# Stock Selection and Analysis

Sy Sherman OLLI Summer 2018

# Disclaimer

- This course is for general education regarding stock selection and analysis purposes
- Any stock discussed is for illustration purposes only and <u>NOT</u> a recommendation to buy or sell
- Decisions on buying or selling stocks should be discussed with certified financial planners, brokers, or other financial professionals

## Focus Areas

### Selection

Terminology Investing Alternatives Where to Start Use What You Know Available (Re)Sources Available Tools Stock Screening

### Analysis

Stock Fundamentals Profiling Valuation Analysis Stock Comparison Analysts Research Making Sense of it All When to sell?

# Terminology

- P/E, Price to Earnings Ratio
- Forward P/E, Projected P/E (next 12 months)
- PEG, P/E Compared to <u>Forecasted</u> Growth
- Valuation, Stock Value Expensive?
- Cash Flow (CF), Cash Produced by the Business (Net)
- PCF, Price to Cash Flow Ratio
- PCF/G, PCF Compared to <u>Forecasted</u> Growth
- Beta, Stock Volatility Compared to the S&P
- Put, Option to Sell
- Call, Option to Buy
- Put/Call Ratio, >1 → Negative, <1 → Positive</li>
- Short, Selling Stock You Don't Own huh???
- Short Interest, % Stock Sold Short/Total Outstanding Shrs
- MRFY, Most Recent Fiscal Year

# Stock Investing Alternatives

- Beginners → Index mutual funds (S&P, Total Market)
  - broadly diversified
  - lower risk
  - lower cost
- Over Time → Sector-based mutual funds, ETFs (tech, consumer, Intl, etc.)
  - Less diversified
  - increasing risk
  - Increasing cost (managed)
- Experienced Investors (with high risk tolerance) → Individual Stocks
  - higher risk
  - basis of <u>this</u> course

# **Stock Selection**

# Stock Selection ... Where to Start?

- The Beginning ...
  - is a very good place to start

### Start with What You Know

- Where Do You Shop?
  - Costco
  - Kohls
  - Nordstroms
  - Coach
  - Staples
  - Home Depot
  - Amazon
  - > Walmart
- What Restaurants Do You Most Frequent?
  - Paneras
  - Chipolte
  - Mcdonalds
  - Yum (KFC, Pizza Hut, Taco Bell)



# **Other Stock Ideas**

### • Things You Use Every Day?

- Phone (Apple, Samsung, Google)
- Computer (Dell, HP, Apple)
- Electricity (Con Ed, Duke Power, Dominion)

### "Expert Sources"

- The Talking Heads
  - > CNBC
  - > Bloomberg
  - > Walls Street Week (back in the day)





## The Written Word

### Investment News Letter

- The Motley Fool
- Kiplinger
- Morningstar

### Online Tools

- Stock Screeners
- Retirement Estimators
  - Schwab
  - > Fidelity

### Other Financial Resources

- Fairfax County Library
  - Morningstar



# Library Resources

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Recommended Reading Virginia Readers Choice Agatha Award (Mystery) Caldecott Medal (Children's) Cookbook Awards Edgar Award (Mystery) More recommended reading lists	Best Sellers New York Times Fiction New York Times Nonfiction Washington Post Fiction Washington Post Nonfiction	Adult Book Lists New This Week Titles on Order May the Fourth Be With You! (Star Wars Fiction) Flyover Country Break Out the Napkins! May is National Barbecue Month!	Kids Book Lists New This Week Titles on Order May the Fourth be with You! Kids Can Code! Swing for the Fences: Books about Baseball	Online Resource Spotlight
What Others Are Reading Hottest title: The fallen Hottest author: Stilton, Geroni Hottest subject: FairiesChildr More items	mo			languages Want to learn another language? QuickLinks Library Home Page
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### A to Z Online Resources

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A to Z Resources

### Librarian



Dan Chen

#### A to Z Resources

From e-books and magazines to business insights and homework help, Fairfax County Public Library offers dozens of online resources for education and enjoyment.

Some items marked "In Library Use Only" may not be available from outside a library branch.

Most sites require a library card for use outside the library.

#### A to Z Resources

Search

# Library A-Z

Teaches conversation and cultural awareness in ov

An authoritative information source from the Nati

government, non-profit and other health-related

information and an illustrated medical encycloped

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Mango Languages

MasterFILE Premier

MedlinePlus

Not available in library branches.

#### **Biography in Context**

Provides in-depth coverage of current and historic people. It provides articles and portraits.

#### Books and Authors

Contains descriptions of thousands of highly recommended adult, teen and children's fiction titles from multiple genres. This is very useful if you would like to know the sequence of a series of titles by one author or if you are looking for other authors who write in a similar genre or style.

#### Covers diverse topics including general informatio collection with photos of people, natural science p

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Has full-text academic and business journals that can be used for research on management issues, economic indicators and business theory/bractices as well as information on companies and industries worldwide.

#### Business Insights: Global



Includes in-depth company and industry profiles, interactive live charts for economic and business indicators, detailed country profiles, investment research/brokerage reports, case studies, SWOT reports, and many business articles.

An online database featuring a vast, indexed collection of corporate and industry related documents. The database contains hundreds of thousands of reports covering over 100 countries and industries. Included in FCPL's subscription are Digitized Corporate Manual Collection, Digitized Municipal & Government Manual Collection, MDDI Archives Collection, Hoovers Archives Collection, D&B First Research Archives Collection, and Bond Record Archive Collection.

#### Mergent Intellect New

Mergent Archives New

Features a deep collection of worldwide business information that enables companies and small businesses to generate insightful business intelligence. Included is access to private and public U.S and international business data, industry news, facts and figures, executive contact information, the ability to access industry profiles and much more from Mergent, Moody's and Dun & Bradstreet. Coverage includes content found in print versions of D&B Million Dollar directory, Hoover's Industrial directories, and D&B Key Business ratios

#### Military & Intelligence Database

Provides hundreds of military-related and general magazines.

#### Morningstar

Provides independent investment research and analysis in the United States and in major international markets with data and analyst reports on stocks and funds, tools to build and analyze a portfolio, and tools to learn new stock and fund-investing strategies and portfolio-building- skills. Data and analysis of domestic and international markets by market sector, industry and geographic region are also available.

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# Morningstar @ Library



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Screen for Funds

Funds

- Fund Favorites
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- P Funds Summary

**ETFs** Screen for ETFs 9

See financial information on hundreds of exchange-traded funds with up-to-date information on returns, reports and Morningstar ratings.

- ETFs by Trading Volume ETF Analyst Reports
- KETF Valuation Quickrank

Markets Ð Get Returns

Get return information on various investment indexes, types, sectors, and styles.

Indexes Fund Categories



End Session

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Test drive our robust yet easyto-use portfolio tools and calculators to determine what your asset mix should be, how your investments are working together, and more.

K Portfolio X-Ray Retirement Cost Calculator K College Savings Calculator

# Morningstar Stock Profiling

Quote Chart Stock Analysis Performance	Key Ratios Financials Valuatio	on Insiders Share	holders Transcripts F	- ilings Bonds	Options	
Overview Company Profile Industry Peers				-		
Last Price Day Change \$188.44 ↑1.13   0.60%	<b>Open Price</b> \$ 186.35	Day Range 185.76-188.21			ket Cap 1.3 bil	
As of Wed 05/23/2018 3:47 PM EST   USD BATS BZX Real-Time Price	Volume 14.4 mil	Avg Vol. 30.3 mil		Price/Book Pric 7.3 3.9		Cash Flov
Stock Price AAPL		More	Dividends AAPL			More
04/23/2018 - 05/22/2018 Zoom:10	5D <u>1M</u> 3M YTD 1Y 3Y 5Y	10Y Maximum	Declared Date			05/01/20
- XNAS:AAPL:+21.44 +12.94%			Ex-Dividend Date			05/11/20
			Latest Indicated Divide	end Amount		USD 0.73
			Yield			1.40
189.00			Projected Yield			1.56
			Recent Dividends			
182.00			Date	Туре		Amo
			05/11/2018	Cash Dividends		USD 0.73
175.00			02/09/2018	Cash Dividends		USD 0.63
			11/10/2017	Cash Dividends		USD 0.63
168.00			08/10/2017	Cash Dividends		USD 0.63
168.00			Purchase Options			
			Direct Investment			1
161.00			Dividend Reinvestmen	t Plan		
Volume	Le co					
04/30/2018 05/06/2018	05/12/2018 05/18	/2018 05/22/2018	Competitors AA	րլ		Mor
			•			TTM Sal
Morningstaria Taka AADI		More	Name	Price	% Chg	\$
Morningstar's Take AAPL		More	Apple Inc	\$188.24	0.50 个	247,41
We believe Apple's strength lies in its expe	ience and expertise in integ	grating	Samsung Electronics ( Ltd	\$2,210.00	4,900.00 🛧	209,0
hardware, software, services, and third-par	ty applications into differen	tiated devices	Sony Corp ADR	\$46.40	-1.40 🕹	76,5
that allow Apple			5 6	÷46.00		

that allow Apple...

Read full Analyst Report

Sony Corp

Panasonic Corp

Panasonic Corp ADR

-1.42 🕹

-0.23 🕹

-0.21 🕹

76,532

70,559

70,559

\$46.38

\$14.05

\$14.04

## Morningstar Research Center

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### Apple appears likely to retain its vast iOS customer base over time



#### Analyst Note 05/01/2018

Authors can be reached at <u>Analyst</u> Feedback Morningstar's <u>Editorial Policies</u> provided investors with a decent third-quarter forecast that was not as bad as we feared. Although the iPhone X "super cycle" did not transpire over the past six months, iPhone unit sales held up well while higher average selling prices, or ASPs, per device continued to contribute to robust revenue growth. We were also impressed with growth seen in Other Products and

Apple reported solid fiscal second-quarter results and

Services, especially as we continue to believe that sales of add-on hardware and services should continue to drive switching costs that will help Apple make repeat, high-margin iPhone sales to its customers over time. Meanwhile, the company authorized another \$100 billion of share repurchases while boosting its quarterly dividend by 16% to \$0.73 per share, taking advantage of changes in U.S. corporate tax policies. We plan to modestly raise our fair value estimate for narrow-moat Apple to \$175 per share from \$170 but continue to view shares as fairly valued.

Apple sold 52.2 million iPhones in the March quarter, up 3% year over year. However, iPhone revenue rose 14% year over year, thanks to an 11% increase in ASPs driven by sales of the higher-priced iPhone X. Apple noted that the X was its highest selling model in each of its 13 weeks in the March quarter (as opposed to the iPhone 8 or 8 Plus), which we again view as an encouraging sign regarding Apple's ability to maintain premium pricing. Other Products revenue rose 38% year over year thanks to Apple Watch and Airpods, which we think is an underrated, innovative hit for Apple. Services revenue rose 31% year over year, accelerating from 18% year-overyear growth in the December quarter, with particular strength in iCloud storage and Apple Music.

#### Morningstar's Take AAPL

#### Analyst

 Price 05-23-2018
 Fair Value Estimate
 Uncertainty

 188.28 USD
 175 USD
 High

 Consider Buy
 Consider Sell
 Economic Moat

 105 USD
 271.25 USD
 Narrow

Stewardship Rating 🔋 Standard

#### Bulls Say

- Between first-time smartphone buyers, users switching from Android, and repeat sales to current customers, Apple has plenty of opportunity to reap the rewards of its iPhone business.
- Apple's iPhone and iOS operating system have consistently been rated at the head of the pack in terms of customer loyalty, engagement, and security, which bodes well for long-term customer retention.
- We think Apple is still innovating with introductions of Apple Pay, Apple Watch, Apple TV, and AirPods; each of these could drive incremental revenue, but more crucially help to retain iPhone users over time.

#### Bears Say

- Apple's decisions to maintain a premium pricing strategy may help fend off gross margin compression but could limit unit sales growth, as devices may be unaffordable for many customers.
- If Apple were to ever launch a buggy <u>software</u> update or subpar services, it could diminish the firm's reputation for building products that "just work."
- Apple is believed to be behind firms like Google and Amazon in artificial intelligence, or AI, development, which could be problematic as tech firms look to integrate AI in order to deliver premium services to customers.

## Library - Business Insights Capital

#### AAPL

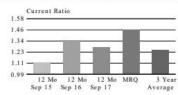
#### APPLE INC

(NASDAQ STOCK EXCHANGE GLOBAL SELECT MARKET)

Key Ratios & Statistics

#### **Financial Strength**

	12 Mo Sep 15	12 Mo Sep 16	12 Mo Sep 17	MRQ	3 Year Average
Quick Ratio	0.89	1.22	1.09	1.37	1.07
Current Ratio	1.11	1.35	1.28	1.46	1.25
LT Debt/Equity	0.45	0.59	0.73	0.80	0.59
Total Debt Equity	0.54	0.68	0.86	0.96	0.69



Quick Ratio: Cash plus Short Term Investments plus Accounts Receivable divided by the Total Current Liabilities for the same period. Current Ratio: Total Current Assets divided by Total Current Liabilities for the same period. Long Term Debt To Total Equipy: Total Long Term Debt divided by Total Shareholder Equipy. Total Debt to Total Equipy: Total Debt divided by Total Shareholder Equip for the same period. Financial Strength looks at business risk. The stronger a company is from a financial standpoint, the less risky it is. The Quick Ratio compares cash and short-term investments (investments that could be converted to cash very quickly) to the financial liabilities they expect to incur within a year's time.

The Current Ratio compares year-ahead liabilities to cash on hand now plus other inflows (e.g. Accounts Receivable) the company is likely to realize over that same twelve-month period.

