



The Leader in Stock Valuation and Forecasting

RATING AND FORECAST REPORT

Company Name: BANK OF AMER CP

Ticker: BAC

Feb. 09, 2018

TABLE OF CONTENTS

• Data Summary	1
• ValuEngine Recommendation	1
• Forecast Analysis	1
• Price and Recommendation History	1
• ValuEngine Evaluation & Rankings	2
• Comparison to Industry	2
• Comparison with Peers	3
• Analyst Opinions	4
• EPS Consensus Expectations	4
• Business Summary	4
• Annual Financials	5
• Quarterly Financials	7
• ValuEngine Service Descriptions	9
• ValuEngine's Methodology	10

www.valuengine.com

Rating and Forecast Report

BANK OF AMER CP (NYSE: BAC)



Report Date: Feb 9, 2018

DATA SUMMARY

Sector: Finance	Trade Date: Feb 8, 2018	Industry: Banks-Major Regional	1-Yr Forecast: 11.82%	1-Yr Momentum: 31.19%
Last Close: \$29.74	Trailing P/E: 15.82	Market Cap (bil): 312.76	Forward P/E: 11.82	
Valuation: 19.94%	PEG Ratio: 0.47	P/S Ratio: 3.12	M/B Ratio: 1.60	
EPS Growth: 33.87%	Volatility: 25.34%	Sharpe Ratio: 0.82	Beta: 1.44	
5-Yr Avg Return: 20.78%	Dividend Yield: 1.31%	52-Wk High: \$32.67	52-Wk Low: \$22.07	
Annual Dividend: \$0.39				

VALUENGINE RECOMMENDATION

NEGATIVE underperform	NEUTRAL match	POSITIVE outperform
--------------------------	------------------	------------------------

**ValuEngine
Rating**



ValuEngine recommendation covers more than 5000 companies. The recommendations are based on the proprietary ValuEngine one-year forecast return model output for each individual equity. ValuEngine's Five-Engine rating stocks have an averaged annual return of 13.15% since 2002.

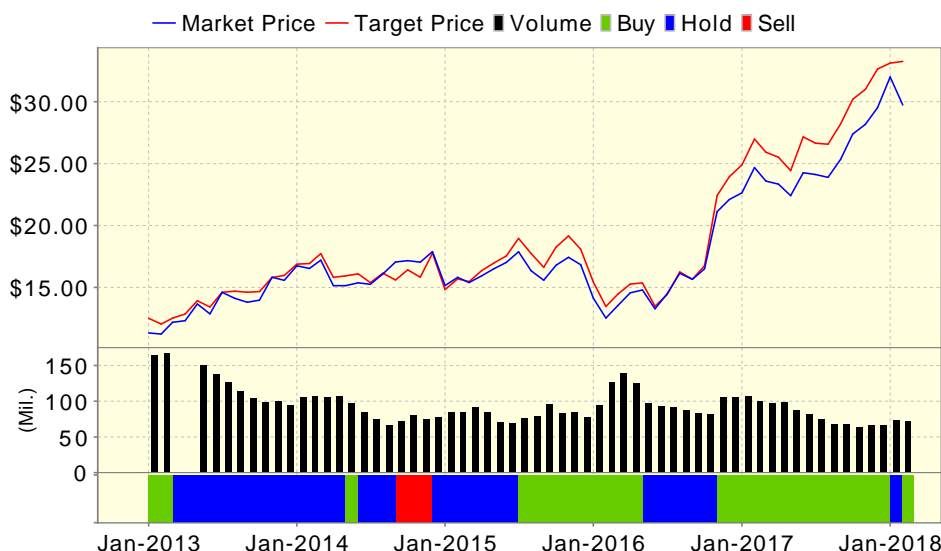
FORECAST ANALYSIS

	Target Price	Exp. Return
1-Month	\$30.03	0.99%
3-Month	\$30.31	1.93%
6-Month	\$31.35	5.42%
1-Year	\$33.26	11.82%
2-Year	\$36.45	22.57%
3-Year	\$37.81	27.12%

The predictive variables used in ValuEngine's forecast model include both proprietary and well-established variables derived from credible financial studies and publications. We use a distinct forecasting model for each time horizon and apply the most advanced statistical/econometric techniques to ensure that our stock return forecasts are as reliable as possible.

