



Financials Sector Recommendation

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Recommendation

Strong Fiscal Tailwinds

- Companies are aided by strong fiscal spending, for example the \$3T infrastructure bill
- Profits are expected to trickle down to individual workers, decreasing default rates and increasing borrowing and spending

Attractive Interest Rate Exposure

- Expectations for higher interest rates in the future make exposure to Financials attractive relative to the broader market

Economic Recovery Fuels Additional Borrowing and Lower Default Rates

- As the economy improves, individuals and companies borrow from banks in order to fuel growth, providing increased yield to banks loan portfolios and providing more opportunities to invest in loans

Attractive Relative to Valuation Metrics of the Broader S&P 500

- Price to Sales and Price to Earnings for Financials, when compared to the broader market, appear very attractive

Currently ~1.5% Overweight

- **Increase Allotment ~1% to be Net ~ 2.5% Overweight**
- **Add more Diversified Financials and Banks exposure**

Portfolio Breakdown and Recommendation

Company	Holding Amount	% of Portfolio	P/E	P/S	Beta
American Express	\$504.0k	5.08%	15.98	2.98	1.22
Bank of America	\$455.3k	4.59%	13.26	4.17	1.54
Morgan Stanley	\$333.0k	3.35%	12.64	3.03	1.29

Company	Current Weight	Proposed Change	Pro Forma Weight	P/E	P/S	Beta
JP Morgan Chase	n/a	+250bps	2.50%	9.94	3.81	1.14
Discover Financial Services	n/a	+200bps	2.00%	6.49	2.49	1.71
American Express	5.08%	-200bps	3.08%	15.98	2.98	1.22
Bank of America	4.59%	-150bps	3.09%	13.26	4.17	1.54

JPMorgan Chase (\$JPM)

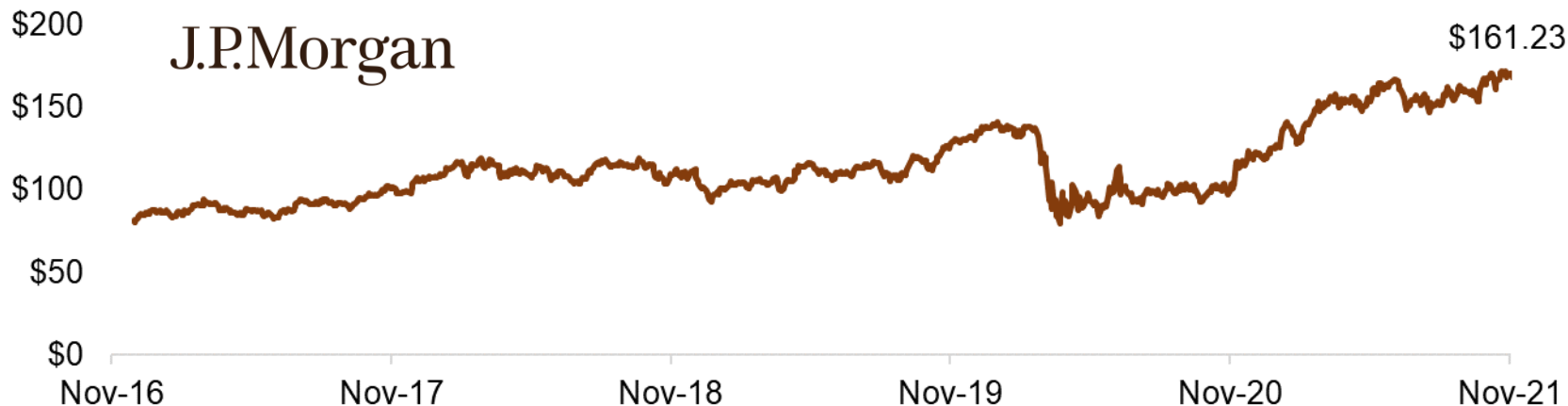
Company Overview

- JPMorgan Chase is a globally operated financial services provider that generates revenue from three main lines of business. These lines of business are, Wealth Management, Institutional Securities, and Investment Management. Their clientele ranges from large institutions and funds to wealthy individuals and business owners.
- JPMorgan is the largest American bank by assets at \$3.68T

Key Drivers

- Interest rates, innovation & technology, and a strong global economy are key drivers for JPMorgan's earnings
- JPMorgan's worldwide brand can be leveraged to further drive growth and revenue
- Positive exposure to interest rates provides increased yield on JPMorgan's current portfolio and enables it to lend at higher rates in the future, boosting profitability