Current Ratio	1.28
Total Current Assets	128,645.00
Total Current Liabilities	100,814,00

The Long Term Debt/Equity Ratio looks at the company's capital base. A ratio of 1.00 means the company's long-term debt and equity are equal. The Total Debt/Equity Ratio includes long-term debt and short term debt.

#### Profitability

2	12 Mo Sep 15	12 Mo Sep 16	12 Mo Sep 17	TTM	3 Year Average
Gross Margin (%)	40.06	39.08	38.47	38.30	39.20
Operating Margin (%)	30.48	27.84	26.76	26.70	28.36
Net Profit Margin (%)	22.85	21.19	21.09	22.60	21.71
Interest Coverage	12	41.23	26.41	1	33.82



These ratios realize overall profitability, or the bottom line.

Gross Margin (%)	38.47 (%)
Gross Profit x 100	88,186.00 x 100
Revenue	229,234.00

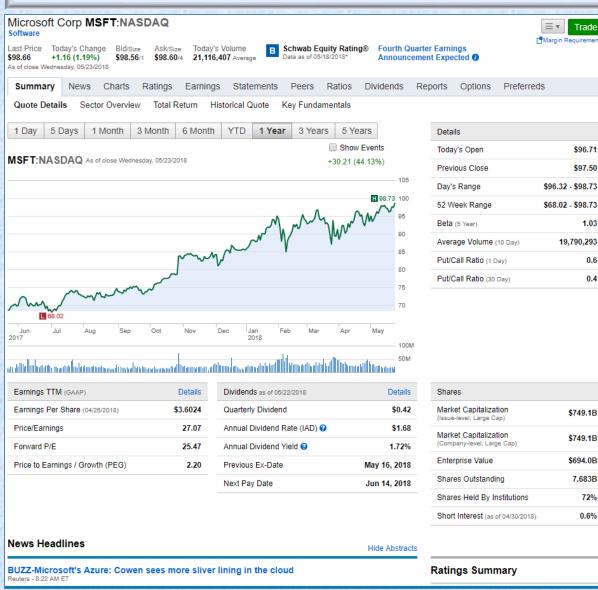
Gross Margin shows the amount of revenue left over after deducting direct costs of producing the goods or services. Operating Profit and Operating Margin trace the progress revenue down to another important level. From gross profit, we now subtract indirect costs, often referred to as overhead e.g. facilities and salaries associated with headquarters operations.

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# Charles Schwab Resource

- Stock Profiling
- Stock Rating
- Analyst Reports
- Stock Screening
- Stock Comparisons

### Schwab Stock Profiling





\$96.71

\$97.50

1.03

0.6

0.4

\$749.1B

\$749.1B

\$694.0B

7.683B

72%

0.6%

19,790,293

#### **Ratings Summary**

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		more ab	out Schwal	b Equity R	atings
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Econ	omic	Moat	9		
	None		Narrow	1	Nide
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#### 7/10/2018

#### Stock Selection

### Schwab – Argus Resource

### ARGUS

Microsoft is the world's largest independent software developer. The company was founded on the MS Windows operating system and MS Office business applications suite for PCs. As it has grown, Microsoft has expanded into enterprise software with Windows Server, SQL Server, Dynamics CRM, SharePoint, Azure and Lync; hardware with the Xbox gaming/media platform; and online services through MSN and Bing. Microsoft acquired Skype, the internet VoIP communications service, in October 2011. The company acquired Nokia's Devices and Services Business in April 2014. About 47% of revenue is generated outside the U.S.

#### **Analyst's Notes**

Analysis by Joseph Bonner, CFA, May 1, 2018 ARGUS RATING: BUY

- Strong fiscal 3Q, maintaining BUY
- Given Microsoft's massive commercial user base and long-term relationships, we believe that the company is well positioned to grow commercial revenue as the process of digital transformation continues both in the U.S. and internationally.
- We see Azure cloud services, Dynamics 365, and Office 365 as primary growth drivers for Microsoft as the Consumer side of the business remains steady.
- We are raising our FY18 EPS forecast to \$3.84 from \$3.66 and our FY19 forecast to \$3.92 from \$3.82.
- MSFT shares have already had a strong run, but we think they could move higher as the company's
  commercial and public cloud business drive growth.

#### INVESTMENT THESIS

We are maintaining our BUY rating on Focus List selection Microsoft Corp. (NGS: MSFT) to a target price of \$107. CEO Satya Nadella has pivoted Microsoft toward high-value commercial and cloud application businesses as the company has shaken off past missteps in the wireless phone handset market. According to industry tracker Gartner, Microsoft has a roughly 7% market share in the public cloud, a distant second to Amazon but still much greater than that of other competitors. Given Microsoft's massive commercial user base and long-term relationships, we believe that the company is well positioned to grow commercial revenue as the process of digital transformation continues to gain traction, both in the U.S. and internationally. The company's large consumer business is growing more slowly, though it is demonstrating better profitability in 2018.

MSFT shares have already had a strong run, but we think they could move higher as the company's commercial and public cloud business drive growth. Microsoft is also one of the few tech companies in our coverage group that pays a growing dividend.



### MICROSOFT CORP

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#### Argus Recommendations

Twelve Month Rating		HOLO	BUY
Five Year Rating		ноц	BUY
Sector Rating	Under Weight	Marka Weigh	Over Weight

Argus assigns a 12-month BUY, HOLD, or SELL rating to each stock under coverage.

- BUY-rated stocks are expected to outperform the market (the benchmark S&P 500 index) on a risk-adjusted basis over the next year.
- HOLD-rated stocks are expected to perform in line with the market.
- SELL-rated stocks are expected to underperform the market on a risk-adjusted basis.

The distribution of ratings across Argus' entire company universe is: 66% Buy, 33% Hold, 1% Sell.

#### **Key Statistics**

Key Statistics pricing data reflects previous trading day's closing price. Other applicable data are trailing 12-months unless otherwise specified

#### **Market Overview**

Price	\$95.00
Target Price	\$107.00
52 Week Price Range	\$67.14 to \$97.90
Shares Outstanding	7.68 Billion
Dividend	\$1.68
Sector Overview	
Sector	Technology
Sector Rating	OVER WEIGHT
Total % of S&P 500 Market Cap.	24.00%
Financial Strength	
Financial Strength Rating	HIGH
Debt/Capital Ratio	49.6%
Return on Equity	37.3%
Net Margin	14.9%
Payout Ratio	0.43
Current Ratio	2.92
Revenue	\$105.88 Billion
After-Tax Income	\$15.77 Billion
Valuation	
Current FY P/E	24.74
Prior FY P/E	29.23
Price/Sales	6.89
Price/Book	9.22
Book Value/Share	\$10.30
Market Capitalization	\$729.90 Billion
	2.8

## Schwab – Argus (cont.)

\$ in Millions, except per share data)	2013	2014	2015	2016	2017
Revenue	77,849	86,833	93,580	85,320	89,950
COGS	20,385	27,078	33,038	32,780	34,261
Gross Profit	57,464	59,755	60,542	52,540	55,689
SG&A	20,289	20,488	20,324	19,260	20,020
R&D	10,411	11,381	12,046	11,988	13,037
Operating Income	26,764	27,759	18,161	20,182	22,326
nterest Expense	-248	-286	15	340	835
Pretax Income	27,052	27,820	18,507	19,751	23,149
ncome Taxes	5,189	5,746	6,314	2,953	1,945
Tax Rate (%)	19	21	34	15	8
Vet Income	21,863	22,074	12,193	16,798	21,204
Diluted Shares Outstanding	8,470	8,399	8,254	8,013	7,832
EPS	2.58	2.63	1.48	2.10	2.7
Dividend	0.89	1.07	1.21	1.39	1.53
GROWTH RATES (%)					
Revenue	5.6	11.5	7.8	-8.8	5.4
Operating Income	-4.3	4.2	1.0	-24.4	6.3
Net Income	28.8	1.0	-44.8	37.8	26.2
EPS	29.0	1.9	-43.7	41.9	29.0
Dividend	17.1	20.2	13.1	14.9	10.1
Sustainable Growth Rate	19.7	14.0	2.6	7.0	12.4
ALUATION ANALYSIS					
Price: High	\$38.98	\$50.05	\$56.85	\$64.10	\$87.50
Price: Low	\$26.28	\$34.63	\$39.72	\$48.04	\$61.95
Price/Sales: High-Low	4.2 - 2.9	4.8 - 3.3	5.0 - 3.5	6.0 - 4.5	7.6 - 5.4
P/E: High-Low	15.1 - 10.2	19.0 - 13.2	38.4 - 26.8	30.5 - 22.9	32.3 - 22.9
Price/Cash Flow: High-Low	11.5 - 7.8	12.9 - 9.0	15.9 - 11.1	14.2 - 10.6	16.9 - 12.0

#### **Financial & Risk Analysis**

FINANCIAL STRENGTH	2015	2016	2017
Cash (\$ in Millions)	5,595	6,510	7,663
Working Capital (\$ in Millions)	73,150	80,303	95,324
Current Ratio	2.47	2.35	2.48
LT Debt/Equity Ratio (%)	34.7	56.3	105.1
Total Debt/Equity Ratio (%)	44.1	74.3	119.1
RATIOS (%)			
Gross Profit Margin	64.7	61.6	61.9
Operating Margin	30.1	25.0	25.2
Net Margin	13.0	19.7	23.6
Return On Assets	7.0	9.1	9.8
Return On Equity	14.4	22.1	29.4
RISK ANALYSIS			
Cash Cycle (days)	26.3	31.0	24.7
Cash Flow/Cap Ex		-	_
Oper. Income/Int. Exp. (ratio)	24.7	16.9	11.4
Payout Ratio	43.9	82.7	68.9

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Argus Analyst Report

### Schwab – S&P (CFRA) Resource

Microsoft Corporation	Price	12-Mo. T	arget Price	Repor	t Currenc	y Inv	vestment	Style
Equity Analyst Scott Kessler	\$96.36 (as of May 18, 20.	ив чио м втј 🛛 🗘 🕯 🕯 🕯 🕯 🕯 🕯 ради на		USD		La	rge-Cap G	rowth
GICS Sector Information Technology Sub-Industry Systems Software		t, the world's largest sof system and the Office a			ps PC sof	tware, inc	luding the	i,
Key Stock Statistics (Source: CFRA, S&P Global Market Int	elligence (SPGMI), Company Reports)	1						
	2019E 4.02 r. EPS 2018E 25.05	Market Capitalization(B) Yield (%) Dividend Rate/Share Institutional Ownership	1.74	3-Yr SPGI	Proj. EPS	i CAGR(%) ty Rankini		1.04 13 A-
Price Performance			Analyst's Ri	sk Asse	ssment		-	
12-Mo. Target Price 👝 🔺 🕯		and the second	Uur risk asse	ssment				npany's
100 Stars Hto (I)	-	- Contraction	Our risk asse financial stre recovery in e smartphones inherent in re Revenue/Ea	angth wi nterpris s and mi aleasing	th our con e IT speni obile devi new proc	ncerns ab ding, marl ces as we	out a sluge ket share li II as difficu	gish osses i ulties
100 Stean Hote (I) 00 01 02 03 04 05 05 05 05 05 05 05 05 05 05	-		financial stre recovery in e smartphones inherent in re	angth wi nterpris s and mi eleasing <b>rnings (</b>	th our con e IT speni obile devi new proc Data	ncerns ab ding, marl ces as we	out a sluge ket share li II as difficu	gish osses i ulties
107 Stars Hos (I) 10 10 10 10 10 10 10 10 10 10			financial stre recovery in e smartphones inherent in re <b>Revenue (Mi</b> 2018 2 2017 2 2016 2 2015 2 2015 2 2014 1	angth wi nterpris s and mi eleasing <b>rnings (</b>	th our con e IT speni obile devi new proc Data	ncerns ab ding, marl ces as we	out a slugi ket share li il as difficu timely mai 4Q 	gish osses i ulties nner. Ye 89,95 85,32 93,56 86,83
100 510 510 510 510 510 510 510		SUNDIFMAMIJA	financial stre recovery in e smartphones inherent in re <b>Revenue (Mi</b> 2018 2 2017 2 2016 2 2015 2 2015 2 2014 1	ength wi nterpris s and mi eleasing rnings I llion U.S 10 44,538 11,928 0,379 3,201 8,529 6,008 r Share (	th our coi e IT speni obile devi new proc Data 5. \$] 20 28,918 25,826 23,796 26,470 24,519 21,456 (U.S. \$]	ncerns ab ding, mark ces as we ducts in a ducts in a 26,819 23,212 20,531 21,729 20,403 20,489	dut a slugg kat share la II as diffict timely mai 40 23,317 20,614 22,180 23,382 19,896	gish osses in ulties nner. 89,95 85,32 93,58 86,83 77,84
	2016 2017 e and should not be relied upon as	SONDIFHAMIJA 2018 such.	financial stre recovery in e smartphones inherent in re <b>Revenue (Mi</b> 2018 2 2017 2 2016 2 2017 2 2016 2 2017 2 2016 2 2017 1 2013 1 Earnings Per	angth wi nterpris s and mi eleasing minings ( llion U.S 10 44,538 1,928 0,379 3,201 8,529 6,008	th our cor e IT speni obile devi new proc Data 28,918 25,926 28,918 25,926 23,796 26,470 24,519 21,456	ncerns ab ding, mari ces as we ducts in a ducts in a 26,819 23,212 20,531 21,729 20,403	40 40 23,317 20,614 23,382	gish osses i ulties nner. ¥e 89,90 85,30 93,50 86,80 77,84 ¥e £ 4.0
Jun j	2016 2017 e and should not be relied upon as	SONDIFHAMIJA 2018 such.	financial stre recovery in e smartphones; inherent in re <b>Revenue (Mi</b> 2018 2 2017 2 2016 2 2017 2 2016 2 2017 2 2016 2 2017 2 2016 2 2017 2 2016 2 2017 2 2016 2 2017 2 2014 1 2013 1 <b>Earnings Per</b> 2019 1	ength wi nterpris s and mi eleasing rnings ( 10 44,538 1,928 0,379 3,201 8,529 6,008 r Share ( 10 E 0.92	th our coi e IT spenio oblie devi new proc Data 28,918 25,826 23,796 24,519 21,456 (U.S. \$) 20 20 24,519 21,456 (U.S. \$) 20 20 20 20 21,456 (U.S. \$)	ncerns ab ding, mark ces as we ducts in a ducts in a 26,819 23,212 20,531 21,729 20,403 20,489 <b>30</b> <b>E</b> 0.96	out a slugg ket share la ill as diffict timely mai 40 	gish osses in ulties nner. 99,95 85,32 93,58 86,83

#### **Dividend Data**

Amount (\$)	Date Decl.	Ex-Div. Date	Stk. of Record	Payment Date
0.42	Mar 12	May 16	May 17	Jun 14'18
0.42	Nov 29	Feb 14	Feb 15	Mar 08 '18
0.42	Sep 19	Nov 15	Nov 16	Dec 14'17
0.39	Jun 13	Aug 15	Aug 17	Sep 14 '17
0.39	Mar 14	May 16	May 18	Jun 08 '17

could be elusive.

segment, driven by continued strong adoption

of MSFT's Azure platform. We see a weaker U.S.

dollar having a positive impact on financial

results. We also see opportunities related to

the LinkedIn purchase, especially in terms of

 Risks to our recommendation and target price include lower-than-projected PC sales and a

prolonged weakness in the global economy.

growth, but we think monetization of synergies

Devices became more important, but that

2016, MSFT sold and wrote down NDS and

acquired professional social networking

changed after Satya Nadella became CED. In

company LinkedIn for \$26.2 billion. Revenues

declined 2% in FY 16, but rase 5% in FY 17.

