THE OHIO STATE UNIVERSITY
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Verizon Communications Inc. (VZ)

Summary

Verizon Communications Inc. is a telecommunications company that offers communications, information, and entertainment products and services to consumers, businesses, and government agencies around the globe. The company was founded in 1983 and is headquartered in New York City, New York.

Investment Thesis

We are recommending that investors sell Verizon Communications Inc. due to the following reasons:

- Growth has stabilized and revenue projections remain flat into the future. Modest revenue growth is heavily speculated on successful 5G product leadership.
- Top competitor in the wireless communications industry, AT&T trades at a lower P/E ratio suggesting Verizon may be priced expensively.
- A potential merger by Sprint and T-Mobile could pose a threat to Verizon market share, in addition to other technology firms who could enter the market.

Risks

Potential risks associated with investment in Verizon Communications include:

- Future growth heavily tied to 5G network expansion and race against competitors to fully leverage first mover advantage.
- Mergers within the telecommunications industry, changing competitive dynamics.
- Firms starting to bundle product lines around wireless services, cable and streaming services, and others lowering average revenue per user.

Verizon Communications Inc.

BUSFIN 7225 - Student Investment Management
Fund Manager: Royce West
Research Analyst: Patrick Roan
July 10th, 2019

Company Information	
Ticker	VZ
Sector	Communication Services
Industry	Telecom Services
Price as of 7/8/2019	$57.89
Market Cap	239.42B
Shares Outstanding (M)	4,132

Recommendation	
Stock Rating	Sell
Price Target	$56.23
Implied Upside	-2.9%
Dividend Yield	4.18%

Key Statistics	
Revenue (2018, M)	$130,863
Earnings (2018, M)	$15,528
EPS (2018)	$3.76
P/E (7/9/19)	11.14
Beta (3Y Monthly)	0.51

Performance History	
52 Week High	61.58
52 Week Low	50.05
1-Year Return	14%

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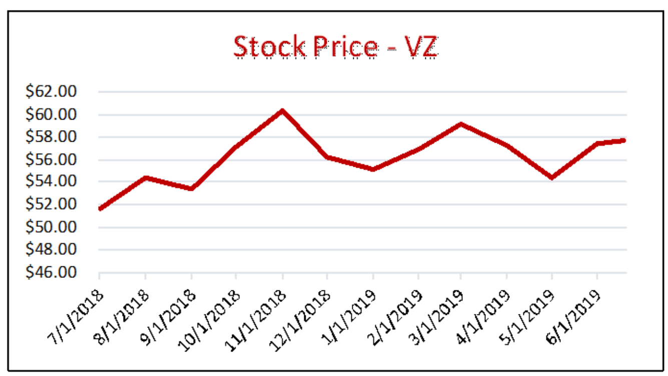
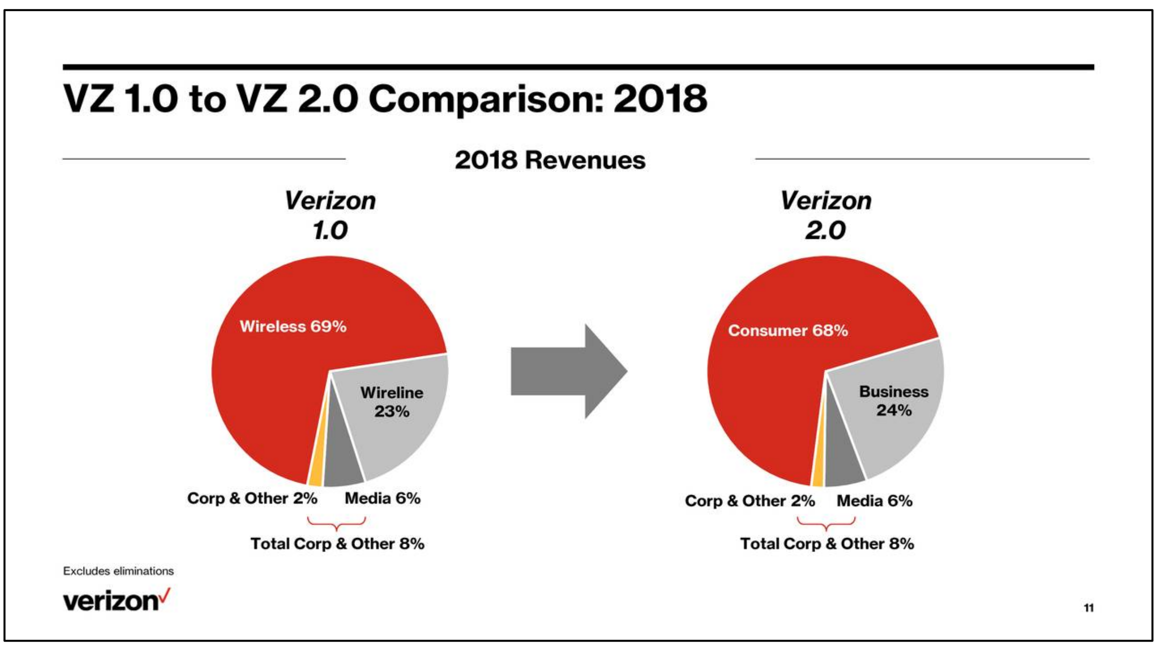