[Click for more information on ValuEngine's models.](#)

PRICE AND RECOMMENDATION HISTORY



Most Recent Recommendation Changes

Feb 01, 2018
Upgrade to Buy
Jan 16, 2018
Downgrade to Hold
Nov 30, 2016
Upgrade to Buy

Past Performance

Last One Month -1.26%
Last Three Month 11.01%
Last Six Month 19.44%
Last One Year 31.19%

CONTACT VALUENGINE

ValuEngine Inc.
PO Box 399
Melbourne, FL 32902
(800) 381-5576 (T)
support@ValuEngine.com
www.ValuEngine.com

ValuEngine's fundamentally-based, quant-derived research is now available to private investors. ValuEngine's research will enhance your ability to evaluate individual stocks, manage your portfolio and allocate capital for maximum returns. ValuEngine currently covers @5500 US equities as well as most major Canadian stocks.

Rating and Forecast Report

BANK OF AMER CP (NYSE: BAC)



Report Date: Feb 9, 2018

VALUENGINE EVALUATION & RANKINGS

	Value	Rank
1-Yr Forecast	11.82%	97
Valuation	19.94%	17
1-Yr Momentum	31.19%	82
P/E Ratio	15.82	75
Market Cap	312.76B	100
EPS Growth	33.87%	64
5-Yr Avg Return	20.78%	87
Volatility	25.34%	59
Sharpe Ratio	0.82	85
P/S Ratio	3.12	34
M/B Ratio	1.60	63
Surprise	8.82%	65

Just as important as the percentages shown for our predictive variables for each stock is the way they are ranked against @7000 stocks in our database. This is sometimes confusing to newcomers to ValuEngine. Each of these quantitative measurements is ranked on a scale of 1 to 100. Generally the higher the ranking, the more positive the influence each measurement has on the overall attractiveness of the stock. In other words a high rank is always better. For example:
 Forecast rank 97: 3% of stocks have higher forecast returns.
 Valuation rank 17: 83% of stocks are more undervalued.
 Momentum rank 82: 18% of stocks have higher momentum.
 P/E rank 75: 25% of stocks have lower P/E ratios.
 Size rank 100: 0% of stocks have higher market capitalization.
 Volatility rank 59: 41% of stocks have less volatility.

COMPARISON TO INDUSTRY

1-Yr Forecast		Rank	EPS Growth		Rank
BAC	11.82%	97	BAC	33.87%	64
Industry	6.43%	84	Industry	22.60%	51
Sector	3.39%	68	Sector	33.75%	43
1-Yr Momentum		Rank	5-Yr Avg Return		Rank
BAC	31.19%	82	BAC	20.78%	87
Industry	16.79%	65	Industry	14.90%	78
Sector	7.13%	49	Sector	4.90%	58
S&P 500	12.48%	60	S&P 500	3.05%	54
Valuation		Rank	P/S Ratio		Rank
BAC	19.94%	17	BAC	3.12	34
Industry	2.11%	45	Industry	3.46	32
Sector	-1.16%	51	Sector	4.52	41
P/E Ratio		Rank	M/B Ratio		Rank
BAC	15.82	75	BAC	1.60	63
Industry	15.83	75	Industry	2.02	55
Sector	17.86	70	Sector	2.22	66
Market Cap (bil.)		Rank	Surprise		Rank
BAC	312.76	100	BAC	8.82%	65
Industry	104.67	96	Industry	4.90%	54
Sector	5.18	49	Sector	-3.96%	48
Volatility		Rank	SharpeRatio		Rank
BAC	25.34%	59	BAC	0.82	85
Industry	19.92%	70	Industry	0.76	82
Sector	26.01%	67	Sector	0.32	59
S&P 500	19.24%	71	S&P 500	0.16	57

Rating and Forecast Report

BANK OF AMER CP (NYSE: BAC)



Report Date: Feb 9, 2018

COMPARISON WITH PEERS

Return Forecast : Expected Return

Ticker	Company Name	VE Rating	1-Mon	3-Mon	6-Mon	1-Yr	2-Yr	3-Yr
BAC	BANK OF AMER CP	4	0.99%	1.93%	5.42%	11.82%	22.57%	27.12%
JPM	JPMORGAN CHASE	4	0.42%	-1.54%	-2.16%	5.09%	-5.90%	-9.98%
WFC	WELLS FARGO-NEW	4	0.47%	1.16%	0.75%	5.62%	10.38%	18.80%
C	CITIGROUP INC	4	1.04%	1.41%	4.16%	12.46%	19.05%	23.51%
USB	US BANCORP	4	0.46%	2.02%	2.50%	5.53%	16.63%	26.52%

1-Yr Forecast

Ticker	Forecast	Rank
BAC	11.82%	97
JPM	5.09%	81
WFC	5.62%	83
C	12.46%	98
USB	5.53%	83