 We see gross margins around 65% through FY 20. MSFT's gross margin fell from 74% in FY 13

to 62% in FY 16, given a shift toward devices

and the cloud. We think the gross margin

## Schwab Stock Screening Resource

<i>charles</i> SCHWAB	ccounts Trade	Research Products	Guidance Service	2
Ma	arkets <b>Stocks</b> Optio	ns Mutual Funds Exchar	nge Traded Products Bon	ds & Fixed Income CDs & M
	Enter Name or Symbol	Research	Page las	t updated: 5:17 PM ET, 05/23/201
	cks Schwab Equity Rating			
	Screen for Stocks	View A-Rated Stocks by Schwab	Screen for Yield on Preferreds	Explore Global Companies
	11,146 stocks in screening universe	272 domestic stocks rated "A" by Schwab	174 preferreds yielding 4- 6%	194 "A" rated global companies
	Analyze Outperformers	Uncover Stocks with Approaching Ex-Dividend Dates	Find Morningstar Equity Research	See Independent Analyst Ratings
	78 stocks beating their averages	294 issues with upcoming ex-dividend dates	5,154 Morningstar reports and videos	20 "Buy" ratings from multiple analysts

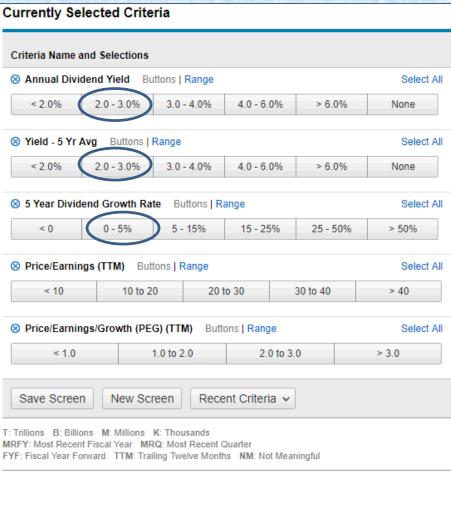
View all Predefined Screening Strategies

# Stock Screening Criteria

Overview Sch	wab Stock Lists™	Charts Screeners	Compare Stocks Schwab Equ	ity Ratings® Performance	Rating Changes
Screen For Stock	s Preferred Shar	es International Morr	ingstar Equity Reports Credit Suis	se Reports Report Archive	
Screen For Stoc	Predefined	Screens CFRA and S&	P Capital IQ Strategies		
Choose Criteri	a	Currently Select	ed Criteria		Pop-up Screener [
My Saved Scree	ns 🗸	Criteria Name and S	elections	Crite Mato	
Basic Criteria (0	))		Select criteria from the left or from	your most recent Saved Screen	s:
<ul> <li>Dividends (0)</li> </ul>					
Analyst Ratings	(0)				
Company Perfo	rmance (0)		or select from your "Recent Cri	iteria" dropdown below to begin	
Price Performar	nce (0)				
<ul> <li>Valuation (0)</li> </ul>		Save Screen	New Screen Recent Criteria	~	View Matches:
Financial Streng	<u>gth (0)</u>	T: Trillione P: Pillione I	A: Millions K: Thousands		
			al Year MRQ: Most Recent Quarter		
<ul> <li>Technicals (0)</li> </ul>			TTM: Trailing Twelve Months NM: Not M	eaningful	

# Screening Dividend Criteria

#### **Choose Criteria** My Saved Screens Basic Criteria (0) < 2.0% Dividends (3) Upcoming Dividends Recent Dividends Annual Dividend Yield 😧 😣 < 2.0% Annual Dividend Rate @ Dividend Frequency 😮 Regular Dividend Amount @ Coverage Ratio - TTM 💡 < 0 Payout Ratio - TTM (2) Payout Ratio - 5 Yr Avg 🔞 Yield - 5 Yr Avg 🔞 😣 Increasing or Decreasing Dividends -< 10 YOY 🚱 3 Year Dividend Growth Rate 5 Year Dividend Growth Rate 🚱 $\otimes$ 10 Year Dividend Growth Rate Analyst Ratings (0) Company Performance (0) Price Performance (0) Valuation (2) Financial Strength (0)



Technicals (0)

# Screening Dividend and Valuation Criteria

#### Choose Criteria **Currently Selected Criteria** My Saved Screens Criteria Name and Selections Annual Dividend Yield Buttons | Range Select All Basic Criteria (0) < 2.0% 2.0 - 3.0% 3.0 - 4.0%4.0 - 6.0% > 6.0% None Dividends (3) Analyst Ratings (0) S Yield - 5 Yr Avg Buttons | Range Select All Company Performance (0) < 2.0% 2.0 - 3.0% 3.0 - 4.0% 4.0 - 6.0% > 6.0%None Price Performance (0) S Year Dividend Growth Rate Buttons | Range Select All Valuation (2) < 0 0 - 5% 5 - 15% 15 - 25% 25 - 50% > 50% Price/Earnings (TTM) 😣 Price/Earnings (MRFY) Price/Earnings (FYF) Price/Earnings (TTM) Buttons | Range Select All Price/Book (MRQ) < 10 10 to 20 20 to 30 30 to 40 > 40 Price/Sales (TTM) Price/Cash Flow (MRFY) Price/Earnings/Growth (PEG) Price/Earnings/Growth (PEG) (TTM) Buttons | Range Select All (TTM) 😣 < 1.0 1.0 to 2.0 2.0 to 3.0 > 3.0 Financial Strength (0) Technicals (0) Save Screen New Screen Recent Criteria 🗸

# **Dividend and Valuation Results**

#### Screen Results (6 Screen Results)

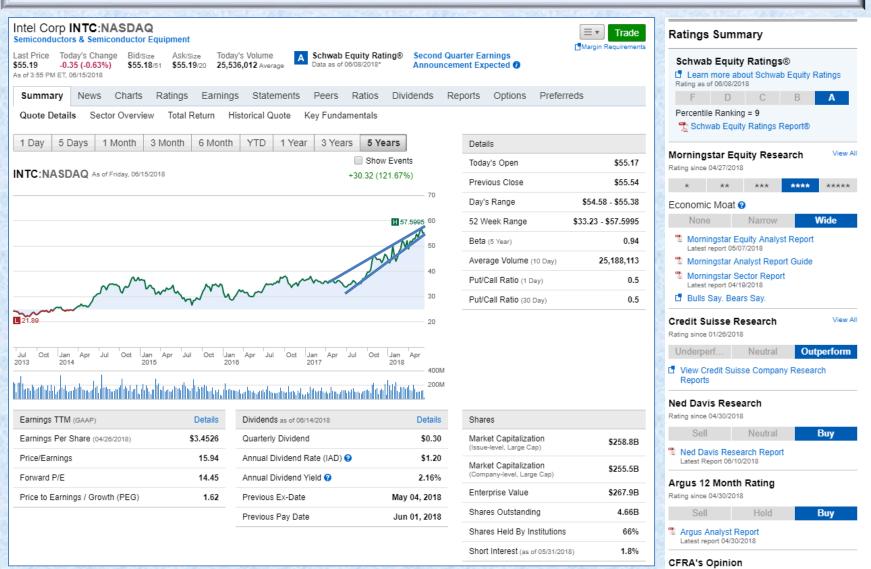
#### Pop-up Screener

## View By Screen Criteria Advanced Sort Modify Criteria Save Screen New Screen My Saved Screens Annual Dividend Vield: 3.0, 3.0%: Vield, 5.Vr Ave: 3.0, 3.0%: 5.Veet Dividend Growth Rate: 0, 5%: Price/Family (Crowth (REG)) Save Screen New Screen My Saved Screens

Annual Dividend Yield: 2.0 - 3.0%; Yield - 5 Yr Avg: 2.0 - 3.0%; 5 Year Dividend Growth Rate: 0 - 5%; Price/Earnings (TTM): 10 to 20; Price/Earnings/Growth (PEG) (TTM): 1.0 to 2.0;

	Symbol	Description ▲ (Full   Short)	Annual Dividend Yield 🕑	Yield 5 Yr Avg	5 Year Dividend Growth Rate	Price/Earnings (TTM)	Price/Earnings/Growth (PEG) (TTM)	
	AJG	Arthur J Gallagher & Co	2.38%	2.99%	2.65%	17.61	1.12	2
	BRC	Brady Corp	2.23%	2.73%	2.07%	19.82	1.72	
4	HPQ	HP Inc	2.57%	2.47%	1.04%	13.30	1.65	~
	HUN	Huntsman Corp	2.20%	2.55%	4.56%	14.41	1.92	~
	INTC	Intel Corp	2.27%	2.77%	4.37%	15.29	1.57	~
	NSC	Norfolk Southern Corp	2.00%	2.18%	4.69%	18.98	1.26	~
			4					×.





Ranking since 08/10/2018

2 CFRA Stock Report

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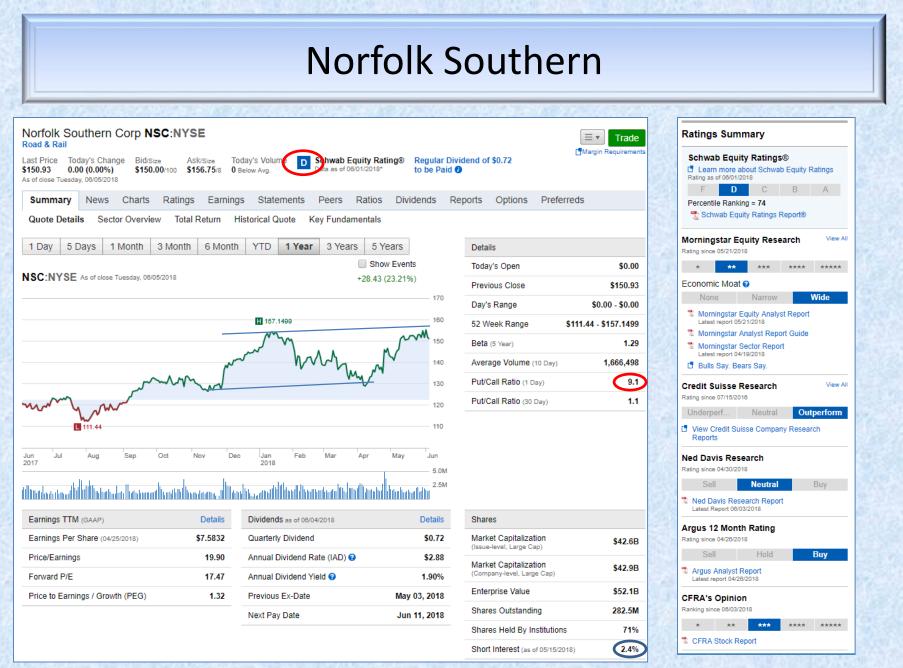
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7/10/2018

# Intel 1 yr Profile







## Screening Analyst Recommended Criteria

Predefined Screens	Currently Sele	Currently Selected Criteria					
Schwab "A" Ratings	Criteria Name and	Criteria Name and Selections					Total Matches
Top Analyst Ratings Stocks currently rated Outperform or	🛞 Credit Suisse F	Select All					
Buy by independent research providers.	Underper	form	Neutral	Οι	Itperform	424	424
Near Price Highs	🛞 Ned Davis Res	8 Ned Davis Research			Select All		
Growth at a Reasonable Price	Sell		Neutral		Buy		46
Near Price Lows		Lin -			O - I t All		
Small Cap Growth	S CFRA Star Ran	-			Select All	88	6
Large Cap Value	*	**	***	****	****		
Small and Mid-Cap Value	8 Argus 12 Mont	h Rating			Select All		
Dividend Growth	Sell		Hold		Buy	305	4
Dividend Sustainability	Reutere Resea	rch Average Rating			Select All		
Dividend High Yield & Momentum	Sell	Underperform	Hold	Outperform	Buy	2,509	4