Company Overview

Verizon Communications Inc. is a telecommunications company that offers communications, information, and entertainment products and services to consumers, businesses, and government agencies around the globe. The firm operates in the telecommunications industry and has grown to be a global leader in delivering innovative communications and technology solutions through three main business segments including wireless, wireline, and media group. Verizon Communications was created through a large merger between Bell Atlantic Corporation and GTE Corp in June 2000 evolving through various other mergers and divestitures, and is now led by CEO Hans Vestberg, headquartered in New York City.

Business Segments

Verizon is known for operating a successful and market leading wireless communications services business which generated $92 Billion in sales, about 69% of total revenue, in the year ended December, 31st 2018. The 4G wireless network for cell phones is considered the best service in the United States with over 70% of the population covered[1]. Significant investment and expansion including acquisitions such as MCI Inc., Vodafone, and Alltel Corp., have helped Verizon become the leading wireless provider in the United States including consumers such as large business and government agencies worldwide. The chart below shows the revenue distribution between the three main business segments in fiscal year 2018 with wireless leading the way.



*[2]https://seekingalpha.com/article/4271093-verizon-communications-vz-investor-presentation-slideshow?dr=1

Wireless

As the current market leader in 4G wireless services in the US, Verizon is continuing to invest in more capacity as consumer demand shifts to cellular device data needs including mobile video and streaming consumption as well as internet of things products and voice command. This investment strategy also supports the R&D related to the 5G technology deployment which started testing back in 2016 and was launched in 2018. Verizon claims to be the leader in 5G innovation which can offer customers 8 "currencies" including peak data rates, mobile data volumes, mobility, connected devices, energy efficiency, service deployment, latency and reliability[3]. The 5G expansion is critical for Verizon as the demand for better networks continues along with higher network traffic across the increasing number of internet connected devices.

The wireless business segment will continue to be the most important to Verizon, especially as competitors consolidate and try to keep up with changes in technology, especially the 5G network. Operating revenues increased 4.8% from 2017 to 2018 or about $4.2 billion, fueled by growth in retail connections, but the average revenue per account actually decreased in 2018[3]. This segment yielded an operating income of $32 billion resulting in a 36% margin providing strong profitability from operations, especially compared to the last few years[3].

Wireline

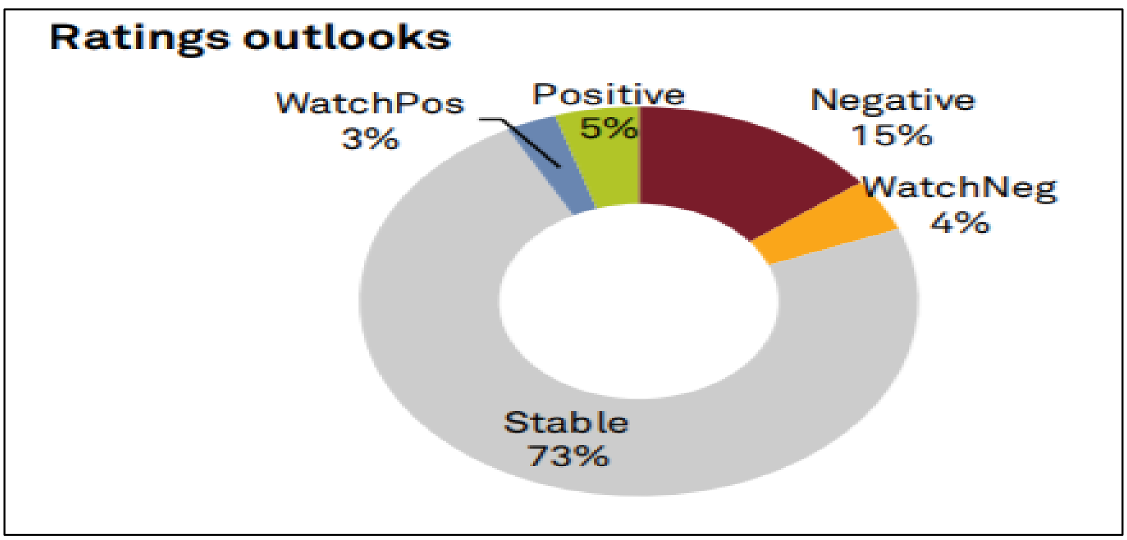
The wireline business provides data and video services, corporate networking solutions, security, and both local and long distance voice services to customers ranging from domestic consumers, carriers, business and government in the US and internationally. As the voice service market has decreased the wireline business focused has shifted to the Fios, fiber based network which supports data, video, and business services demanding reliable high speed connections. A current initiative to improve profitability includes a common fiber platform network supporting both wireline and wireless business creating more revenue opportunities for both segments. Operating revenues reported on 2018 were $29 billion, a 3% decrease from 2017 or about $0.9 billion due to technology substitution and competition. Operating income in 2018 was a loss of $273 million, resulting in a (0.9%) operating margin[3]. Verizon must continue to expand the Fios products and services as the demand shift from traditional voice networks to video and other internet based components.