5 Year Historical Stock Price



JPMorgan Chase (\$JPM)

Investment Merits

- Strong economic conditions and long-term outlook of markets will drive earnings and stock price upwards, especially given their strong consumer lending operations
- JPMorgan is historically a consistent stock, aided by its relatively cheap cost of capital from its large borrowing base
- JPMorgan Chase shows ample upside when intrinsically valued using a discounted cash flow analysis, which is rare with the market at stretched valuations
- Investment banking revenue will remain strong in the coming months as Washington considers changes to capital gains taxes and coming increases in interest rates

Year	2021P	2022P	2023P	2024P	2025P	2026P	2027P	2028P	2029P	2030P	2031P		
Revenue	123,219	124,976	125,125	126,876	129,287	131,873	134,510	137,201	139,945	143,093	146,313		
% Growth		1.4%	0.1%	1.4%	1.9%	2.0%	2.0%	2.0%	2.0%	2.3%	2.3%		
Net Income	43,714	41,130	42,878	42,617	43,853	45,165	46,513	47,896	49,315	50,897	52,525		
% Margin	35.5%	32.9%	34.3%	33.6%	33.9%	34.2%	34.6%	34.9%	35.2%	35.6%	35.9%		
% Growth		-5.9%	4.2%	-0.6%	2.9%	3.0%	3.0%	3.0%	3.0%	3.2%	3.2%		
Free Cash Flow	43,714	41,130	42,878	42,617	43,853	45,165	46,513	47,896	49,315	50,897	52,525		
% Growth		-5.9%	4.2%	-0.6%	2.9%	3.0%	3.0%	3.0%	3.0%	3.2%	3.2%		
NPV of Cash Flows	312,657	39%									Shares Outstanding	3,087	
NPV of terminal value	496,348	61%									Current Price	\$ 161.23	
Projected Equity Value	809,005	100%									Implied equity value/share	\$ 262.03	
Free Cash Flow Yield	8.78%									Upside/(Downside) to DCF	62.5%		
Current P/E	11.4	12.1	11.6									Discount Rate:	7.50%
<i>Projected P/E</i>	<i>18.5</i>	<i>19.7</i>	<i>18.9</i>									Terminal FCF Growth:	2.25%

Discover Financial Services (\$DFS)

Company Overview

- Discover Financial Services is a consumer credit card issuer and payment services company
- The company also offers student, personal, and home equity loans as well as savings products including CDs and money market accounts

Key Drivers

- Interest rates, borrowing habits of consumers, and consumer confidence are key drivers for the company
- Discover earns mainly interest-derived income based on outstanding consumer loan balances
- Additionally, Discover processes payments

5 Year Historical Stock Price





Discover Financial Services (\$DFS)

Investment Merits

- Favorable consumer spending and payment patterns, a strong economy, and foresight into increasing interest rates are catalysts for the company and its products
- Increased adoption of digital payments and spending is beneficial for the tech-enabled company, especially with younger demographics that Discover targets
- Comparatively, Discover appears to be undervalued relative to its peers on both Price to Sales and Price to Earnings metrics
- Equity Research analysts have strong ratings on the company, with the average equity research price target being ~24% above Discover's current share price

Discover Financial Services Comparable Company Analysis

Company	Ticker	Market Cap	Enterprise Value	EV/Revenue	Trailing P/E	Forward P/E
Visa	V	\$457,260.3	\$458,840.3	16.2x	29.6x	24.8x
Mastercard	MA	322,750.5	329,794.5	17.5x	39.9x	31.2x
American Express Co	AXP	134,935.4	143,755.4	3.4x	18.2x	18.1x
Capital One Financial Corp	COF	65,855.5	82,644.5	2.8x	5.8x	8.1x
Global Payments Inc.	GPN	38,401.5	47,598.4	6.2x	16.2x	13.7x
Synchrony Financial	SYF	25,923.7	29,627.7	2.9x	6.5x	8.3x
Ally Financial Inc	ALLY	17,010.4	23,365.4	2.9x	5.8x	6.8x
Alliance Data Systems Corp	ADS	4,315.7	8,737.9	2.0x	4.7x	6.4x
<i>Median</i>		52,128.5	65,121.4	3.2x	11.4x	11.0x
<i>Mean</i>		133,306.6	140,545.5	6.7x	15.8x	14.7x

Discover Financial Services	DFS	\$33,604.1	\$40,474.1	3.4x	6.8x	8.7x
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Discover Financial Services Implied Share Price

	EV/Revenue	Trailing P/E	Forward P/E
Median	\$108.92	\$189.66	\$183.81
Mean	\$112.58	\$264.64	\$245.22