## Screening Analyst Recommended Results

#### Screen Results (4 Screen Results)

#### Pop-up Screener 🗗

View By Screen Criteria 🗸	Advanced Sort	Modify Criteria	Save Screen	New Screen	Predefined Screens V
Credit Suisse Research: Outperfo Outperform;	orm; Ned Davis Research: Buy; CFRA Star R	anking: <b>five</b> ; Argus 12 Mo	onth Rating: <b>Buy</b> ; Re	uters Research Ave	rage Rating:

	Symbol	Description ▲ (Full   Short)	Credit Suisse Research	Ned Davis Research	CFRA Star Ranking	Argus 12 Month Rating	Reuters Research Average Rating	
	GOOGL	Alphabet Inc	Outperform since 10/27/2008	Buy	5	BUY	OUTPERFORM	<u>~</u>
	CT SH	Cognizant Technolog	Outperform since 01/23/2015	Buy	5	BUY	OUTPERFORM	~
	FDX	FedEx Corp	Outperform since 02/27/2015	Buy	5	BUY	OUTPERFORM	~
	x	United States Steel C	Outperform since 05/24/2017	Buy	5	BUY	OUTPERFORM	~
			4					×.
=	,			Show 20 4	0 60 per page Vie	wing 1 - 4 of 4 matches	s 1 2 3 4 5	Next

\_ '

# GOOGL

Alphabet Inc GOOGL:NASDA	Q				Trade
ast Price Today's Change Bid/size 1,132.71 -1.71 (-0.15%) \$1,132.01/1 Is of close Friday, 06/08/2018	Ask/Size Today's Volume \$1,133.99/1 1,364,226 Below Avg.	C Schwab Equity Rating® Data as of 06/08/2018*		warter Earnings ement Expected 🕜	
Summary News Charts Ratin	gs Earnings Statements	Peers Ratios Divider	ids Repo	rts Options Prefer	reds
Quote Details Sector Overview Tot	tal Return Historical Quote	Key Fundamentals			
1 Day 5 Days 1 Month 3 Mont	th 6 Month YTD 1 Yea	ir 3 Years 5 Years		Details	
		Show Events		Today's Open	\$1,131.2
GOOGL:NASDAQ As of close Friday, 08/0	8/2018	+692.42 (157.26%)		Previous Close	\$1,134.4
		H 1,198		Day's Range	\$1,123.23 \$1,138.7
		Mu	1,200 —	52 Week Range	\$915.31 - \$1,198.0
		mmmmm	1,000	Beta (5 Year)	1.0
	monto	m		Average Volume (10 Day)	1,937,28
- Martin Martin	- Marine Marin		600	Put/Call Ratio (1 Day)	0.
L 421.8988	/		400	Put/Call Ratio (30 Day)	0.
			_		
Jul Oct Jan Apr Jul Oct Jan Apr 2013 2014 2015	Jul Oct Jan Apr Jul Oct 2016	Jan Apr Jul Oct Jan Apr 2017 2018	- 40M		
n kalenderer kalenderer			- 20M		
alionatultaasidinasilliinsasahaanadinasilaliisimininaa		iandhaadhadduddunadholinadddddddd	li		
	Details Dividends as of			Shares	
Earnings TTM (GAAP)	Details Dividends as or				
Earnings TTM (GAAP) Earnings Per Share (04/23/2018)	\$37.7033 GOOGL has not	paid a regular dividend in the last		Market Capitalization (Issue-level, Large Cap)	\$391.5
	\$37.7033 GOOGL has not twelve months. S	paid a regular dividend in the last see the Dividends tab for informat r special dividends	on	(Issue-level, Large Cap) Market Capitalization	•
Earnings Per Share (04/23/2018)	\$37.7033 GOOGL has not introduced to the second se	ee the Dividends tab for informat	on	(Issue-level, Large Cap) Market Capitalization (Company-level, Large Cap)	\$782.6
Earnings Per Share (04/23/2018) Price/Earnings	\$37.7033 GOOGL has not j twelve months. S about one time or	ee the Dividends tab for informat	on	(Issue-level, Large Cap) Market Capitalization (Company-level, Large Cap) Enterprise Value	\$391.50 \$782.60 \$685.00 345.60
Earnings Per Share (04/23/2018) Price/Earnings Forward P/E	\$37.7033 GOOGL has not introduced to the second se	ee the Dividends tab for informat	on	(Issue-level, Large Cap) Market Capitalization (Company-level, Large Cap)	\$782.6i \$685.0i 345.6i