EPS Growth

Ticker	EPS Growth	Rank
BAC	33.87%	64
JPM	27.13%	58
WFC	16.25%	42
C	19.46%	48
USB	17.20%	44

1-Yr Momentum

Ticker	Momentum	Rank
BAC	31.19%	97
JPM	25.50%	77
WFC	-0.41%	37
C	27.61%	79
USB	-0.45%	37

5-Yr Avg Return

Ticker	Avg Return	Rank
BAC	20.78%	87
JPM	17.99%	83
WFC	12.72%	74
C	12.43%	74
USB	10.92%	70

Valuation

Ticker	Valuation	Rank
BAC	19.94%	17
JPM	-11.22%	69
WFC	-0.36%	49
C	10.90%	27
USB	5.33%	37

P/S Ratio

Ticker	P/S Ratio	Rank
BAC	3.12	34
JPM	3.54	30
WFC	2.95	37
C	2.48	42
USB	3.93	27

P/E Ratio

Ticker	P/E Ratio	Rank
BAC	15.82	75
JPM	14.93	78
WFC	13.50	83
C	13.28	83
USB	15.17	77

M/B Ratio

Ticker	M/B Ratio	Rank
BAC	1.60	63
JPM	2.00	54
WFC	1.73	59
C	1.25	72
USB	2.55	46

Market Cap (bil.)

Ticker	Market Cap	Rank
BAC	312.76	100
JPM	403.28	100
WFC	287.39	100
C	217.73	100
USB	94.21	99

Surprise

Ticker	Surprise	Rank
BAC	8.82%	65
JPM	8.68%	65
WFC	0.32%	39
C	7.45%	62
USB	1.21%	42

Volatility

Ticker	Volatility	Rank
BAC	25.34%	59
JPM	19.46%	71
WFC	16.63%	77
C	22.19%	65
USB	13.13%	83

SharpeRatio

Ticker	SharpeRatio	Rank
BAC	0.82	85
JPM	0.92	87
WFC	0.76	83
C	0.56	75
USB	0.83	85

Rating and Forecast Report

BANK OF AMER CP (NYSE: BAC)



Report Date: Feb 9, 2018

ANALYST OPINIONS

Buy

The mean recommendation was calculated from the numbers provided by Zacks.

Current Mean: 4.05

Number of Analyst: 19

Strong Buy: 9

Buy: 2

Hold: 8

Sell: 0

Strong Sell: 0

Recommendation Mean Trend

Three Month Ago: 4.05

Two Month Ago: 4.05

One Month Ago: 4.10

Current: 4.05

EPS CONSENSUS EXPECTATIONS

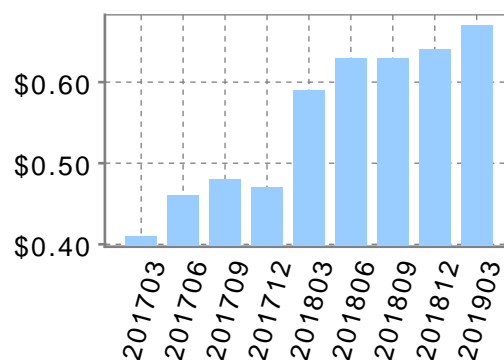
Quarter	201803	201806	201809	201812	201903
Mean	\$0.59	\$0.63	\$0.63	\$0.64	\$0.67
# of Estimates	8	8	8	8	3
High	\$0.60	\$0.66	\$0.67	\$0.69	\$0.72
Low	\$0.56	\$0.60	\$0.61	\$0.59	\$0.62
Same Qtr Last Yr	\$0.41	\$0.46	\$0.48	\$0.47	\$0.59
% Growth	42.68	37.23	31.77	35.90	15.10

Qtr/Year/LTG	201803	201806	2018	2019	LTG
Mean - Current	\$0.59	\$0.63	\$2.46	\$2.76	8.00%
Mean - 7 Days Ago	\$0.59	\$0.63	\$2.46	\$2.76	8.00%
Mean - 30 Days Ago	\$0.51	\$0.56	\$2.26	\$2.64	8.00%
Mean - 60 Days Ago	\$0.45	\$0.55	\$2.13	\$2.41	8.00%
Mean - 90 Days Ago	\$0.44	\$0.55	\$2.13	\$2.40	8.00%