Discover Financial Services (\$DFS)

Investment Merits

- Based on intrinsic valuation, Discover is an attractive target
- Additionally, gaining exposure to Diversified Financials will benefit the overall portfolio

Year	2021P	2022P	2023P	2024P	2025P	2026P	2027P	2028P	2029P	2030P	2031P
Total Revenue After Loan Loss	10,931	8,905	9,416	9,879	10,350	10,842	11,345	11,848	12,351	12,845	13,320
% Growth		-18.5%	5.7%	4.9%	4.8%	4.8%	4.6%	4.4%	4.2%	4.0%	3.7%
Earnings Before Tax	5,629	4,680	5,047	5,399	5,765	6,017	6,353	6,694	7,040	7,386	7,726
EBT Margin	51.5%	52.6%	53.6%	54.7%	55.7%	55.5%	56.0%	56.5%	57.0%	57.5%	58.0%
Taxes	1,182	983	1,060	1,134	1,211	1,264	1,334	1,406	1,478	1,551	1,622
Tax Rate	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%
Net Income	4,447	3,697	3,987	4,265	4,554	4,754	5,019	5,289	5,562	5,835	6,103
% Growth		-16.9%	7.9%	7.0%	6.8%	4.4%	5.6%	5.4%	5.2%	4.9%	4.6%
Add Depreciation/Amort	170	180	191	201	211	228	238	249	259	270	280
% of Capex	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%
Plus/(minus) Changes WC	(10,162)	(277)	(243)	(50)	15	(217)	(227)	(237)	(247)	(257)	(266)
% of Sales	-93.0%	-3.1%	-2.6%	-0.5%	0.1%	-2.0%	-2.0%	-2.0%	-2.0%	-2.0%	-2.0%
Subtract Cap Ex	283	300	319	335	351	379	397	415	432	450	466
Capex % of sales	2.6%	3.4%	3.4%	3.4%	3.4%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
Free Cash Flow	(5,828)	3,300	3,617	4,081	4,429	4,385	4,633	4,886	5,142	5,398	5,650
% Growth		-156.6%	9.6%	12.8%	8.5%	-1.0%	5.7%	5.5%	5.2%	5.0%	4.7%
NPV of Cash Flows	20,432	33%									
NPV of terminal value	41,206	67%									
Projected Equity Value	61,639	100%									
Free Cash Flow Yield	-16.75%										
Current P/E	7.8	9.4	8.7								
<i>Projected P/E</i>	11.2	13.5	12.5								
							Shares Outstanding				307
							Current Price				\$ 113.32
							Implied equity value/share				\$ 162.13
							Upside/(Downside) to DCF				43.07%
							Terminal Discount Rate =				9.0%
							Terminal FCF Growth =				3.50%

American Express (\$AXP)

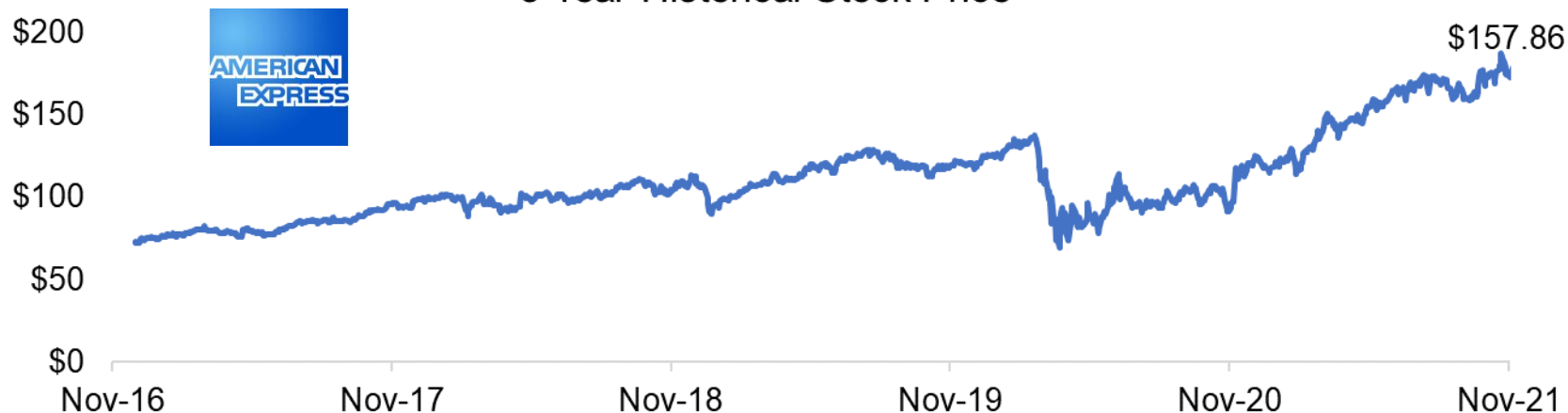
Company Overview

- American Express provides payment services in over 130 countries, providing consumers and businesses access to credit card payment products
- The company is organized in 4 segments: consumer services, commercial services, merchant services, and corporate management