## Cognizant Technology

IT Services		SH:NASDAQ			Trad
Last Price Today's Change Bid/Size \$77.11 +0.39 (0.51%) \$75.21/3 As of close Friday, 06/08/2018		B Schwab Equity Data as of 06/01/20		arter Earnings nent Expected ()	argin Requirem
Summary News Charts F	Ratings Earnings	s Statements Peers Ratio	os Dividends R	eports Options Preferreds	
Quote Details Sector Overview	Total Return Hi	istorical Quote Key Fundamenta	ls		
1 Day 5 Days 1 Month 3 I	Month 6 Month	YTD 1 Year 3 Years	years	Details	
		. s	how Events	Today's Open	\$76.
CTSH:NASDAQ As of close Friday, 06	1/08/2018	+43.82	2 (131.63%)	Previous Close	\$76.
			85.10	Day's Range \$	75.94 - \$77.
			~~~~~~ »	52 Week Range \$	65.59 - <b>\$</b> 85.
	1 M	m	70	Beta (5 Year)	1.0
N	VNW.M	My m	60	Average Volume (10 Day)	3,390,1
my my	· v	MA	50	Put/Call Ratio (1 Day)	0
pr. w			40	Put/Call Ratio (30 Day)	0
30.46					
E 30.70					
Jul Oct Jan Apr Jul Oct Jan	Apr Jul Oct Jan 201		Oct Jan Apr 2018		
Jul Oct Jan Apr Jul Oct Jan 2013 2014 2015	201	6 2017 ·			
Jul Oct Jan Apr Jul Oct Jan 2013 2014 2015	201	6 2017 ·	2018 100M		
Jul Oct Jan Apr Jul Oct Jan 2013 2014 2015	201	6 2017 ·	2018 100M	Shares	
Jui Oct Jan Apr Jui Oct Jan 2013 2014 2015	201 Dathadadahanddatlalilli	e 2017 -	2018 100М 50М адияныя адияная	Market Capitalization	\$45.0
Jul Oct Jan Apr Jul Oct Jan 2013 Ult 2014 Ult but the stand but the stan	201 Dartheadhaldhanddathalldh Details	e 2017	2018 100M 50M admithandhunitumhu Details		
Jul Oct Jan Apr Jul Oct Jan 2013 Addutterated and and a dealine that a distributed and a dealine that a distributed and	201 tootlocoolulation tootlocal the Details \$3.5295	e 2017	2018 100M 50M aluitkatuluutuutu Details \$0.20	Market Capitalization (Issue-level, Large Cap) Market Capitalization (Company-level, Large Cap)	\$45.8
Jul Oct Jan Apr Jul Oct Jan 2013 Linkatin distance and handling the distance of the distance	201 toorfooddamatetaldfill Details \$3.5295 21.74	e 2017 underhanden underhanden underhande	2018 100M 50M Details \$0.20 \$0.80	Market Capitalization (Issue-level, Large Cap) Market Capitalization (Company-level, Large Cap) Enterprise Value	\$45.8 \$41.7
Jul Oct Jan Apr Jul Oct Jan 2013 Linkultultultutus.uthautuutuutuutuutuutuutuutuutuutuutuutuutu	201 Details \$3.5295 21.74 17.10	e 2017 annual maintend black and annual maintend black as of 08/07/2018 Quarterly Dividend Annual Dividend Rate (IAD) @ Annual Dividend Yield @	2018 100M 50M aduithanthuitiadui Details \$0.20 \$0.80 1.04%	Market Capitalization (Issue-level, Large Cap) Market Capitalization (Company-level, Large Cap) Enterprise Value Shares Outstanding	\$45.8 \$41.7 585.9
Jul     Oct     Jan     Apr     Jul     Oct     Jan       2013     2014     Apr     Jul     Oct     Jan       Hubble     2015     2015	201 Details \$3.5295 21.74 17.10	e 2017 Indemodentiet in the definition of the d	2018 100M 50M aduittkatallaattauba. Details \$0.20 \$0.80 1.04% May 21, 2018	Market Capitalization (Issue-level, Large Cap) Market Capitalization (Company-level, Large Cap) Enterprise Value	\$45.0 \$45.8 \$41.7 586.9 89 1.3

Cognizant is a U.S.-headquartered IT services firm

FedEx

FedEx Corp FDX:NYSE ir Freight & Logistics						<b>≡ Trade</b>
ast Price Today's Change Bid/Size 260.15 +2.90 (1.13%) \$260.16/1 s of close Friday, 06/08/2018			b Equity Rating® of 06/08/2018*	Fourth Quart Announceme	ter Earnings ent Expected 🕜	Margin Requirements
Summary News Charts Rat	tings Earning	s Statements Peers	s Ratios Div	idends Re	ports Options Pref	ferreds
Quote Details Sector Overview	Total Return H	istorical Quote Key Fun	ndamentals			
1 Day 5 Days 1 Month 3 Mo	onth 6 Month	YTD 1 Year 3 Ye	ears 5 Years	]	Details	
			Show Ever	nts	Today's Open	\$256.97
DX:NYSE As of close Friday, 06/08/2018			+160.37 (160.72)	%)	Previous Close	\$257.25
			<b>H</b> 274.0	300 56	Day's Range	\$256.75 - \$260.41
			A	250	52 Week Range	\$203.131 - \$274.66
		manin	and	W	Beta (5 Year)	1.41
	0	mm		200	Average Volume (10 Day)	1,193,143
man	min	man		150	Put/Call Ratio (1 Day)	0.4
Jun was	- In	<i>F</i>			Put/Call Ratio (30 Day)	0.6
94.60				100		
Jui Oct Jan Apr Jui Oct Jan A 013 2014 2015 Muuduullikukukukukukukukukukukukukukukuku		16 2017	opr Jul Oct Jan 201 Intelligence and an and a start	8 40M		
Earnings TTM (GAAP)	Details	Dividends as of 06/08/2018		Details	Shares	
Earnings Per Share (03/20/2018)	\$12.188	Quarterly Dividend		\$0.50	Market Capitalization (Issue-level, Large Cap)	\$69.5B
Price/Earnings	21.34	Annual Dividend Rate (IAE	D) 😮	\$2.00	Market Capitalization	\$69.5B
Forward P/E	17.29	Annual Dividend Yield 💡		0.77%	(Company-level, Large Cap)	
	$\sim$		Ma	- 00 2040	Enterprise Value	\$84.3B
Price to Earnings / Growth (PEG)	1.42	Previous Ex-Date	IVID	r 09, 2018		267.2M

Short Interest (as of 05/15/2018)

1.8%

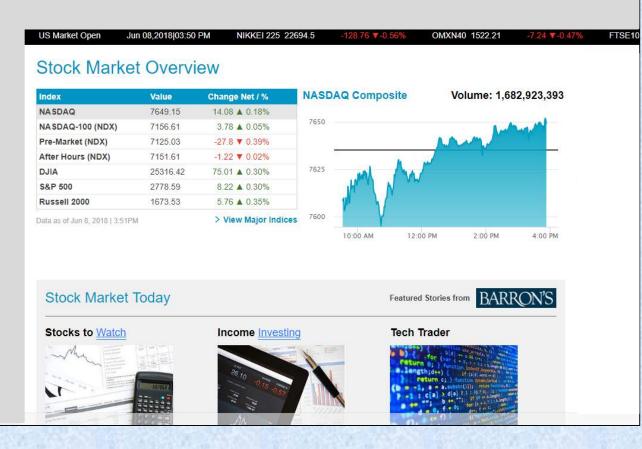
# US Steel

	United States Steel Corp X:NYS	ŝE				Trade				
			r's Volume ,203 Below Avg. B Schwab Eq Data as of 08/		vidend of \$0.05	Omargin Requirements				
	Summary News Charts Rating	s Earning	s Statements Peers R	atios Dividends Re	ports Options Preferr	reds				
2	Quote Details Sector Overview Tota	al Return Hi	istorical Quote Key Fundame	ntals						
	1 Day 5 Days 1 Month 3 Month	n 6 Month	YTD 1 Year 3 Years	5 Years	Details					
	Show Events Today's Open \$36.78									
	X:NYSE As of close Friday, 08/08/2018		+1	9.81 (114.18%)	Previous Close	\$36.82				
				60	Day's Range	\$36.71 - \$37.5101				
į,				H 47.64 50	52 Week Range	\$19.75 - \$47.64				
2	٨			40	Beta (5 Year)	3.03				
	/W		mm	NW	Average Volume (10 Day)	7,993,887				
2	man have			30	Put/Call Ratio (1 Day)	0.6				
	we have	M.	and have	20	Put/Call Ratio (30 Day)	0.5				
		h		10						
		6.1	15							
	Jul Oct Jan Apr Jul Oct Jan Apr 2013 2014 2015	Jul Oct Jan 201		Oct Jan Apr 2018 400M						
ł			ь	200M						
2	www.auaddiaaaddii.waaaaaddhaaddiidhaanad	aduluttinlatitada	. Ali ana ang ang ang ang ang ang ang ang ang	uundidaataandi Hilli tutubaa						
	Earnings TTM (GAAP)	Details	Dividends as of 06/08/2018	Details	Shares					
2	Earnings Per Share (04/26/2018)	\$2.8571	Quarterly Dividend	\$0.05	Market Capitalization (Issue-level, Mid Cap)	\$6.6B				
	Price/Earnings	13.01	Annual Dividend Rate (IAD) 😯	\$0.20	Market Capitalization	\$6.6B				
	Forward P/E	7.34	Annual Dividend Yield 😮	0.54%	(Company-level, Mid Cap)					
	Price to Earnings / Growth (PEG)	(1.04)	Previous Ex-Date	May 09, 2018	Enterprise Value	\$8.1B				
			Previous Pay Date	Jun 08, 2018	Shares Outstanding	176.8M				
					Shares Held By Institutions	69%				
					Short Interest (as of 05/15/201	8) 6.5%				

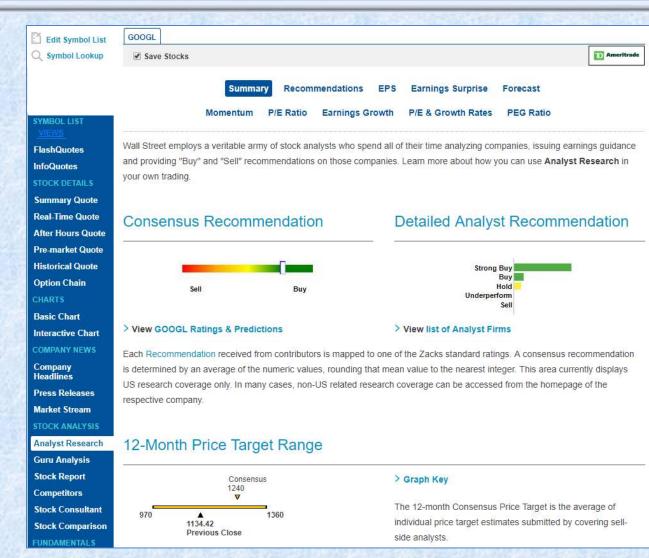
## Tools – NASDAQ.com

Nasdaq			Hot Topics:	ETFs	Smart Portfolio	Currencies	Online Brok	er Center		
Our Businesses	▼ Quo	ites 🔻	Markets	▼	News	▼	Investing	•	Personal Finance	•
				_						_

**Nasdaq, Inc.** is an American multinational financial services corporation that owns and operates the NASDAQ stock market and eight European stock exchanges. It is headquartered in New York City.



## Available Tools – NASDAQ.COM



0-11-25-3	S. 2000-1-15-22-3	Co. 1 1916 B - 811 - 21	1. S. P. 1991 - 1. 21
Edit Symbol List	GOOGL		
Q Symbol Lookup	Save Stocks		
SYMBOL LIST	Summary Recomm Momentum P/E Ratio	nendations EPS Earnings Earnings Growth P/E & G	Surprise Forecast rowth Rates PEG Ratio
VIEWS FlashQuotes			Strong
InfoQuotes	Se	II Underperform Hold Buy	Buy
STOCK DETAILS			
Summary Quote			-
Real-Time Quote			
After Hours Quote	S	trong Buy	22
Pre-market Quote		Buy 4	_
Historical Quote		Buy	
Option Chain		Hold 3	
CHARTS	Unde	rperform 0	
Basic Chart		Sell 0	
Interactive Chart			
COMPANY NEWS			
Company Headlines	Analyst Firms Mal	king Recommendation	ons
Press Releases		B.05.4.14	
Market Stream	AEGIS CAPITAL BAIRD R W	B OF A M L COWEN & COMPANY	B.RILEY FBR INC EDWARD JONES
STOCK ANALYSIS	JEFFERIES & CO.	JP MORGAN SECUR	KEYBANC CAP MKT
Analyst Research	MORGAN STANLEY	OPPENHEIMER HLD	PIPER JAFFRAY
Guru Analysis	RAYMOND JAMES	STIFEL NICOLAUS	SUNTRUST ROBINS
Stock Report	WELLS FARGO SEC	WILLIAM BLAIR	