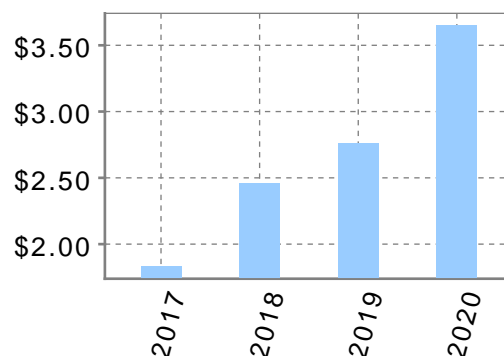
Year/LTG	2018	2019	2020	2021	LTG
Mean	\$2.46	\$2.76	\$3.65		8.00%
# of Estimates	10	9	1	0	2
High	\$2.60	\$3.06	\$3.65		9.00%
Low	\$2.30	\$2.60	\$3.65		7.00%
Previous Year	\$1.83	\$2.46	\$2.76	\$3.65	
% Growth	34.48	12.01	32.41		

Quarter	201703	201706	201709	201712
Estimated EPS	\$0.35	\$0.43	\$0.46	\$0.44
Actual EPS	\$0.41	\$0.46	\$0.48	\$0.47
Difference	\$0.06	\$0.03	\$0.02	\$0.03
% Surprise	17.14	6.98	4.35	6.82

Quarterly EPS Trend



Annual EPS Trend



BUSINESS SUMMARY

Bank of America is one of the world's leading financial institutions, serving individual consumers, small and middle-market businesses and large corporations with a full range of banking, investing, asset management and other financial and risk management products and services. The company provides unmatched convenience in the United States, serving approximately 47 million consumer and small business relationships with approximately 4,500 retail financial centers, approximately 16,000 ATMs, and award-winning digital banking with approximately 34 million active users, including approximately 24 million mobile users. Bank of America is a global leader in wealth management, corporate and investment banking and trading across a broad range of asset classes, serving corporations, governments, institutions and individuals around the world. Bank of America offers industry-leading support to approximately 3 million small business owners through a suite of innovative, easy-to-use

Rating and Forecast Report

BANK OF AMER CP (NYSE: BAC)



Report Date: Feb 9, 2018

ANNUAL FINANCIALS (All numbers in millions)

Balance Sheet	201012	201112	201212	201312	201412	201512	201612	201712
Cash	344476	357289	349370	333190	337922	359579	355823	381334
Marketable Securities	194671	169319	237226	200993	191785	176527	180209	209358
Receivables	984259	959416	955107	970253	928817	949079	954205	987979
Inventory	35058	13762	19413	11362	12836	7453	9066	11430
Raw Materials								
Work in Progress								
Finished Goods								
Notes Receivable								
Other Current Assets								
Total Current Assets	1558464	1499786	1561116	1515798	1471360	1492638	1499303	1590101
Property, Plant & Equipment								
Accumulated Depreciation								
Net Property, Plant & Equipment	14306	13637	11858	10475	10049	9485	9139	9247
Investment & Advances	338054	311416	336387	323945	380461	407005	430731	440130
Other non-current Assets								
Deferred Charges								
Intangibles	98961	85498	82511	80470	77919	76616	74638	71253
Deposits & other assets	255124	218709	218102	171585	164745	158572	173891	170503
TOTAL ASSETS	2264909	2129046	2209974	2102273	2104534	2144316	2187702	2281234
Notes Payable	305321	250562	323990	244105	232449	202389	194235	209531
Accounts Payable	1010430	1033041	1105261	1119271	1118936	1197259	1260934	1309545
Current Portion of Long-term Debt								
Current Portion of Capital Leases								
Accrued Expenses	144580	123049	148579	135662	145438	146286	146359	152123
Income Taxes Payable								
Other Current Liabilities	71985	60508	73587	83469	74192	66963	63031	81187
Total Current Liabilities	1532316	1467160	1651417	1582507	1571015	1612897	1664559	1752386
Mortgages								
Deferred Charges (taxes/income)								
Convertible Debt								
Long Term Debt	448431	372265	275585	249674	243139	236764	216823	227402
Non-Current Capital Leases								
Other Long-Term Liabilities	55914	59520	46016	37407	46909	38450	39480	34300
TOTAL LIABILITIES	2036661	1898945	1973018	1869588	1861063	1888111	1920862	2014088
Minority Interest (liabilities)								
Preferred Stock	16562	18397	18768	13352	19309	22273	25220	22323
Common Stock, Net	150905	156621	158142	155293	153458	151042	147038	138089
Capital Surplus								
Retained Earnings	60849	60520	62843	72497	75024	88564	101870	113816
Treasury Stock								
Other Liabilities	-68.00	-5437	-2797	-8457	-4320	-5674	-7288	-7082
SHAREHOLDERS' EQUITY	228248	230101	236956	232685	243471	256205	266840	267146
TOTAL LIABILITES & SHAREHOLDERS	2264909	2129046	2209974	2102273	2104534	2144316	2187702	2281234