Key Drivers

- Interest rates, borrowing habits of consumers, and consumer confidence are key drivers for the company
- American Express earns mainly interest-derived income based on outstanding consumer loan balances, and generally caters towards safer borrowers
- Amex has a number of cobranded corporate cards, boosting name recognition

5 Year Historical Stock Price



American Express (\$AXP)

Investment Merits

- American Express has a brand recognition above any of its credit card issuing peers, with the brand becoming a status symbol in previous years
- Intrinsic valuation through discounted cash flow analysis yields an upside of 30.2%, which is difficult to find in the recent stretched valuation environment
- The company has a robust credit profile, keeping returns steady if the current situation regarding COVID-19 changes meaningfully over the next year
- Consumers have spent more using credit cards during the economy's reopening

Year	2021P	2022P	2023P	2024P	2025P	2026P	2027P	2028P	2029P	2030P	2031P
Net Revenue before Loan Loss	41,494	45,643	49,820	53,452	56,817	60,226	63,840	67,670	71,730	76,034	80,596
% Growth		6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Operating Income	11,271	9,901	11,024	12,069	13,084	14,003	15,162	16,410	17,753	19,199	20,753
Operating Margin	27.2%	21.7%	22.1%	22.6%	23.0%	23.3%	23.8%	24.3%	24.8%	25.3%	25.8%
Taxes	2,367	2,079	2,315	2,535	2,748	2,941	3,184	3,446	3,728	4,032	4,358
Tax Rate	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%
Net Income	8,904	7,822	8,709	9,535	10,337	11,062	11,978	12,964	14,025	15,167	16,395
% Growth		-12.2%	11.3%	9.5%	8.4%	7.0%	8.3%	8.2%	8.2%	8.1%	8.1%
Add Depreciation/Amort	1,307	1,438	1,569	1,684	1,790	1,626	1,724	1,827	1,937	2,053	2,176
% of Capex	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%
Plus/(minus) Changes WC	(5,799)	(2,103)	(1,786)	(1,719)	(1,302)	(1,205)	(1,277)	(1,353)	(1,435)	(1,521)	(1,612)
% of Sales	-14.0%	-4.6%	-3.6%	-3.2%	-2.3%	-2.0%	-2.0%	-2.0%	-2.0%	-2.0%	-2.0%
Subtract Cap Ex	1,452	1,598	1,744	1,871	1,989	1,807	1,915	2,030	2,152	2,281	2,418
Capex % of sales	3.5%	3.5%	3.5%	3.5%	3.5%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Free Cash Flow	2,960	5,559	6,749	7,629	8,836	9,677	10,510	11,407	12,375	13,418	14,542
% Growth		87.8%	21.4%	13.0%	15.8%	9.5%	8.6%	8.5%	8.5%	8.4%	8.4%
NPV of Cash Flows	59,724	33%									
NPV of terminal value	122,703	67%									
Projected Equity Value	182,427	100%									
Free Cash Flow Yield	2.26%										
											830
											\$157.86
											\$205.50
											30.18%
Current P/E	14.7	16.8	15.0								
Projected P/E	19.2	21.8	19.6								
											8.5%
											3.5%

Bank of America (\$BAC)

Company Overview

- Bank of America is a globally operated financial services provider that has four main lines of business. These segments are Consumer, Global Markets, Global Banking, and Global Wealth Investment Management.
- Bank of America is the second largest US bank by total assets, with \$3.03T under management

Key Drivers

- Interest rates, innovation & technology, and a strong global economy are key drivers for Bank of America's earnings
- Bank of America makes a healthy mix of revenues from each of its segments, making it resistant to any change in economic conditions

5Y Historical Stock Price



Bank of America (\$BAC)

Investment Merits

- Strong economic conditions and favorable monetary policy conditions will drive yield on Bank of America's portfolio and increase margins in coming years
- Bank of America offers safety from economic conditions and acts as a natural hedge on interest rate risk for the portfolio
- Global Markets and Global Wealth Investment Management have driven strong returns in recent years, which still have substantial growth opportunities
- Bank of America's intrinsic valuation shows an upside of 34.9%, which makes it attractive especially given the stretched valuations the rest of the market trades at