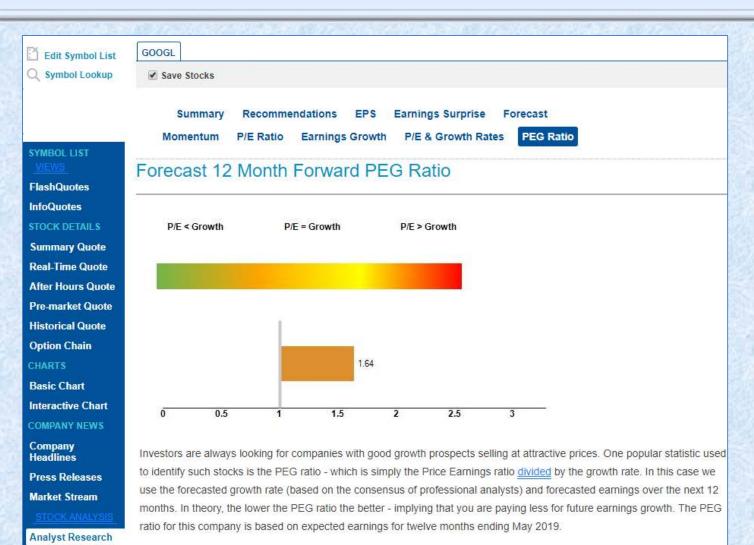


7/10/2018

#### **Stock Selection**

41





7/10/2018

# **Stock Analysis**

# How <u>Has</u> the Stock Performed?

#### Price History

- versus S&P and Sector
- Revenue Growth, Trailing 3-5 years
- Earnings P/E, Trailing 12 months (TTM)+
- Valuation (expensive?)
  - Relative to the Sector
  - Relative to Competitors
- Quarterly/Annual Reports
- Earnings News Conferences
- Short Interest negative or positive
- Put/Call Ratio negative or positive

## How <u>Will</u> the Stock Perform?

- Forcasted Revenue Growth (5 years)
- Forward P/E
- Analysts Forecast
- 12 Month Price Projection (w/grain of salt)
- New Products and Services
  - Quarterly/Annual Reports
  - Earnings News Conferences
  - News articles
  - Analysts input
- Competitive Products and Services

# Valuation Analysis

- P/E
- PEG
- PEG Life-cycle
- Price to Cash Flow (P/CF)
- Price to Free Cash Flow (P/FCF)
- Price to Book (P/B)
- Price to Sales (P/S)

# P/E and PEG

## Price to Earnings Ratio (P/E)

- Current Stock Price (P)
- Earnings/Share (E)
  - P/E <sub>TTM</sub>
  - Forward P/E (projected)

## P/E to Growth Ratio (PEG)

- Current Valuation
  - P/E <sub>TTM</sub>
  - PEG, Forecasted Growth (5-year)
- Projected Valuation
  - Forward P/E
  - Forecasted Growth Rate (5-year)

# **PEG Life-Cycle**

- Emerging company initially has limited earnings
  - P/E is higher than the average S&P company (16 21)
  - Price is bid up with the expectation of future earnings growth
  - Consequently, PEG may be higher than a maturing company
- Growing Company, established earnings, consistent growth
  - PEG ~2 3 range
- Maturing company, consistent earnings, limited growth outlook
  - Price consistent with earnings and established growth rate
  - Fairly valued, PEG 1-2
  - Undervalued, PEG <1</li>
  - Overvalued company, PEG >>1

# Price to Cash Flow (P/CF)

- Cash flow, earnings before interest, taxes, depreciation, and amortization (EBITDA).
- P/CF similar to P/E, except uses cash flow per share instead of earnings.
- Stock Price / Cash Flow per share (trailing twelve months)
- Better measure of the actual dollars being generated by the business.
- P/CF < P/E

# Price to Free Cash Flow (P/FCF)

- Free Cash Flow (FCF) = CF, less cash needed to replace obsolete equipment and ongoing maintenance expenses.
- FCF can be used by the company however it sees fit
   share buybacks, dividend payouts, or growth investments
- Free Cash Flow = Operating Cash Flow Depreciation
- P/FCF = Stock Price / Free Cash Flow per share TTM
- Free cash > earnings → sign of a very well run business
- Free cash < earnings → undesirable</li>

# Price to Book Ratio (P/B)

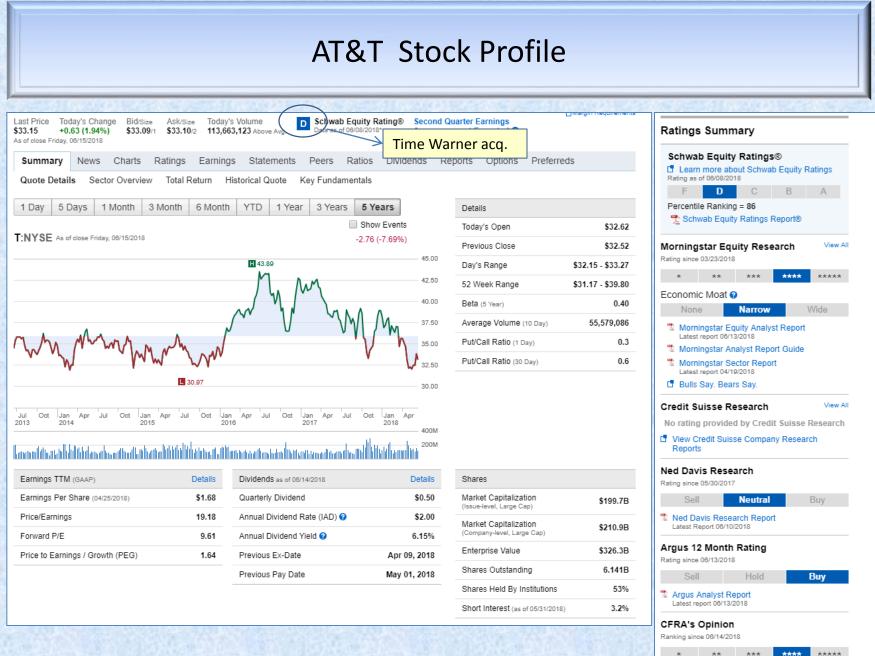
- Book value (P/B), Net worth of the company (a.k.a. net equity)
  - includes property, buildings, equipment, cash, and other assets
  - less bills outstanding, wages owed to employees, debt, and other liabilities
- Book value is what the company would be worth if liquidated.
  - most companies sell at a premium to book value because the company can generate profits from these assets.
- Stock Price / Book Value per share (most recent quarter)
- P/B useful for valuing companies where growth in assets is the goal of the business.
  - Banks, insurance companies, and investment firms (P/B < 2 favorable)
  - Poor statistic for valuing companies where assets are primarily nonphysical, like software and media companies.

# Price to Sales Ratio (P/S)

- Compares the stock price to the amount of Sales<sub>TTM</sub> per share
- P/S best used to compare a company against another in the same business,
- P/S can also be used to compare a company against historical averages for the stock being considered.

# AT&T P/B, P/S, P/CF

MC	)RNINGS	STAR <sup>®</sup>			nt Research		er™			End Session
Home	Companies	Funds	ETFs I	Markets	Articles & Videos	Portfolio	Help & Education	Newsletters	♀ Enter a Ticker or Name	
AT&T	Inc ⊤	<b>★★</b>	**							PDF Report
Quote					Ratios Financials	Valuation	Insiders Sharehold	ders Transcripts	Filings Bonds Options	
Overview	Company	Profile	Industry P	Peers	Ratios Financials Open F \$ 33.0	Price D	ay Range 5	ders Transcripts 2-Week Range 1.17-39.80	FilingsBondsOptionsYieldMarket Cap6.15%198.2 bil	



**Stock Selection** 

CFRA Stock Report

## AT&T Analyst Forecast

#### Consensus Recommendation **Detailed Analyst Recommendation** Strong Buy Buy Hold Sell Buy Underperform Sell > View T Ratings & Predictions > View list of Analyst Firms 12-Month Price Target Range > Graph Key Consensus 39,495 35 v 54 The 12-month Consensus Price Target is the average of individual price target estimates submitted by covering sell-33.15 Previous Close side analysts.

## **Stock Comparisons**

## Stock Profile - APPLE

		and the second	A Contractor						Section 1		
	1 Day	5 Days	1 Month	3 Month	6 Month	YTD	1 Year	3 Years	5 Years	]	De
								_	Show Ever		То
	AAPL:	NASDAQ	As of close Frid	ay, 06/08/2018				+130	0.26 (212.039	%)	Pr
Ś										225	Da
									H	194.20 200	52
									$\sqrt{m}$	W 175	Be
				~ ~ · ·				m		150	Av
			M	min	mm	~	m	/		125	Pu
		mand	~~~		$\sim$	$\sim$				75	Pu
	55.5528-									50	
WAS DIMININ	Jul Oct 2013	Jan Apr 2014		Jan Apr Jui 2015	I Oct Jan 2010	8	2	ian Apr Jul 1017 dimmadiadhaadi	201	8 1.0B	
	Earnings	TTM (GAAP	)		Details		<b>IS</b> as of 06/08			Details	Sh
	Earnings	Per Share (	05/01/2018)	\$1	10.8539	Quarteri	y Dividend			\$0.73	Ma (Iss
	Price/Ea	rnings			17.66	Annual (	Dividend Ra	ite (IAD) 😯		\$2.92	Ma
	Forward	P/E			16.69	Annual (	Dividend Yie	eld 😯		1.52%	(Co
	Price to	Earnings / G	rowth (PEG)		1.28	Previous	s Ex-Date		Mag	y 11, 2018	En
						Previous	s Pay Date		May	y 17, 2018	Sh
											Sh

Details	
Today's Open	\$191.17
Previous Close	\$193.46
Day's Range	\$189.77 - \$192.00
52 Week Range	\$142.20 - \$194.20
Beta (5 Year)	1.21
Average Volume (10 Day)	22,690,418
Put/Call Ratio (1 Day)	0.6
Put/Call Ratio (30 Day)	0.6

#### Available Reports

- Argus
- S&P (CFRA)
- Ned Davis
- Credit Suisse
- Others

Shares	
Market Capitalization (Issue-level, Large Cap)	\$942.2B
Market Capitalization (Company-level, Large Cap)	\$942.2B
Enterprise Value	\$976.1B
Shares Outstanding	4.915B
Shares Held By Institutions	59%

# AAPL vs. INDICES

Ratio	(193) AAPL : Apple Inc NASDAQ	S&P United States BMI Information Technology	S&P 500
Price/Earnings	17.66	36.40	22.32
Price/Forecasted Earnings (FYF)	16.69	20.25	17.60
Price/Sales	3.81	4.05	2.24
Price/Tangible Book (MRQ)	7.43	5.98	3.36
Price/Cash Flow	16.32	18.07	
Return on Equity (%)	42.86	16.47	13.35
Dividend Yield (%)	1.52	1.05	1.90

# **FANG** Valuations

Basic	193	1,133	189	102	361	1,684
View as Yield	V AAPL	J GOOGL	JJ FB	\$ MSFT		\$\$\$ AMZN
Price/Earnings (TTM)	17.66	30.04	27.75	28.21	215.74	265.49
Price/Forecasted Earnings (FYF)	16.69	25.52	24.58	26.48	126.21	134.47
Price/Cash Flow (MRFY)	16.32	26.63	25.78	26.04	22.49	59.53
Price to Earnings / Growth (PEG) (5yr Projected Growth)	1.28	1.42	1.06	2.30	3.53	12.29
Sales Growth - 5 Year (%)	7.93	19.21	51.53	4.06	26.50	23.83
EPS Growth - 1 Year (%) (Year over Year TTM)	26.95	27.00	64.36	37.71	119.25	18.85
EPS Growth Forecast - 1 Year (%)	24.73	37.64	24.91	15.94	128.55	174.63
EPS Growth Forecast - 3-5 Year (%)	13.76	21.16	26.22	12.28	61.17	21.61
Annual Dividend Yield (%) 😧	1.52			1.65		
Gross Profit Margin (%)	38.30	57.99	86.04	64.22	35.73	37.77
Net Profit Margin (%)	22.60	22.57	45.15	27.04	5.88	1.63
Cash Flow/Share (TTM)	\$12.84	\$48.24	\$7.93	\$4.90	\$16.78	\$32.06
Long-Term Debt to Equity (%) (MRQ)	79.89	2.47	0.00	92.73	162.72	120.59

# Apple Valuation, non-FANG

Fundamentals	193	30	146	84	34	57
View as Yield		BAC	Х ІВМ	Х хом	? T	SBUX
Price/Earnings (TTM)	17.66	15.36	12.30	24.78	20.14	17.97
Price/Forecasted Earnings (FYF)	16.69	11.78	10.57	17.32	9.98	22.70
Price/Cash Flow (MRFY)	16.32	14.72	8.50	10.47	6.12	19.76
Price to Earnings / Growth (PEG) (5yr Projected Growth)	1.28	0.99	4.21	1.52	1.72	1.13
Sales Growth - 5 Year (%)	7.93	0.06	-5.11	-12.08	4.73	11.01