Rating and Forecast Report

BANK OF AMER CP (NYSE: BAC)



Report Date: Feb 9, 2018

ANNUAL FINANCIALS (All numbers in millions)

Income Statement	201012	201112	201212	201312	201412	201512	201612	201712
Net Sales or Revenues	134194	115074	100078	101697	95181	93056	93662	100264
Cost of Goods Sold	3997	3002	1990	1396	1080	861.00	1015	1931
Gross Profit	130197	112072	98088	100301	94101	92195	92647	98333
Research & Development Expense								
Selling, General, & Admin. Expense	95592	88353	78998	71684	76456	59519	57818	58139
Income Before Deprec., Depletion, Amort.	34605	23719	19090	28617	17645	32676	34829	40194
Depreciation, Depletion, Amortization	14131	4693	1264	1086	936.00	834.00	730.00	
Non-Operating Income	1820	638.00						
Interest Expense	19977	18618	14754	11359	9854	9688	8946	10981
Pretax Income	-1323	-230.00	3072	16172	6855	22154	25153	29213
Provision for Income Taxes	915.00	-1676	-1116	4741	2022	6266	7247	10981
Minority Interest								
Investment Gains (Losses)								
Other Income								
Income Before Extraordinaries & Disc	-2238	1446	4188	11431	4833	15888	17906	18232
Extraordinary Items & Discontinued								
Net Income	-2238	1446	4188	11431	4833	15888	17906	18232
EPS - Basic, net	-0.37	0.01	0.26	0.94	0.36	1.38	1.58	1.63
EPS - Diluted, net	-0.37	0.01	0.25	0.90	0.36	1.31	1.50	1.56
EPS - Diluted, before non-recurring items	0.86	-0.29	0.25	0.98	0.43	1.31	1.50	1.83
Cash Flow Statement	200912	201012	201112	201212	201312	201412	201512	201612
Net Income (Cash Flow)	6276	-2238	1446	4188	11431	4833	15888	17906
Depreciation, Depletion, Amortization-CF	4314	16312	6669	3038	4260	5210	4861	5375
Net Increase (decrease) in	71774	40057	52336	-37494	68124	17118	4009	-16434
Cash from (used in) Discontinued								
Other Adjustments - Net	47367	28463	4039	16410	9002	-422.00	2972	11459
Net Cash from (used by) Operating	129731	82594	64490	-13858	92817	26739	27730	18306
(increase) Decrease in Prop, Plant, &	-2240	-987.00	-1307	5.00	-521.00	-1160		
Acquisition/disposition of subsidiaries, othr	31804							
Increase (decrease) in investments	88266	-50170	40909	-34877	64236	-43069	-13324	-37704
Other Cash inflow from investment	40095	20810	12827	-2305	-38657	40025	-41630	-25439
Net Cash from (used by) investment	157925	-30347	52429	-37177	25058	-4204	-54954	-63143
Issuance (purchase) of equity shares	17712		5000	667.00	-8673	4282	590.00	-2165
Issuance (repayment) of debt securities	-33463	-58704	-75813	-102189	-19944	-2176	3305	-16312
Increase (decrease) in bank & other	-189419	-41524	-54759	73378	-79144	-11656	-30060	-8014
Payment of dividends & other cash	-4863	-1762	-1738	-1909	-1677	-2306	-3574	-4194
Other cash from (used by) financing	10465	36603	22614	72469	13996	-345.00	78324	63667
Net Cash from (used by) Financing	-199568	-65387	-104696	42416	-95442	-12201	48585	32982
Effect of Exchange Rate Changes on	394.00	228.00	-548.00	-731.00	-1863	-3067	-597.00	240.00
Net Change in Cash & Cash Equivalents	88482	-12912	11675	-9350	20570	7267	20764	-11615
Cash & Equivalents at beginning of year	32857	121339	108427	120102	110752	131322	138589	159353
Cash & Equivalents at year end	121339	108427	120102	110752	131322	138589	159353	147738

Rating and Forecast Report

BANK OF AMER CP (NYSE: BAC)



Report Date: Feb 9, 2018

QUARTERLY FINANCIALS (All numbers in millions)

