate: -2.5%

Valuation of Pessimistic Growth

Pessimistic Valuation				
Method	Estimate	Average FCF	Weight	Price Estimate
FCFF	213.00	217.11	30%	320.87
FCFE	221.21			
P/E	365.33565	---	70%	

- The 2023 P/E ratio we decided to use was 37. We lowered the P/E because of the Russia Ukraine conflict, as it could potentially harm the company's earnings, lowering the P/E to 37 is what we deemed to be an acceptable figure.
- Growth rate changed due to the Russia Ukraine conflict. We found that sales from Europe, The Middle East and Africa generate 26.9% of total revenue for Adobe. We also found the European economy is expected to shrink by 4.1% due to this conflict. We multiplied those numbers together to find a shrink in growth of 1.1%. We then took that number and subtracted it from our subscriber growth rate for each of the segments. For the Publishing and Advertising segment we decided to increase the decrease in growth for this segment.
- Final growth rates
 - Creative Cloud careers growth: 11.4%
 - Document Cloud PC growth: 7.1%
 - Digital Experience PC + Price growth rate: 8.5%
 - Publishing and Advertising growth rate: -2.5%

EPS

- Adobe 2021 Earnings Per Share – \$10.11
 - Lower than industry average and decrease of 8% EPS going back to 2020
- Adobe average P/E Ratio over 5 years – 41.22
 - Higher than average for the industry
 - Seeing a good blend of value and growth within Adobe

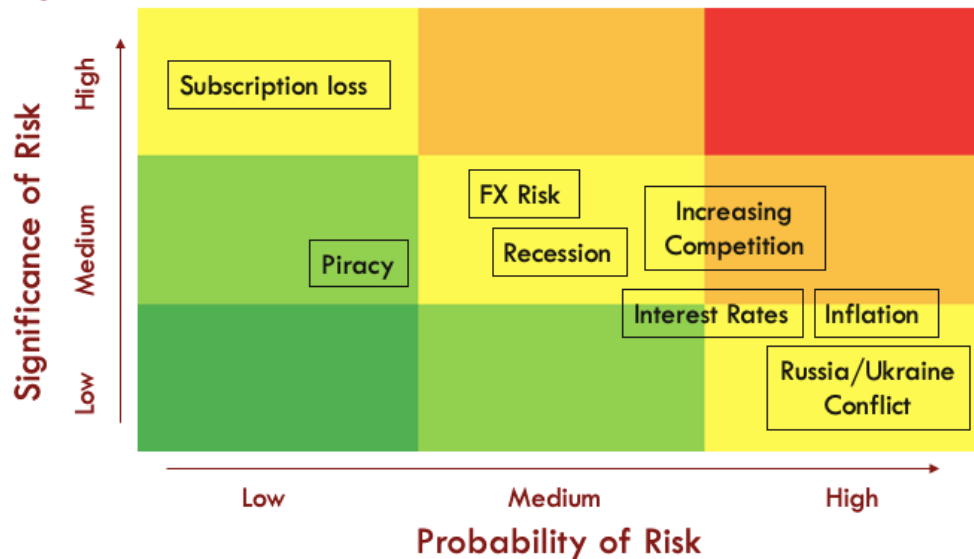
Segmented EPS					
	2021	2022	2023	2024	2025
EPS (digital media)	\$ 10.11	\$ 11.65	\$ 13.47	\$ 15.63	\$ 18.18
EPS (digital experience)	\$ 2.48	\$ 2.74	\$ 3.04	\$ 3.36	\$ 3.72
EPS (publishing/advertising)	\$ 0.25	\$ 0.20	\$ 0.16	\$ 0.13	\$ 0.10
EPS	\$ 12.84	\$ 14.59	\$ 16.67	\$ 19.12	\$ 22.00

Quarterly Earnings

Quarterly Earnings (dollars in millions)				
	2022 Q1	2021 Q4	2021 Q3	2021 Q2
Total revenue	\$4,262	\$4,110	\$3,657	\$3,835
Cost of Revenue	-\$512	-\$428	-\$467	-\$444
Gross Profit	\$3,750	\$3,603	\$3,468	\$3,391
Operating Expense	-\$2,170	-\$2,102	-\$2,027	-\$1,985
Other expenses	-\$37	-\$33	-\$23	-\$20
Income before Tax	\$1,543	\$1,468	\$1,418	\$1,386
Tax	-\$277	-\$235	-\$206	-\$270
Net income	\$1,266	\$1,233	\$1,212	\$1,116
EPS	2.66	2.59	2.54	2.34

Risk

Risks associated with Adobe and its industry can be seen in the risk matrix below. When looking at the risks, the probability and significance are considered in order to see how much of an impact the factor would cause and how likely it is for the given risk to occur.