EPS Growth - 1 Year (%) (Year over Year TTM)	26.95	18.25	-2.35	40.99	-17.84	56.78
EPS Growth Forecast - 1 Year (%)	24.73	37.76	0.17	34.45	11.15	21.02
EPS Growth Forecast - 3-5 Year (%)	13.76	15.48	2.92	16.27	11.71	15.97
Annual Dividend Yield (%) 😧	1.52	1.60	4.30	3.92	5.91	2.12
Gross Profit Margin (%)	38.30		45.85	32.27	51.36	59.00
Net Profit Margin (%)	22.60	25.22	13.80	6.04	6.76	19.29
Cash Flow/Share (TTM)	\$12.84	\$2.14	\$16.77	\$8.07	\$5.66	\$3.95
Long-Term Debt to Equity (%) (MRQ)	79.89	74.36	222.45	11.04	91.64	131.29

Stock Analysis ... cont.

- SBUX
- FB
- GOOGL
- AMZN
- INTC
- BAC

## **Stock Profile - Starbucks**

tarbucks ( otels Restaura	Corp SBUX:NASD	)AQ				Trade
	2 (-0.21%) \$56.46/1		s Volume 007 Below Avg.		nter Earnings ement Expected 🕖	
Summary	News Charts Rat	tings Earning	s Statements Peers	Ratios Dividends	Reports Options Prefer	reds
Quote Details	s Sector Overview	Total Return	listorical Quote Key Fundar	nentals		
I Day 5 D	ays 1 Month 3 Mo	onth 6 Month	YTD 1 Year 3 Years	S 5 Years	Details	
				Show Events	Today's Open	\$56.61
BUX:NASE	DAQ As of close Monday, 06/	11/2018		+23.68 (72.20%)	Previous Close	\$56.60
			H 64.8	70	Day's Range	\$56.27 - \$56.74
		M	A	60	52 Week Range	\$52.58 - \$61.99
		Nº W		how how	Beta (5 Year)	0.62
	- An	(		50	Average Volume (10 Day)	8,924,879
	N			40	Put/Call Ratio (1 Day)	0.8
s m	~~~~				Put/Call Ratio (30 Day)	0.8
31.59				30		
ul Oct Jan 13 2014	Apr Jul Oct Jan Ap 2015	pr Jul Oct Ja 20		lul Oct Jan Apr 2018		
1				200M		
	ԱԱԱստուստություներինություն		wadaandaawaalahaalhdwabaana	Uhlahan Uhlan Uhlahan Uhlahan I		
Earnings TTM	(GAAP)	Details	Dividends as of 06/08/2018	Details	Shares	
Earnings Per S	share (04/26/2018)	\$3.1492	Quarterly Dividend	\$0.30	Market Capitalization (Issue-level, Large Cap)	\$78.1B
Price/Earnings		17.97	Annual Dividend Rate (IAD) 😯	\$1.20	Market Capitalization	A70.40
Forward P/E		22.70	Annual Dividend Yield 😯	2.12%	(Company-level, Large Cap)	\$78.1B
			Description Fill Data	May 09, 2018	Enterprise Value	\$82.4B
	gs / Growth (PEG)	1.13	Previous Ex-Date	Way 09, 2018		
	gs / Growth (PEG)	1.13	Previous Ex-Date Previous Pay Date	May 25, 2018	Shares Outstanding	1.38B

Short Interest (as of 05/31/2018)

2.1%

#### Starbucks Analysts Forecast



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#### 12-Month Price Target Range



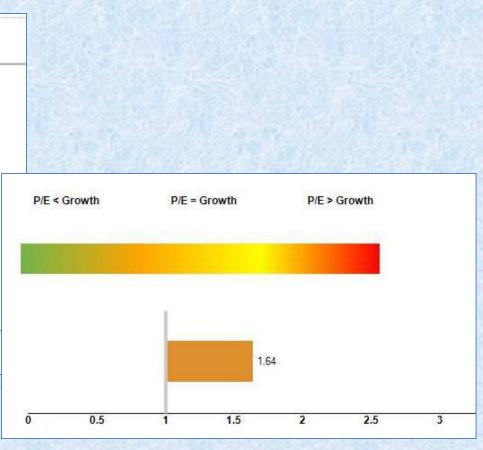
#### > Graph Key

The 12-month Consensus Price Target is the average of individual price target estimates submitted by covering sellside analysts.

## Starbucks Earnings Growth Forecast

#### Forecast Earnings Growth

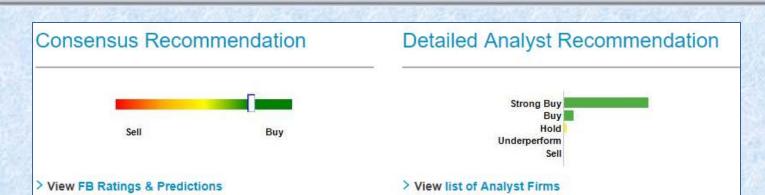




### Stock Profile - Facebook

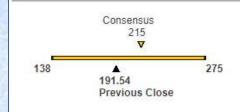
Facebook Inc FB:NASDAQ Internet Software & Services		Trade
	Second Quarter Earnings Announcement Expected 🕜	Envargin Requirement
Summary News Charts Ratings Earnings Statements Peers Ratios Dividend	ls Reports Options Preferre	eds
Quote Details Sector Overview Total Return Historical Quote Key Fundamentals		
-		
1 Day 5 Days 1 Month 3 Month 6 Month YTD 1 Year 3 Years 5 Years	Details	
FB:NASDAQ As of close Tuesday, 06/12/2018         +168.77 (714.22%)	Today's Open	\$192.17
+100.17 (114.2270)	Previous Close	<b>\$1</b> 91.54
	250 Day's Range	\$191.56 - \$193.28
H 195.32	200 52 Week Range	\$144.56 - \$195.32
how we have the second of the	Beta (5 Year)	0.84
the second the second sec	150 Average Volume (10 Day)	18,237,786
and the state of t	100 Put/Call Ratio (1 Day)	0.5
a manufacture e	Put/Call Ratio (30 Day)	0.7
and have	50	
23.38		
Jul Oct Jan Apr 2013 2014 2015	1.0B	
- Realling of the second se	0.5B	
taldd Nichdebiid Michiel in titlen tarinan talaran tillein diarach Unathen ar diarmatic an ar ar ar ar an an ta I		
Earnings TTM (GAAP) Details Dividends as of	Shares	
Earnings Per Share (04/25/2018) \$6.8143 FB does not currently pay a dividend	Market Capitalization (Issue-level, Large Cap)	\$554.4B
Price/Earnings         27.75           Forward P/E         24.89	Market Capitalization (Company-level, Large Cap)	\$547.4B
Price to Earnings / Growth (PEG) 1.06	Enterprise Value	\$503.4B
	Shares Outstanding	2.895B
	Shares Held By Institutions	71%
	Short Interest (as of 05/31/2018	i) <b>1.0%</b>

#### **FB** Analysts Forecast



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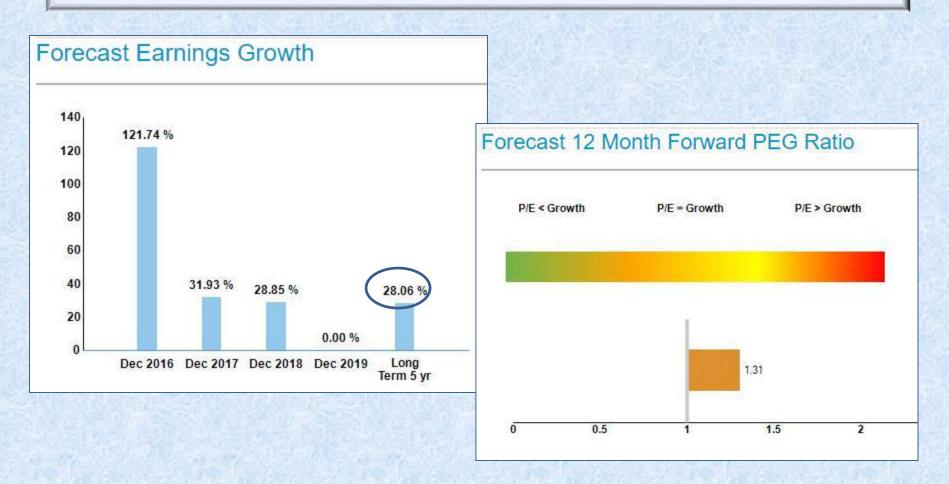
#### 12-Month Price Target Range



#### > Graph Key

The 12-month Consensus Price Target is the average of individual price target estimates submitted by covering sellside analysts.

## Facebook Earnings Growth Forecast



## Stock Profile GOOGL

	Section States	and and	Sur Star	Sec. 1	Sand Sugar	
Alphabet Inc GOOGL:NAS	DAQ				(	Trade
ast Price Today's Change Bid/size 1,148.19 +7.29 (0.64%) \$1,148.5 s of close Tuesday, 08/12/2018			hwab Equity Rating® ta as of 06/08/2018*		d Quarter Earnings ncement Expected 7	margini requirement
Summary News Charts F	Ratings Earnings	Statements Peers	Ratios Dividend	ds Re	ports Options Preferreds	5
Quote Details Sector Overview	Total Return Histor	rical Quote Key Fund	lamentals			
1 Day 5 Days 1 Month 3	Month 6 Month	YTD 1 Year 3 Ye	ars 5 Years		Details	
			Show Events		Today's Open	\$1,141.02
GOOGL:NASDAQ As of close Tuesd	ay, 06/12/2018		+710.25 (162.18%)		Previous Close	\$1,140.90
			<b>H</b> 1,198	1,400	Day's Range	\$1,141.02 - \$1,148.75
			Mar	1,200	52 Week Range \$91	5.31 - <b>\$1,1</b> 98.00
		~	www	1,000	Beta (5 Year)	1.07
	10 Ton	mont		800	Average Volume (10 Day)	1,972,878
munition	www.			600	Put/Call Ratio (1 Day)	0.2
421.8988				400	Put/Call Ratio (30 Day)	0.7
Jul Oct Jan Apr Jul Oct Jan 013 2014 2015	Apr Jul Oct Jan A 2016	pr Jul Oct Jan Apr 2017	Jul Oct Jan Apr 2018	40M		
n lan a taa		1	l d'art	20M		
		undhahaanmillanaalaannahu	ddadaaaaadaa.aaddaddddada			
Earnings TTM (GAAP)	Details Di	ividends as of			Shares	
Earnings Per Share (04/23/2018)		OOGL has not paid a reg relve months. See the Div		n	Market Capitalization (Issue-level, Large Cap)	\$394.3B
Price/Earnings		oout one time or special d			Market Capitalization	\$782.6B
Forward P/E	25.70				(Company-level, Large Cap)	•••••
Price to Earnings / Growth (PEG)	1.42				Enterprise Value	\$685.0B
	<u> </u>				Shares Outstanding	345.6M
					Shares Held By Institutions	77%
					Short Interest (as of 05/31/2018)	0.9%

#### **GOOGL** Analysts Forecast



#### > View GOOGL Ratings & Predictions

#### > View list of Analyst Firms

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#### 12-Month Price Target Range



#### > Graph Key

The 12-month Consensus Price Target is the average of individual price target estimates submitted by covering sellside analysts.

## GOOGL Earnings Growth Forecast

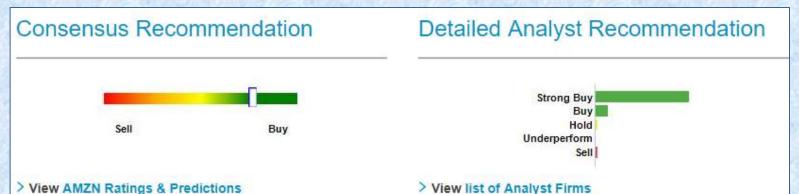
#### Forecast Earnings Growth 30 26.99 % 25 20.47 % 20.52 % 20 17.21 % 16.71 % 15 10 5 0 Dec 2018 Dec 2019 Dec 2020 Dec 2021 Long Term 5 yr

# P/E < Growth</td> P/E = Growth 1.84 0

## Stock Profile - Amazon

0.8
\$1,691.5235 \$1,699.51 \$931.75 - \$1,714.50 1.61 3,448,189 0.8
\$1,699.51 \$931.75 - \$1,714.50 1.61 3,448,189 0.8
1.61 3,448,189 0.8
3,448,189
0.8
0.8
\$819.6B
\$817.1B
\$836.6B
485.2M
ions 56%
p)

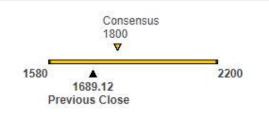
## **AMZN** Analysts Forecast



Each Recommendation received from contributors is mapped to one of the Zacks standard ratings. A consensus recommendation is determined by an average of the numeric values, rounding that mean value to the nearest integer. This area currently displays US research coverage only. In many cases, non-US related research coverage can be accessed from the homepage of the

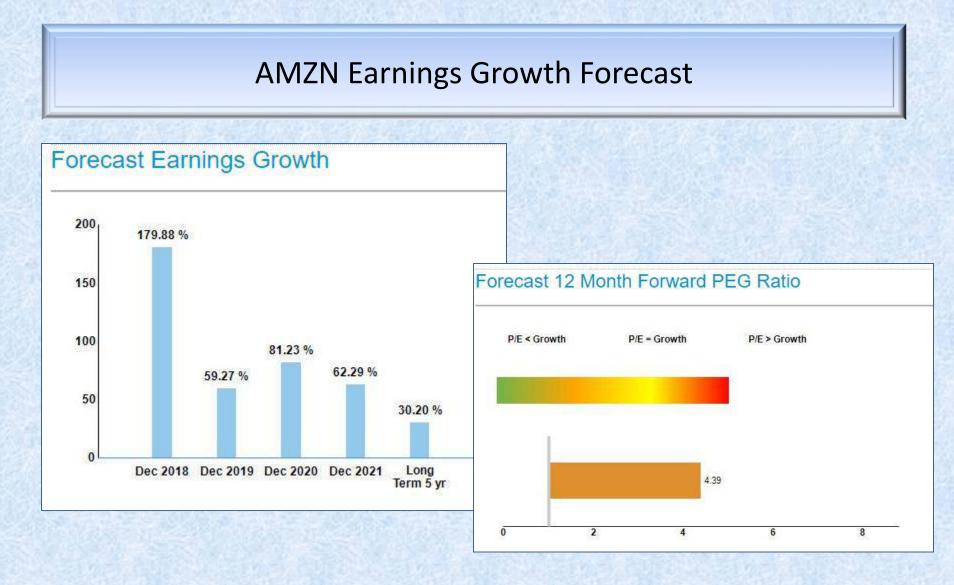
respective company.

### 12-Month Price Target Range



#### > Graph Key

The 12-month Consensus Price Target is the average of individual price target estimates submitted by covering sellside analysts.



# Intel Stock Profile

ntel Corp INTC:NASDAQ semiconductors & Semiconductor Equ	ipment				
ast Price Today's Change Bid/size 55.19 -0.35 (-0.63%) \$55.18/51 s of 3:55 PM ET, 08/15/2018		ay's Volume 36,012 Average A Schwab Equ Data as of 06/08		arter Earnings nent Expected 🕖	