Balance Sheet	201603	201606	201609	201612	201703	201706	201709	201712
Cash	406630	392502	370750	355823	390725	386057	399088	381334
Marketable Securities	178987	175365	187849	180209	209044	216369	210319	209358
Receivables	945882	949466	947432	954205	954664	965133	972279	987979
Inventory	6192	8848	10586	9066	14751	5882	13243	11430
Raw Materials								
Work in Progress								
Finished Goods								
Notes Receivable								
Other Current Assets								
Total Current Assets	1537691	1526181	1516617	1499303	1569184	1573441	1594929	1590101
Property, Plant & Equipment								
Accumulated Depreciation								
Net Property, Plant & Equipment	9358	9150	9133	9139	9319	8904	8971	9247
Investment & Advances	400311	411949	434914	430731	428045	434517	439209	440130
Other non-current Assets								
Deferred Charges								
Intangibles	75970	75365	75389	74638	74345	74080	73834	71253
Deposits & other assets	162168	163964	159261	173891	166808	163587	166953	170503
TOTAL ASSETS	2185498	2186609	2195314	2187702	2247701	2254529	2283896	2281234
Notes Payable	305321	250562	323990	244105	232449	202389	194235	209531
Accounts Payable	1217261	1216091	1232895	1260934	1272141	1262980	1284417	1309545
Current Portion of Long-term Debt								
Current Portion of Capital Leases								
Accrued Expenses	137705	140876	141634	146359	142051	150925	157670	152123
Income Taxes Payable								
Other Current Liabilities	74003	74282	76998	63031	77283	77933	86434	81187
Total Current Liabilities	1648810	1642362	1656611	1664559	1721735	1724739	1750990	1752386
Mortgages								
Deferred Charges (taxes/income)								
Convertible Debt								
Long Term Debt	232849	229617	225136	216823	221385	223923	228666	227402
Non-Current Capital Leases								
Other Long-Term Liabilities	41063	47561	43484	39480	36428	34880	31781	34300
TOTAL LIABILITIES	1922722	1919540	1925231	1920862	1979548	1983542	2011437	2014088
Minority Interest (liabilities)								
Preferred Stock	24342	25220	25220	25220	25220	25220	22323	22323
Common Stock, Net	150774	149554	148261	147038	144782	142744	142818	138089
Capital Surplus								
Retained Earnings	90270	93623	98303	101870	105467	109628	113486	113816
Treasury Stock								
Other Liabilities	-2610	-1328	-1701	-7288	-7316	-6605	-6168	-7082
SHAREHOLDERS' EQUITY	262776	267069	270083	266840	268153	270987	272459	267146
TOTAL LIABILITES & SHAREHOLDERS	2185498	2186609	2195314	2187702	2247701	2254529	2283896	2281234

Rating and Forecast Report

BANK OF AMER CP (NYSE: BAC)



Report Date: Feb 9, 2018

QUARTERLY FINANCIALS (All numbers in millions)