- Subscription loss is of low probability for Adobe because their customer retention rate is so high. If they are to lose subscribers due to increasing competition in the software industry, this could be a large loss for the company.
- Piracy is a topic that there is not much information on, but it is a definite threat for Adobe as they are missing out on that revenue. Piracy doesn't offer the ability to update your software or get any new features, so it is not of huge probability because it is worth the purchase.
- Over 40% of Adobe's revenues come from outside of the US, so foreign exchange risk is a factor to consider when looking at Adobe's risks.
- A looming recession could be a problem for Adobe. Adobe has changed their business model to subscription based since the last recession in 2008. The subscription-based model may be a plus for Adobe through a recessionary period, but there is a lot of uncertainty on how the stock may perform.
- Increasing competition goes hand in hand with subscription loss. The software industry is fast growing and always innovating and this leaves the chance that Adobe will lose part of their market share and consumers due to new competitors in the market.
- Inflation is of high probability, but low significance for Adobe. Adobe has very high profit margins and increases their prices often, so inflation doesn't affect the company very seriously.
- The Russia and Ukraine conflict is a problem, but Adobe won't see huge losses from it. They are expecting a \$75 million loss of revenue from the conflict which is of low significance to the company.

Correlation/Portfolio Fit

Using returns from the last 5 years, we conducted a correlation analysis between Adobe and all the individual stocks currently held in the Spellman Fund. These correlations are compiled into a correlation matrix (See Appendix).

Looking at the partial correlation matrix to the right (ADBE, 1.0), Adobe is moderately correlated with many different stocks in the fund (0.50+). Adobe is highly correlated with Apple (AAPL) which is another technology stock. Overall, having stocks with high correlations means that they move very similarly to one another on the market. This may cause some issues when trying to create a well-diversified portfolio. The other holdings in the Spellman Fund are not of a concern as these stocks don't have strong enough correlations to have an effect.

<i>DIS</i>	0.64	<i>QCOM</i>	0.41	<i>UNP</i>	0.33
<i>RIO</i>	0.63	<i>BKNG</i>	0.41	<i>BA</i>	0.32
<i>AAPL</i>	0.62	<i>PYPL</i>	0.39	<i>PG</i>	0.29
<i>GM</i>	0.57	<i>JNJ</i>	0.37	<i>CVS</i>	0.29
<i>MA</i>	0.57	<i>EMR</i>	0.35	<i>JPM</i>	0.28
<i>AMAT</i>	0.51	<i>HEAR</i>	0.35	<i>PRU</i>	0.28
<i>AMT</i>	0.51	<i>KO</i>	0.34	<i>GOOGL</i>	0.22
<i>SBUX</i>	0.50	<i>NXST</i>	0.33	<i>PFE</i>	0.22
<i>UNH</i>	0.44	<i>NEE</i>	0.33	<i>SAP</i>	0.20
<i>FB</i>	0.42	<i>INTC</i>	0.33		

The Spellman Fund Portfolio breakdown by sector (see right) reveals that the portfolio is slightly underweighted in the Technology sector compared the S&P 500 (3.01%). Adobe falls in the technology sector and selling our holdings frees up space for holdings in both the technology sector, along with other less represented sectors. Along with this, many groups choose to analyze technology companies for the Spellman Fund, so with less Adobe holdings, it does give room to grow the technology sector in the future.

Stock Sector | Holdings Detail

	Portfolio (% of Stocks)	S&P 500 (%)
Cyclical	26.55	30.07
Basic Materials	5.24	2.31
Consumer Cyclical	5.94	11.84
Financial Services	12.27	13.19
Real Estate	3.11	2.72
Sensitive	48.39	46.98
Communication Services	15.26	9.36
Energy	0.00	3.87
Industrials	10.56	8.15
Technology	22.58	25.59
Defensive	25.06	22.95
Consumer Defensive	5.47	6.50
Healthcare	15.91	13.70
Utilities	3.67	2.74
Not Classified	0.00	0.00

Another thing to note is that the fund is overweighted in growth stocks. The Spellman Fund policy statement say that we are value investors, so we should be allocating our fund more toward value stocks rather than growth stocks. The fund has more growth stocks than the S&P 500 with 46.9% compared to 40.4%. This percentage should be much lower than the S&P 500 as we should be invested in value stocks.