Summary News Charts R	atings Earning	gs Statements Peers Ra	atios Dividends Re	eports Options Prefer	reds
Quote Details Sector Overview	Total Return	listorical Quote Key Fundame	ntals		
1 Day 5 Days 1 Month 3 M	Nonth 6 Month	YTD 1 Year 3 Years	5 Years	Details	
Show Events				Today's Open	\$55.17
INTC:NASDAQ As of Friday, 08/15/2018 +30.32 (121.67%)			0.32 (121.67%)	Previous Close	\$55.54
			70	Day's Range	\$54.58 - \$55.38
			57:5995 60	52 Week Range	\$33.23 - \$57.5995
			W 50	Beta (5 Year)	0.94
			T-11-50	Average Volume (10 Day)	25,188,113
mm.	m. m	mont	-	Put/Call Ratio (1 Day)	0.5
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	my 4		30	Put/Call Ratio (30 Day)	0.5
21.89			20		
Jul Oct Jan Apr Jul Oct Jan 2013	Apr Jul Oct Ja 20		Oct Jan Apr 2018 400M 200M		
Earnings TTM (GAAP)	Details	Dividends as of 06/14/2018	Details	Shares	
Earnings Per Share (04/26/2018)	\$3.4526	Quarterly Dividend	\$0.30	Market Capitalization (Issue-level, Large Cap)	\$258.8E
Price/Earnings	15.94	Annual Dividend Rate (IAD) 😯	\$1.20	Market Capitalization	\$255.5B
	14.45	Annual Dividend Yield 😯	2.16%	(Company-level, Large Cap)	9£33,30
Forward P/E					
Forward P/E Price to Earnings / Growth (PEG)	1.62	Previous Ex-Date	May 04, 2018	Enterprise Value Shares Outstanding	\$267.9B 4.66B

1.8%

Short Interest (as of 05/31/2018)

## Intel Analyst Forecast

### **Consensus Recommendation**



## Detailed Analyst Recommendation

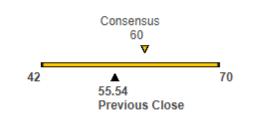


#### > View INTC Ratings & Predictions

#### > View list of Analyst Firms

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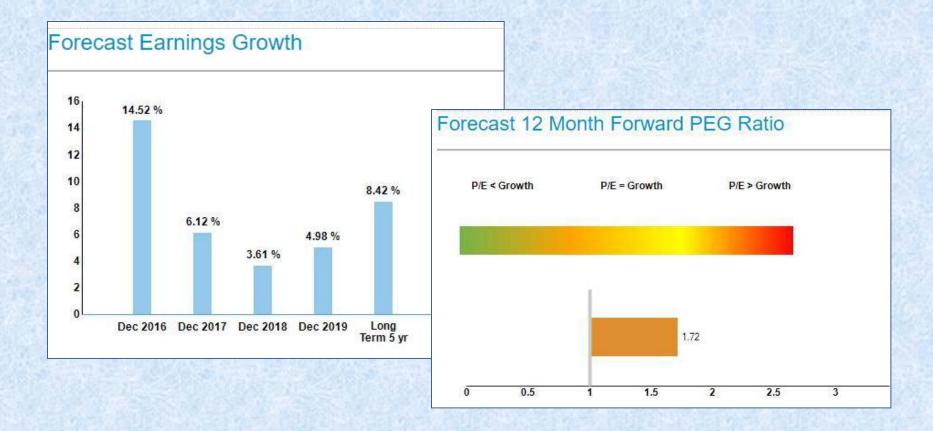
## 12-Month Price Target Range



### > Graph Key

The 12-month Consensus Price Target is the average of individual price target estimates submitted by covering sellside analysts.

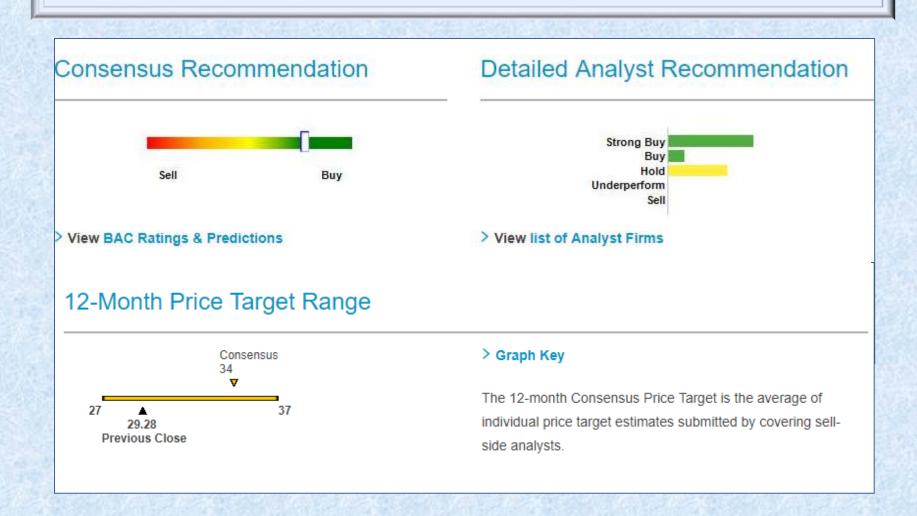
# Intel Earnings Growth Forecast

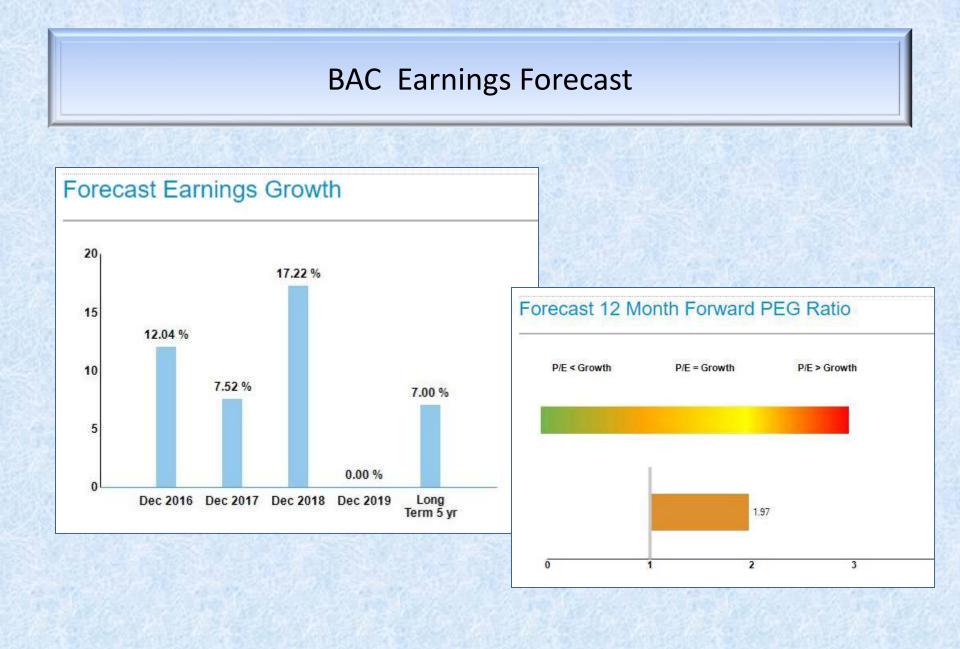


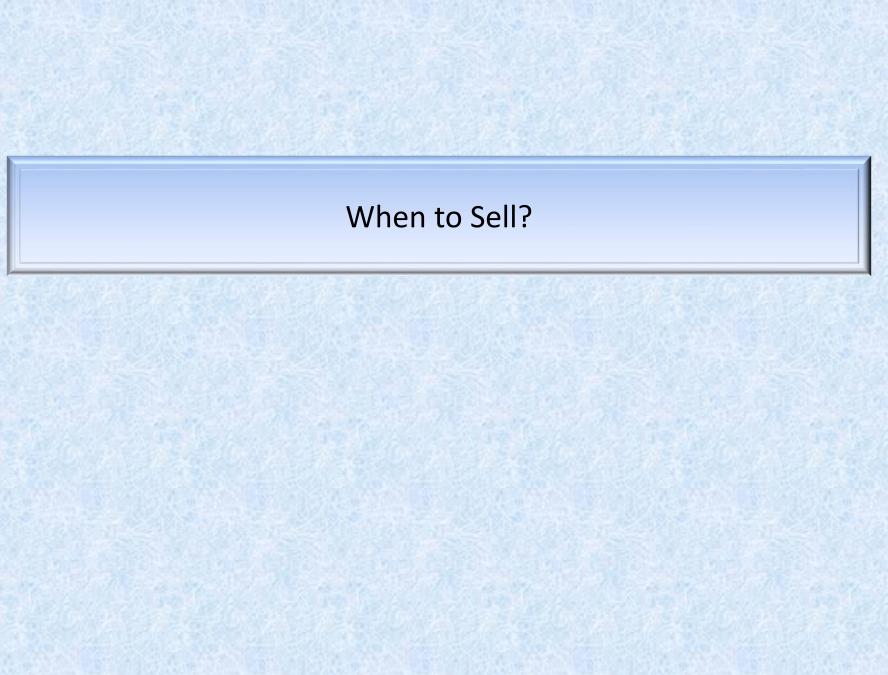
# **BAC Stock Profile**

Bank of America Corp BAC:NYSE				<b>∃</b> ▼ Trade	Ratings Summary
ast Price Today's Change Bid/size Ask/size Today's Volume ( 29.28 -0.22 (-0.75%) \$29.17/1 \$29.18/11 105,079,500 Above Av s of close Friday, 08/15/2018	A Schwab Equity Data as of 06/15/2		E Quarter Earnings cement Expected 7	Margin Requirements	Schwab Equity Ratings® Later more about Schwab Equity Ratings Rating as of 08/15/2018
Summary News Charts Ratings Earnings Stateme	nts Peers Ratios	s Dividends Re	eports Options Preferred	ls	F D C B A
Quote Details Sector Overview Total Return Historical Quote	Key Fundamentals	3			Percentile Ranking = 8           Schwab Equity Ratings Report®
1 Day 5 Days 1 Month 3 Month 6 Month YTD 1	Year 3 Years 5	Years	Details		Morningstar Equity Research Vie
	Sh	ow Events	Today's Open	\$29.25	Rating since 03/23/2018
BAC:NYSE As of close Friday, 08/15/2018	+16.21	(124.02%)	Previous Close	\$29.50	* ** *** **** ****
		H 33.05	Day's Range	\$28.865 - \$29.41	None Narrow Wide
		J W 30	52 Week Range	\$22.73 - \$33.05	Morningstar Equity Analyst Report Latest report 06/15/2018
	0.01	N 25	Beta (5 Year)	1.31	2 Morningstar Analyst Report Guide
	manning		Average Volume (10 Day)	63,405,102	Morningstar Sector Report Latest report 04/19/2018
and and we way		20	Put/Call Ratio (1 Day)	0.5	🖪 Bulls Say. Bears Say.
mit have have been a		15	Put/Call Ratio (30 Day)	0.4	Credit Suisse Research Vi Rating since 03/12/2015
		10			Underperf Neutral Outperfo
Jul Oct Jan Apr Jul Oct Jan Apr Jul Oct Jan Apr Jul	Oct Jan Apr Jul	Oct Jan Apr			View Credit Suisse Company Research Reports
013 2014 2015 2016	2017	2018 2B			Ned Davis Research
hmannahaddalaadaaaaaada.aadaaaaaaaaaaaaaaaaaa		18 mailliadaldada			Rating since 05/30/2017 Sell Neutral Buy
Earnings TTM (GAAP) Details Dividends as	of 06/15/2018	Details	Shares		Ned Davis Research Report Latest Report 08/10/2018
Earnings Per Share (04/18/2018) \$1.9541 Quarterly Div	idend	\$0.12	Market Capitalization	\$296.9B	Argus 12 Month Rating
Price/Earnings 15.10 Annual Divid	end Rate (IAD) 😯	\$0.48	Market Capitalization	\$302.6B	Rating since 04/17/2018
Forward P/E 11.51 Annual Divid	end Yield 😯	1.64%	(Company-level, Large Cap)		Sell Hold Buy
Price to Earnings / Growth (PEG) 0.97 Previous Ex-	Date	May 31, 2018	Enterprise Value	\$564.2B	Argus Analyst Report Latest report 04/17/2018
Next Pay Da	e	Jun 29, 2018	Shares Outstanding	10.14B	CFRA's Opinion
			Shares Held By Institutions	68%	Ranking since 08/15/2018
			Short Interest (as of 05/31/2018)	1.3%	* ** *** ****

# BAC Analyst Forecast







# Selling Stock

Sell when the reasons you bought it have materially changed

- not just because it had a bad quarter or two
- significant change in competitive landscape
- senior management turnover
- "accounting irregularities"

• Sell portions of holdings when they have appreciated significantly ("Schnitzel")

when stock doubles, sell half (invest with OPM)

• Sell to accumulate cash for near term requirements (tuition, car purchase, etc.)

- in order to maintain 12 24 months of cash on hand
- Before you sell, plan what you'll be doing with the capital
- Sell incrementally if possible

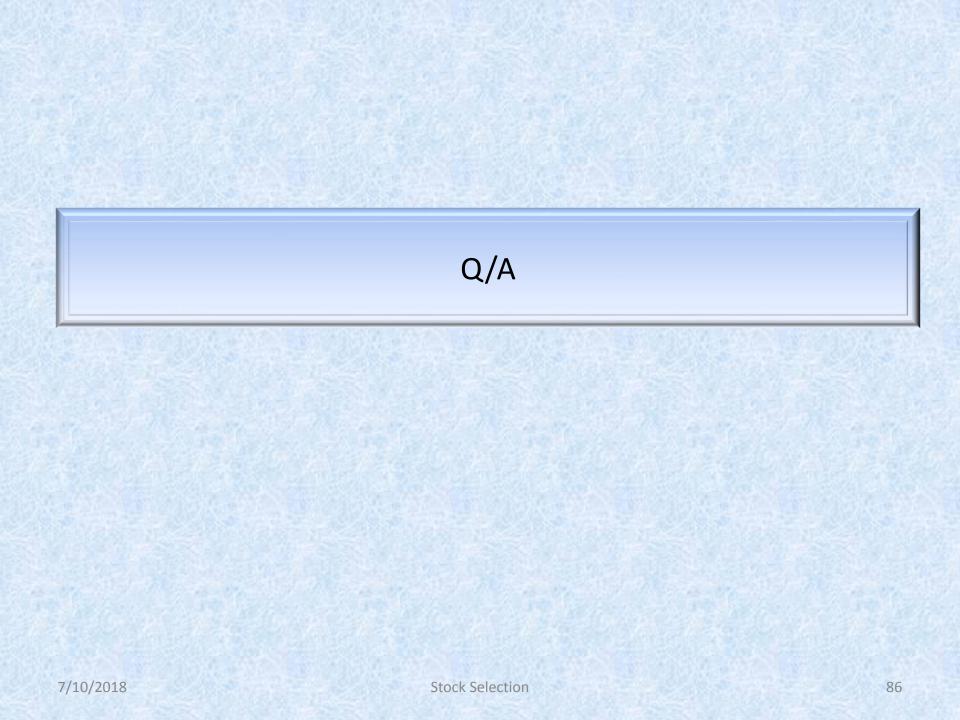
## Summary

- Start with what you know
- Then do the research
  - Fundamentals
  - Third Party Analysis
  - Products and Services
- If all else fails .... ask your spouse

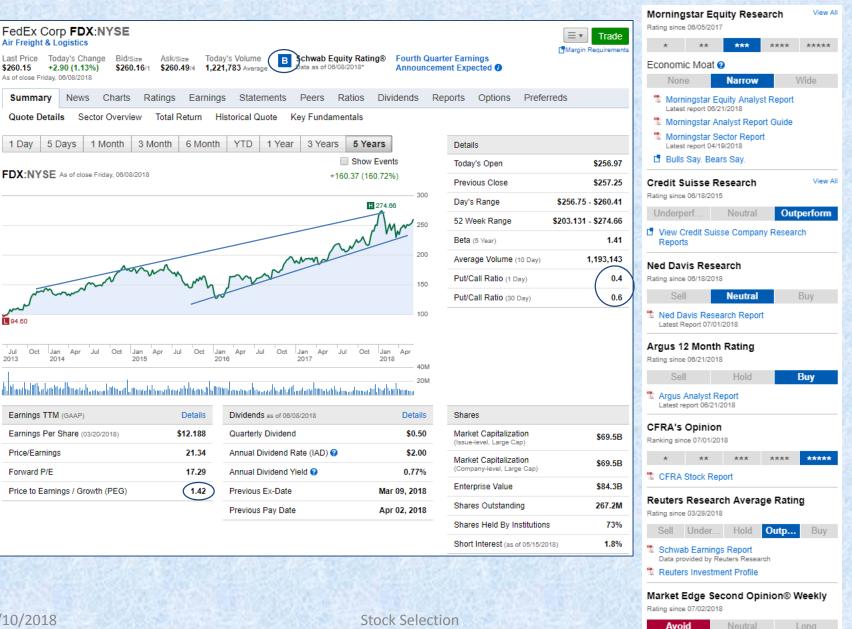


# Stocks Assessment (class participation)

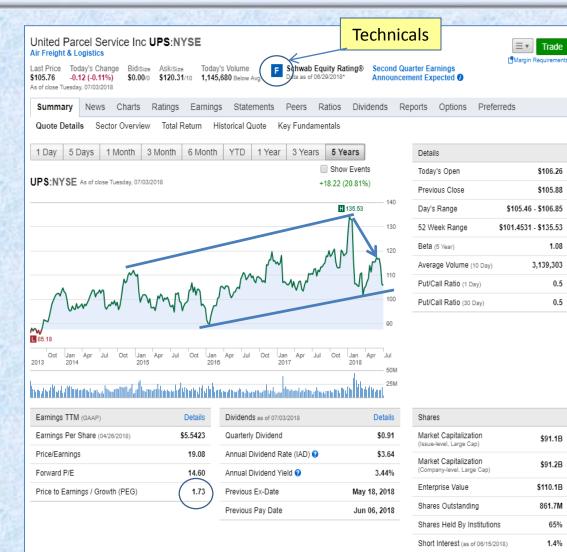
Stock	Rating (H,M,L)	Rationale (Valuation, Risk, other)	
AAPL			Rating:
SBUX			H – Pursue further M – defer and reassess
FB			L – Not pursue
GOOGL			
AMZN			
AT&T			
BAC			
INTC			
FedEx			
MSFT			
CTSH			
HP			
NSC			

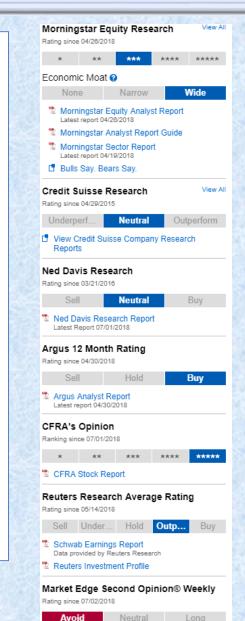


## FedEx



# **UPS** Profile





1.08

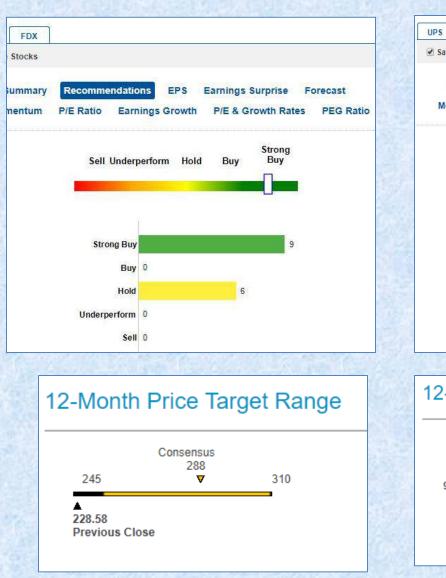
0.5

0.5

65%

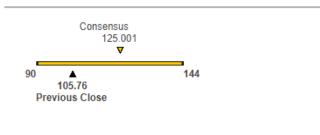
1.4%

## FDX, UPS Analysts Forecast





### 12-Month Price Target Range



## Sector, S&P compare

#### Comparisons

Gain global insights by comparing domestic or international indices and securities. Compare up to 4 securit Download your comparisons in a printer friendly report format.

Need help? 🕈 Download our user guide and get the answers you need.

#### Index Comparison

Select up to three indexes to compare to FDX: FedEx Corp NYSE

Ratio	FDX : FedEx Corp NYSE	S&P United States BMI Industrials	S&P 500
Price/Earnings	21.23	21.78	21.98
Price/Forecasted Earnings (FYF)	13.19	17.64	17.41
Price/Sales	0.93	1.66	2.20
Price/Tangible Book (MRQ)	4.89	4.16	3.31
Price/Cash Flow	10.05	14.75	
Return on Equity (%)	16.50	17.93	13.35
Dividend Yield (%)	1.14	1.73	1.90

#### Comparisons

Gain global insights by comparing domestic or international indices and securities. Compare up to 4 secu Download your comparisons in a printer friendly report format.

Need help? 落 Download our user guide and get the answers you need.

#### Index Comparison

Trail Select up to three indexes to compare to UPS: United Parcel Service Inc NYSE

Ratio	UPS : United Parcel Service Inc NYSE	S&P United States BMI Industrials	S&P 500
Price/Earnings	19.18	21.78	21.98
Price/Forecasted Earnings (FYF)	14.67	17.64	17.41
Price/Sales	1.35	1.66	2.20
Price/Tangible Book (MRQ)		4.16	3.31
Price/Cash Flow	13.14	14.75	-
Return on Equity (%)	515.06	17.93	13.35
Dividend Yield (%)	3.42	1.73	1.90

# FDX, UPS Valuation Compare

Fundamentals		
View as Yield	FDX	UPS
Price/Earnings (TTM)	21.23	19.18
Price/Forecasted Earnings (FYF)	13.19	14.67
Price/Cash Flow (MRFY)	10.05	13.14
Price to Earnings / Growth (PEG) (5yr Projected Growth)	1.58	1.74
Sales Growth - 5 Year (%)	8.13	4.01
EPS Growth - 1 Year (%) (Year over Year TTM)	-2.88	41.57
EPS Growth Forecast - 1 Year (%)	13.22	20.54
EPS Growth Forecast - 3-5 Year (%)	13.44	11.01
Annual Dividend Yield (%)	1.14	3.42
Gross Profit Margin (%)	71.77	75.01
Net Profit Margin (%)	4.47	7.15
Cash Flow/Share (TTM)	\$22.14	\$8.21
Long-Term Debt to Equity (%) (MRQ)	78.51	1,518.53