Year	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Revenue	83,645	84,900	86,598	88,330	90,097	91,899	93,737	95,611	97,524	99,474	101,464
% Growth		1.5%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Net Income	28,686	25,032	25,737	26,252	27,930	29,408	30,933	32,508	33,158	34,816	35,512
% Margin	34.3%	29.5%	29.7%	29.7%	31.0%	32.0%	33.0%	34.0%	34.0%	35.0%	35.0%
% Growth		-12.7%	2.8%	2.0%	6.4%	5.3%	5.2%	5.1%	2.0%	5.0%	2.0%
Free Cash Flow	28,686	25,032	25,737	26,252	27,930	29,408	30,933	32,508	33,158	34,816	35,512
% Growth		-12.7%	2.8%	2.0%	6.4%	5.3%	5.2%	5.1%	2.0%	5.0%	2.0%
NPV of Cash Flows	201,706	38%									
NPV of terminal value	335,581	62%									
Projected Equity Value	537,287	100%									
Free Cash Flow Yield	7.20%										
Current P/2021E	13.9	15.9	15.5								
<i>Projected P/E</i>	<i>18.7</i>	<i>21.5</i>	<i>20.9</i>								
							Shares Outstanding	8,736			
							Current Price	\$ 45.59			
							Implied equity value/share	\$ 61.51			
							Upside/(Downside) to DCF	34.9%			
							Discount Rate:	7.5%			
							Terminal FCF Growth:	2.25%			

Portfolio Breakdown

Company	Holding Amount	% of Portfolio	P/E	P/S	Beta	Return on Equity
American Express Co.	\$485.8k	5.08%	19.05	3.55	1.44	28.55%
Bank of America Corp.	\$404.5k	4.59%	14.15	4.45	1.22	10.79%
Morgan Stanley	\$315.3k	3.35%	12.64	3.03	1.29	13.48%
JPMorgan Chase	n/a	0.00%	9.95	3.81	1.14	11.34%
Discover F.S.	n/a	0.00%	6.45	2.48	1.71	31.93%

Industry / Sector / Sub-Sector	P/E	P/S	Beta
S&P 500	22.23	3.14	n/a
Financials	14.27	3.02	1.12
Banks	11.52	3.77	1.24
Diversified Financials	17.46	3.28	1.05
Insurance	15.25	1.51	1.04

Portfolio Recommendation

Company	Current Price	Target Price	Upside	% of Portfolio	Change	New % of Portfolio
Morgan Stanley	\$97.23	\$159.76	64.3%	3.35%	n/a	3.35%
American Express Company	\$157.86	\$205.20	30.2%	5.08%	-200 bps	3.08%
Bank of America Corporation	\$45.59	\$61.51	34.9%	4.59%	-150 bps	3.09%
JPMorgan Chase	\$161.23	\$262.03	62.5%	n/a	+250 bps	2.50%
Discover Financial Services	\$113.32	\$162.13	43.1%	n/a	+200 bps	2.00%

Currently 1% Overweight

- **Increase Allotment 1.5% to be Net 2.5% Overweight**
- **Add more Diversified Financials and Banks exposure through opening a position in JPMorgan Chase and Discover**



Questions/Comments?

Appendix

JPMorgan Chase DCF

Year	2021P	2022P	2023P	2024P	2025P	2026P	2027P	2028P	2029P	2030P	2031P
Revenue	123,219	124,976	125,125	126,876	129,287	131,873	134,510	137,201	139,945	143,093	146,313
% Growth		1.4%	0.1%	1.4%	1.9%	2.0%	2.0%	2.0%	2.0%	2.3%	2.3%
Net Income	43,714	41,130	42,878	42,617	43,853	45,165	46,513	47,896	49,315	50,897	52,525
% Margin	35.5%	32.9%	34.3%	33.6%	33.9%	34.2%	34.6%	34.9%	35.2%	35.6%	35.9%
% Growth		-5.9%	4.2%	-0.6%	2.9%	3.0%	3.0%	3.0%	3.0%	3.2%	3.2%
Free Cash Flow	43,714	41,130	42,878	42,617	43,853	45,165	46,513	47,896	49,315	50,897	52,525
% Growth		-5.9%	4.2%	-0.6%	2.9%	3.0%	3.0%	3.0%	3.0%	3.2%	3.2%
NPV of Cash Flows	312,657	39%									
NPV of terminal value	496,348	61%									
Projected Equity Value	809,005	100%									
Free Cash Flow Yield	8.78%										
Current P/E	11.4	12.1	11.6								
<i>Projected P/E</i>	18.5	19.7	18.9								
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											Terminal FCF Growth:
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		Discount Rate:				
		5.5%	6.5%	7.5%	8.5%	9.5%
Terminal FCF Growth:	1.25%	\$ 348.92	\$ 281.05	\$ 234.97	\$ 201.68	\$ 176.51
	1.75%	\$ 381.89	\$ 300.40	\$ 247.32	\$ 210.02	\$ 182.38
	2.25%	\$ 424.99	\$ 324.31	\$ 262.02	\$ 219.70	\$ 189.07
	2.75%	\$ 483.78	\$ 354.59	\$ 279.81	\$ 231.05	\$ 196.75
	3.25%	\$ 568.69	\$ 394.19	\$ 301.79	\$ 244.58	\$ 205.66