Recommendation

We recommend selling our 30 shares of ADBE. This is due to the estimated valuation of ADBE being \$414.19 while the current price is \$397.63. More than that, the Spellman Fund features many growth stocks, and reducing our Adobe position helps lower the amount of funds allocated to growth stocks in the portfolio. Like this, there is a large amount of technology stocks in the portfolio, and with this comes the risk of losing on multiple positions at the same time as these stocks are correlated with one another. We also believe that current events may have an impact on Adobe soon which leaves us with some uncertainty on how they may perform. A looming recession will cause for slow, or even negative, growth in the portfolio. Adobe has a beta of 1.05

which means it will fall slightly faster than the market during a recession. This will affect the technology stocks especially hard and selling our Adobe position will lower the amount of money allocated to technology stocks in the fund.

Key Financial Ratios:

Adobe Inc. (ADBE)								
	EPS	P/E	ROE	P/B	D/E	ROE	ROA	NPM
2019	6.07	51.49	28.03%	14.59	0.97	28.03%	14.22%	26.42%
2020	10.94	43.65	39.66%	17.46	0.83	39.66%	21.66%	40.88%
2021	10.10	61.10	32.59%	20.06	0.84	32.59%	17.70%	30.55%
Fiscal year end Dec. 3 2021								

Industry							
EPS Growth (3 year)	P/E	PEG	P/B		ROE	ROA	NPM
23.8	32.41	1.36	12.74		38.69%	15.79%	32.78%

Adobe Inc. (ADBE)			
	EPS	P/E	ROE
2019	6.07	51.49	28.03%
2020	10.94	43.65	39.66%
2021	10.10	61.10	32.59%

Appendix:

Other financial ratios (Telemet)	
	2021 (TTM)
Liquidity	
Current ratio	1.25
Cash ratio	0.84
Activity	
TA TO	0.61
AR TO	9.83
FA TO	9.86

Profitability	
Gross profit margin	87.66%
Operating profit margin	36.76%
Valuation Ratios	
P/S	18.81
P/CF	41.02
P/FCF	43.14

Ratios of Adobe's competitors:

<i>DIS</i>	0.64	<i>QCOM</i>	0.41	<i>UNP</i>	0.33
<i>RIO</i>	0.63	<i>BKNG</i>	0.41	<i>BA</i>	0.32
<i>AAPL</i>	0.62	<i>PYPL</i>	0.39	<i>PG</i>	0.29
<i>GM</i>	0.57	<i>JNJ</i>	0.37	<i>CVS</i>	0.29
<i>MA</i>	0.57	<i>EMR</i>	0.35	<i>JPM</i>	0.28
<i>AMAT</i>	0.51	<i>HEAR</i>	0.35	<i>PRU</i>	0.28
<i>AMT</i>	0.51	<i>KO</i>	0.34	<i>GOOGL</i>	0.22
<i>SBUX</i>	0.50	<i>NXST</i>	0.33	<i>PFE</i>	0.22
<i>UNH</i>	0.44	<i>NEE</i>	0.33	<i>SAP</i>	0.20
<i>FB</i>	0.42	<i>INTC</i>	0.33		

Google		Oracle		IBM	
P/E	25.54	P/E	32.31	P/E	20.78
PEG	0.97	PEG	1.93	PEG	1.22
P/B	7.28	P/B	N/A	P/B	6.10
ROE	32.07%	ROE	1060.31%	ROE	23.73%
ROA	14.49%	ROA	8.74%	ROA	2.51%
NPM	29.51%	NPM	18.07%	NPM	10.01%
D/E	11.33	D/E	N/A	D/E	290.27

<https://www.statista.com/markets/418/topic/484/software/#definition>

https://ethw.org/Software_Industry

<https://my-ibisworld-com.libweb.uwlax.edu/us/en/industry/51121d/major-companies>