Income Statement	201603	201606	201609	201612	201703	201706	201709	201712
Net Sales or Revenues	22036	22853	24044	22563	24900	25989	25335	24040
Cost of Goods Sold	225.00	245.00	266.00	279.00	282.00	346.00	624.00	679.00
Gross Profit	21811	22608	23778	24450	24618	25643	24711	23361
Research & Development Expense								
Selling, General, & Admin. Expense	15626	14283	14150	13759	15521	14292	13822	14504
Income Before Deprec., Depletion, Amort.	6185	8325	9628	10691	9097	11351	10889	8857
Depreciation, Depletion, Amortization	187.00	186.00	181.00	176.00	162.00	160.00	151.00	
Non-Operating Income								
Interest Expense	2299	2210	2143	2294	2370	2814	2872	2925
Pretax Income	3699	5929	7304	8221	6565	8377	7866	6405
Provision for Income Taxes	1019	1697	2349	2182	1709	3108	2279	3885
Minority Interest								
Investment Gains (Losses)								
Other Income								
Income Before Extraordinaries & Disc	2680	4232	4955	4696	4856	5269	5587	2365
Extraordinary Items & Discontinued								
Net Income	2680	4232	4955	4696	4856	5269	5587	2365
EPS - Basic, net	0.21	0.38	0.43	0.43	0.43	0.49	0.50	0.20
EPS - Diluted, net	0.21	0.36	0.41	0.40	0.41	0.46	0.48	0.20
EPS - Diluted, before non-recurring items	0.21	0.36	0.41	0.40	0.41	0.46	0.48	0.47
Cash Flow Statement	201512	201603	201606	201609	201612	201703	201706	201709
Net Income (Cash Flow)	15888	2680	6912	13210	17906	4856	10125	15712
Depreciation, Depletion, Amortization-CF	4861	2368	4784	3895	5375	1078	2130	3235
Net Increase (decrease) in	4009	2887	9878	525.00	-16434	-23185	-24315	-14850
Cash from (used in) Discontinued								
Other Adjustments - Net	2972	2908	4562	9032	11459	4405	9040	13354
Net Cash from (used by) Operating	27730	10843	26136	26662	18306	-12846	-3020	17451
(increase) Decrease in Prop, Plant, &								
Acquisition/disposition of subsidiaries, othr								
Increase (decrease) in investments	-13324	-16454	-21996	-50800	-37704	-11870	-20551	-22968
Other Cash inflow from investment	-41630	-4920	-8494	-12200	-25439	-2149	-3622	-17071
Net Cash from (used by) investment	-54954	-21374	-30490	-63000	-63143	-14019	-24173	-40039
Issuance (purchase) of equity shares	590.00	1069	564.00	-835.00	-2165	-2728	-4964	-7945
Issuance (repayment) of debt securities	3305	-8144	-12267	-16777	-16312	3761	3911	5978
Increase (decrease) in bank & other	-30060	17452	8724	2835	-8014	35938	38687	28570
Payment of dividends & other cash	-3574	-974.00	-1853	-3031	-4194	-1255	-2403	-4124
Other cash from (used by) financing	78324	19979	18797	35633	63667	10623	1464	22874
Net Cash from (used by) Financing	48585	29382	13965	17825	32982	46339	36695	45353
Effect of Exchange Rate Changes on	-597.00	1406	2243	2594	240.00	813.00	1464	1878
Net Change in Cash & Cash Equivalents	20764	20257	11854	-15919	-11615	20287	10966	24643
Cash & Equivalents at beginning of year	32857	121339	108427	120102	110752	131322	138589	159353
Cash & Equivalents at year end	159353	179610	171207	143434	147738	168025	158704	172381

VALUENGINE SERVICE DESCRIPTIONS

Investing Should Not Be Emotional Investing Should Be Based Upon Information & Knowledge Improve your investment returns with ValuEngine

ValuEngine provides research on over 5,000 stocks with stock valuations, Buy/Hold/Sell recommendations, and forecasted target prices, so that you the individual investor can make informed decisions, not emotional ones!
VE employs a complex Quantitative model that evaluates all available data, all the time.

ValuEngine Stock Analysis Service

- Research on over 4,000 US and 1,000 Canadian stocks
- Updated DAILY (when stock markets open)
- Fair market valuations, forecasted target prices, Buy/Hold/Sell Recommendations
- Industry and Sector Group analysis
- Screener to find top forecasted, or most undervalued stocks (and much more)
- Portfolio functions to maximize performance
- Portfolio wizard to build list of stocks to fit specific investment goals
- Daily Market Bulletin and Weekly newsletters
- Individual stock financials

For more information about ValuEngines research [CLICK HERE](#)

Two-week Free Trial available! [CLICK HERE](#)

ValuEngine Professional Subscription

- Everything in above Stock Analysis Service, PLUS
- Data file download of ValuEngine research outputs: Valuations, Forecasts, Ratings
- Import portfolio functions
- View unlimited ValuEngine stock reports on over 5,000 companies
- Unlimited access to 16 Sector and over 140 Industry reports
- Track portfolios of unlimited size
- ValuEngine View Portfolio Strategy: Flagship portfolio of 16 stocks
- ValuEngine REIT Strategy: Portfolio of 15 Real estate investment trust stocks
- ValuEngine Diversified Strategy: Portfolio of ETF's for a general market strategy

Two-week Free Trial available! [CLICK HERE](#)

ValuEngine Daily and Weekly Financial Newsletters

- Published most trading days
- Analysis of various ValuEngine stock picks, newsletters, economic commentary, and market insights
- Additional critical data on market and sector valuations
- Frequently includes links to free ValuEngine stock reports, newsletter samples
- Notification of ValuEngine investor events in your area
- Demonstrates the use of the tools and features at www.valuengine.com
- Provides analysis for key indices, sectors, and industries
- Analysis of individual stocks that are key in current news cycles
- Provides the latest results for a variety of VE portfolios and newsletters

For FREE access to ValuEngine blogs and articles! [CLICK HERE](#)

Data Feeds/Consultancy

- Real time data feeds of ValuEngine model outputs
- Quantitative consulting such as model creation, testing, backtesting
- Other customized services

Please call (800) 381-5576 or contact support@ValuEngine.com

VALUENGINE'S METHODOLOGY

ValuEngine's research combines the most advanced academic concepts with real world Wall Street practice. The result is state-of-the-art fair market valuation and price forecasting technologies.