Discover DCF

Year	2021P	2022P	2023P	2024P	2025P	2026P	2027P	2028P	2029P	2030P	2031P
Total Revenue After Loan Loss	10,931	8,905	9,416	9,879	10,350	10,842	11,345	11,848	12,351	12,845	13,320
% Growth		-18.5%	5.7%	4.9%	4.8%	4.8%	4.6%	4.4%	4.2%	4.0%	3.7%
Earnings Before Tax	5,629	4,680	5,047	5,399	5,765	6,017	6,353	6,694	7,040	7,386	7,726
EBT Margin	51.5%	52.6%	53.6%	54.7%	55.7%	55.5%	56.0%	56.5%	57.0%	57.5%	58.0%
Taxes	1,182	983	1,060	1,134	1,211	1,264	1,334	1,406	1,478	1,551	1,622
Tax Rate	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%
Net Income	4,447	3,697	3,987	4,265	4,554	4,754	5,019	5,289	5,562	5,835	6,103
% Growth		-16.9%	7.9%	7.0%	6.8%	4.4%	5.6%	5.4%	5.2%	4.9%	4.6%
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% of Capex	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%
Plus/(minus) Changes WC	(10,162)	(277)	(243)	(50)	15	(217)	(227)	(237)	(247)	(257)	(266)
% of Sales	-93.0%	-3.1%	-2.6%	-0.5%	0.1%	-2.0%	-2.0%	-2.0%	-2.0%	-2.0%	-2.0%
Subtract Cap Ex	283	300	319	335	351	379	397	415	432	450	466
Capex % of sales	2.6%	3.4%	3.4%	3.4%	3.4%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
Free Cash Flow	(5,828)	3,300	3,617	4,081	4,429	4,385	4,633	4,886	5,142	5,398	5,650
% Growth		-156.6%	9.6%	12.8%	8.5%	-1.0%	5.7%	5.5%	5.2%	5.0%	4.7%

		Discount Rate				
		7.0%	8.0%	9.0%	10.0%	11.0%
Current Price	\$ 113.32					
Implied equity value/share	\$ 162.13					
Upside/(Downside) to DCF	43.07%					
Terminal Discount Rate =	9.0%					
Terminal FCF Growth =	3.50%					
Terminal FCF						
Growth:						
		2.5%	3.0%	3.5%	4.0%	4.5%
		\$ 237.19	\$ 179.86	\$ 140.38	\$ 111.60	\$ 89.72
		\$ 263.18	\$ 195.37	\$ 150.35	\$ 118.35	\$ 94.48
		\$ 296.59	\$ 214.31	\$ 162.13	\$ 126.15	\$ 99.89
		\$ 341.15	\$ 237.99	\$ 176.27	\$ 135.25	\$ 106.06
		\$ 403.52	\$ 268.44	\$ 193.54	\$ 146.00	\$ 113.18



American Express DCF

Year	2021P	2022P	2023P	2024P	2025P	2026P	2027P	2028P	2029P	2030P	2031P
Net Revenue before Loan Loss	41,494	45,643	49,820	53,452	56,817	60,226	63,840	67,670	71,730	76,034	80,596
% Growth		6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Operating Income	11,271	9,901	11,024	12,069	13,084	14,003	15,162	16,410	17,753	19,199	20,753
Operating Margin	27.2%	21.7%	22.1%	22.6%	23.0%	23.3%	23.8%	24.3%	24.8%	25.3%	25.8%
Taxes	2,367	2,079	2,315	2,535	2,748	2,941	3,184	3,446	3,728	4,032	4,358
Tax Rate	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%
Net Income	8,904	7,822	8,709	9,535	10,337	11,062	11,978	12,964	14,025	15,167	16,395
% Growth		-12.2%	11.3%	9.5%	8.4%	7.0%	8.3%	8.2%	8.2%	8.1%	8.1%
Add Depreciation/Amort	1,307	1,438	1,569	1,684	1,790	1,626	1,724	1,827	1,937	2,053	2,176
% of Capex	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%
Plus/(minus) Changes WC	(5,799)	(2,103)	(1,786)	(1,719)	(1,302)	(1,205)	(1,277)	(1,353)	(1,435)	(1,521)	(1,612)
% of Sales	-14.0%	-4.6%	-3.6%	-3.2%	-2.3%	-2.0%	-2.0%	-2.0%	-2.0%	-2.0%	-2.0%
Subtract Cap Ex	1,452	1,598	1,744	1,871	1,989	1,807	1,915	2,030	2,152	2,281	2,418
Capex % of sales	3.5%	3.5%	3.5%	3.5%	3.5%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Free Cash Flow	2,960	5,559	6,749	7,629	8,836	9,677	10,510	11,407	12,375	13,418	14,542
% Growth		87.8%	21.4%	13.0%	15.8%	9.5%	8.6%	8.5%	8.5%	8.4%	8.4%

Current Price
Implied equity value/share
Upside/(Downside) to DCF

\$157.86
\$205.50
30.18%

Discount Rate =
Terminal FCF Growth =

8.5%
3.5%

Terminal
FCF
Growth:

	Discount Rate:				
	6.5%	7.5%	8.5%	9.5%	10.5%
2.50%	\$ 399.72	\$ 254.03	\$ 179.67	\$ 162.65	\$ 135.59
3.00%	\$ 386.31	\$ 278.77	\$ 191.41	\$ 172.00	\$ 142.02
3.50%	\$ 451.53	\$ 310.57	\$ 205.50	\$ 183.35	\$ 149.44
4.00%	\$ 549.36	\$ 352.98	\$ 222.72	\$ 196.81	\$ 158.10
4.50%	\$ 712.41	\$ 412.36	\$ 244.24	\$ 213.25	\$ 168.34



Bank of America DCF

Year	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Revenue	83,645	84,900	86,598	88,330	90,097	91,899	93,737	95,611	97,524	99,474	101,464
% Growth		1.5%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Net Income	28,686	25,032	25,737	26,252	27,930	29,408	30,933	32,508	33,158	34,816	35,512
% Margin	34.3%	29.5%	29.7%	29.7%	31.0%	32.0%	33.0%	34.0%	34.0%	35.0%	35.0%
% Growth		-12.7%	2.8%	2.0%	6.4%	5.3%	5.2%	5.1%	2.0%	5.0%	2.0%
Free Cash Flow	28,686	25,032	25,737	26,252	27,930	29,408	30,933	32,508	33,158	34,816	35,512
% Growth		-12.7%	2.8%	2.0%	6.4%	5.3%	5.2%	5.1%	2.0%	5.0%	2.0%

Current Price	\$ 45.59
Implied equity value/share	\$ 61.51
Upside/(Downside) to DCF	34.9%
Discount Rate =	7.5%
Terminal FCF Growth =	2.25%

	5.5%	6.5%	7.5%	8.5%	9.5%
Terminal FCF Growth:					
0.25%	\$ 70.97	\$ 59.00	\$ 50.36	\$ 43.85	\$ 38.77
1.25%	\$ 82.22	\$ 66.03	\$ 55.04	\$ 47.11	\$ 41.12
2.25%	\$ 100.40	\$ 76.36	\$ 61.51	\$ 51.42	\$ 44.12
3.25%	\$ 134.73	\$ 93.06	\$ 71.01	\$ 57.36	\$ 48.09
4.25%	\$ 224.01	\$ 124.60	\$ 86.36	\$ 66.11	\$ 53.56