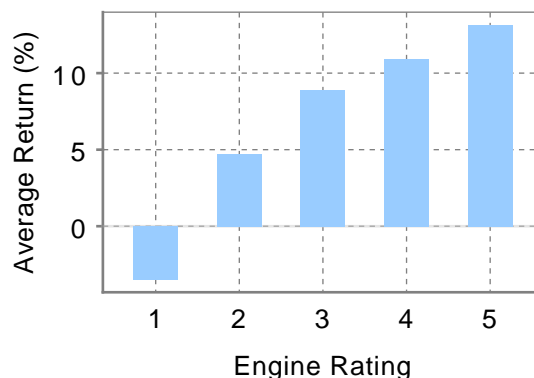
ValuEngine's stock valuation employs a sophisticated, three-factor approach. Fundamental variables, such as a company's trailing 12-month Earnings-Per-Share (EPS), the analyst consensus estimate of the company's future 12-month EPS, and the 30-year Treasury yield, are all used to create a more accurate reflection of a company's fair value. Together with eleven additional variables, ValuEngine paints a detailed picture of a company's fair value, represented by the model price.

ValuEngine's stock forecasts capture several important tendencies that stock prices consistently exhibit over six time horizons to ensure forecasts are established relative to a stock's proper peer groups. Advanced statistical/econometric techniques are used to run thousands of simulations estimating the probability of a double in stock price, as well as the probability of meeting and exceeding any given portfolio or stock investment target.

VE Engine Rating is an assessment of a stock's overall attractiveness. It is based on the one year forecast target price, which is the final evolution of VE's equity modeling. On average, only 2 percent of ValuEngine's 5,500 stocks under coverage achieve a 5 rating. 5 and 4 rated stocks are expected to outperform the overall markets, 3 rated to roughly match market performance, and 2 and 1 rated are expected to underperform.

For additional information about ValuEngine's financial research and financial modeling, please click www.valuengine.com

Engine Rating and Average Annual Return
(Jan 2002 - Jan 2018)



DISCLOSURES

ValuEngine offers equity recommendations and related return estimates to investors and their advisors. It uses a three-class Buy-Hold-Sell rating system. This is a consolidated version of the firm's five class rating system: most favorable and favorable ratings are buys; neutral ratings are holds and the categories unfavorable and most unfavorable are sells.

STOCK RATINGS: The terms below are used to rate a stock's 12-month performance:

1. Buy: Expected to outperform the SP500 producing above average returns.
2. Hold: Expected to perform in line with the SP500 with average returns.
3. Sell: Expected to underperform the SP500 producing below-average returns.

ValuEngine does not offer brokerage or investment banking services. ValuEngine adheres to professional standards and abides by formal codes of ethics that put the interests of clients ahead of their own. The following are specific disclosures made by ValuEngine with regards to this research report:

1. ValuEngine, Inc. does not make a market in this security.
2. ValuEngine, Inc. has not received compensation from the companies discussed above in the last 12 months.
3. ValuEngine has not managed or co-managed a public offering for any companies in the above report in the last 12 months.
4. None of ValuEngine's management, the analysts involved, nor a member of the research analyst's household serves as an officer, director or advisory board member of the companies discussed in this report.
5. The research analyst over this company or members of his/her household do not have a financial interest in these companies discussed in this report.
6. ValuEngine, Inc. or its affiliates do not beneficially own 1% or more of any class of common equity securities of the subject companies.
7. Each research analyst primarily responsible for the content of this research report, in whole or in part, certifies that with respect to each security or issuer that the analyst covered in this report: a). all of the views expressed accurately reflect his or her personal views about those securities or issuers; and b). no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by that research analyst in the research report.

DISCLAIMERS

This report is intended for informational purposes only and does not constitute a recommendation, or an offer, to buy or sell any securities or related financial instruments. The report has no regard to the specific investment objectives, financial situation, or particular needs of any specific recipient. The information contained herein accurately reflects the opinion of ValuEngine at the time the report was released. The opinions of ValuEngine are subject to change at any time without notice and without obligation of notification. ValuEngine does not provide investment banking or consulting services to the companies mentioned in this report. ValuEngine does not receive any compensation from companies mentioned in this report. The author, officers, or affiliates of ValuEngine do not hold positions in the securities of the companies mentioned in this report. No warranty is made as to the accuracy of the information contained herein. This information is intended for the sole use of clients of ValuEngine, Inc. Any other use, distribution, or reproduction is strictly prohibited. Quotes provided by Zacks.