Morgan Stanley DCF

Year	2021P	2022P	2023P	2024P	2025P	2026P	2027P	2028P	2029P	2030P	2031P
Revenue	57,321	57,033	58,203	59,367	60,555	61,766	63,001	64,261	65,707	67,185	68,697
% Growth		-0.5%	2.1%	2.0%	2.0%	2.0%	2.0%	2.0%	2.3%	2.3%	2.3%
Income Before Taxes	20,145	20,972	21,149	20,779	21,194	21,618	22,050	22,491	22,997	23,515	24,044
Operating Margin	35.1%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%
Taxes	4,533	4,719	4,758	4,675	4,769	4,864	4,961	5,061	5,174	5,291	5,410
Tax Rate	22.5%	22.5%	22.5%	22.5%	22.5%	22.5%	22.5%	22.5%	22.5%	22.5%	22.5%
Net Income	15,612	16,254	16,390	16,103	16,425	16,754	17,089	17,431	17,823	18,224	18,634
% Growth		4.1%	0.8%	-1.7%	2.0%	2.0%	2.0%	2.0%	2.3%	2.3%	2.3%
Free Cash Flow	15,612	16,254	16,390	16,103	16,425	16,754	17,089	17,431	17,823	18,224	18,634
% Growth		4.1%	0.8%	-1.7%	2.0%	2.0%	2.0%	2.0%	2.3%	2.3%	2.3%

Current Price

\$ 97.23

Implied equity value/share

\$ 159.76

Upside/(Downside) to DCF

64.3%

Discount Rate =

8.25%

Terminal FCF Growth =

2.25%

Terminal
FCF
Growth:

	Discount Rate:				
	6.25%	7.25%	8.25%	9.25%	10.25%
0.25%	\$ 176.11	\$ 150.67	\$ 131.61	\$ 116.79	\$ 104.94
1.25%	\$ 201.31	\$ 167.68	\$ 143.67	\$ 125.67	\$ 111.67
2.25%	\$ 239.10	\$ 191.50	\$ 159.76	\$ 137.09	\$ 120.08
3.25%	\$ 302.08	\$ 227.23	\$ 182.29	\$ 152.32	\$ 130.89
4.25%	\$ 428.05	\$ 286.77	\$ 216.08	\$ 173.63	\$ 145.31

Discover Equity Research Price Targets

Broker	Target Price	% Premium / (Discount)	Date
BMO Capital markets	\$126	11.2%	10/26/2021
Piper Sandler & Co	\$122	7.7%	10/25/2021
Deutsche Bank	\$134	18.2%	10/22/2021
Goldman Sachs	\$141	24.4%	10/22/2021
JP Morgan	\$150	32.4%	10/22/2021
Stephens	\$137	20.9%	10/22/2021
Barclays	\$146	28.8%	10/22/2021
RBC Capital Markets	\$143	26.2%	10/21/2021
Credit Suisse	\$142	25.3%	10/21/2021
Jefferies	\$150	32.4%	10/21/2021
Keefe Bruyette & Woods	\$150	32.4%	10/21/2021
Evercore ISI	\$132	16.5%	10/21/2021
Wells Fargo	\$135	19.1%	10/21/2021
Wolfe Research	\$160	41.2%	10/21/2021
Mean	\$140.57	24.0%	
Median	\$141.50	24.9%	
Current Share Price	\$113.32		

Discover Comparable Company Analysis

Discover Financial Services Comparable Company Analysis

Company	Ticker	Market Cap	Enterprise Value	EV/Revenue	Trailing P/E	Forward P/E
Visa	V	\$457,260.3	\$458,840.3	16.2x	29.6x	24.8x
Mastercard	MA	322,750.5	329,794.5	17.5x	39.9x	31.2x
American Express Co	AXP	134,935.4	143,755.4	3.4x	18.2x	18.1x
Capital One Financial Corp	COF	65,855.5	82,644.5	2.8x	5.8x	8.1x
Global Payments Inc.	GPN	38,401.5	47,598.4	6.2x	16.2x	13.7x
Synchrony Financial	SYF	25,923.7	29,627.7	2.9x	6.5x	8.3x
Ally Financial Inc	ALLY	17,010.4	23,365.4	2.9x	5.8x	6.8x
Alliance Data Systems Corp	ADS	4,315.7	8,737.9	2.0x	4.7x	6.4x

<i>Low</i>		\$4,315.7	\$8,737.9	2.0x	4.7x	6.4x
<i>Median</i>		52,128.5	65,121.4	3.2x	11.4x	11.0x
<i>Mean</i>		133,306.6	140,545.5	6.7x	15.8x	14.7x
<i>High</i>		457,260.3	458,840.3	17.5x	39.9x	31.2x

Discover Financial Services	DFS	\$33,604.1	\$40,474.1	3.4x	6.8x	8.7x
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Discover Financial Services Implied Share Price

	EV/Revenue	Trailing P/E	Forward P/E
25th Percentile	\$47.21	\$96.92	\$119.06
Median	\$108.92	\$189.66	\$183.81
Mean	\$112.58	\$264.64	\$245.22
High	\$292.43	\$666.73	\$521.35