Competitive Strategy and Market Factors

Verizon Communications has developed a sustained competitive advantage in the wireless market, leveraging its high fixed cost structure and significant scale characteristics to provide a profitable network coverage product to consumers. The firm is well positioned to maintain the highest margins in the wireless business as the competition shrinks and Verizon strengthens its most reliable network. Verizon currently owns about 40% of the postpaid phone market, 10% above the nearest competitor in AT&T[4]. Sprint and T-Mobile are the next largest players, and with a possible merger on the table, could further consolidate the industry. With three large scale wireless providers, prices could hold to help firms maintain current profit margins, as each firm would control the sufficient market share to achieve healthy returns.

Even as a market leader in wireless services, there are a few growth opportunities Verizon should consider. First, the race for 5G is critical to maintaining if not capturing a wider percentage of the wireless market. As more devices connect to wireless networks, increasing capacity demand and network performance, it will be key that Verizon delivers and captures value with this innovation. Another key market for Verizon to grow is business and carrier customers' accounts, some internationally. With the vast infrastructure and network quality in place, Verizon is suited to meet the needs of large customer and governmental agency accounts. The pace of business is accelerating demanding reliable wireless and network solutions which Verizon is well positioned to support.

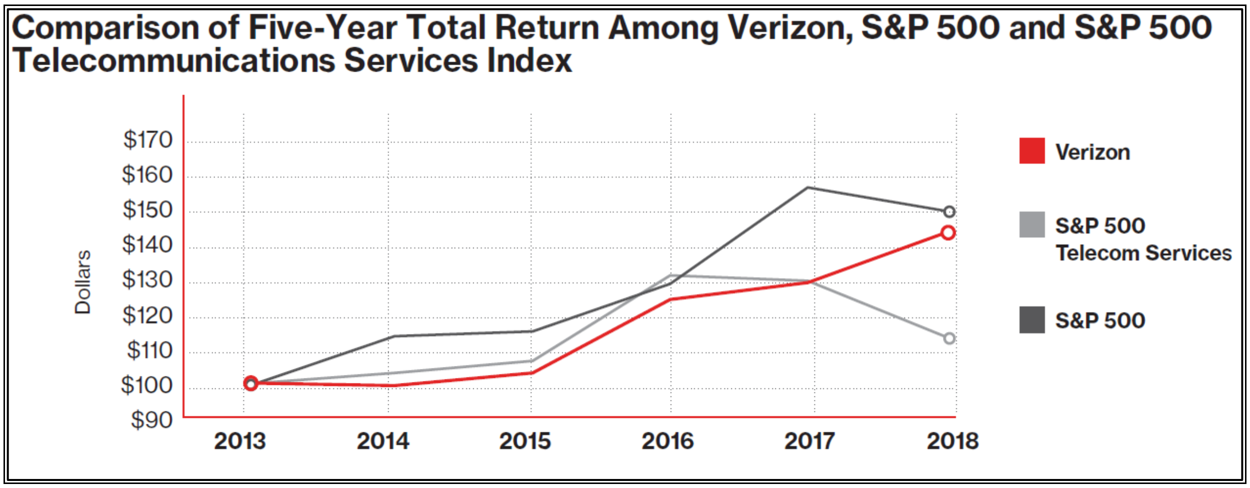
Recent growth projections for global telecom revenue are only 2-3% as consumers demand higher speed and more reliable networks for video, voice, and streaming services[5]. The traditional fixed line voice and cable trend continues to decrease, putting that piece of Verizon's business at risk. Heavy competition in a highly saturated market are other factors that may limit growth, impacting pricing, and constrain the returns on assets. The graph below from the S&P Global Ratings report on Telecommunications industry trends in 2019 shows a predicted stable outlook which is supported by many of the factors discussed above and must be heavily considered by potential investors.



*[6]https://www.spratings.com/documents/20184/5670590/Industry+Top+Trends+-+Telecommunications/3cd48091-6df7-3a2d-ac31-c2a376745c15

Recent Stock News

The chart below from Verizon's 2018 annual report illustrates the five year total return of Verizon compared to the S&P 500 and S&P 500 Telecom Services. This has been during a period of economic expansion which has boosted superior returns in the S&P 500 compared to Telecom and Verizon. Verizon has performed in line with the Telecom industry until 2018 where Verizon has recently spike above the industry index. Verizon is classified as a defensive stock which could offer protection against any potential recession effects on the market and S&P 500 securities. In addition Verizon offers a high dividend yield around 4%, guaranteeing shareholders a solid cash flow stream.

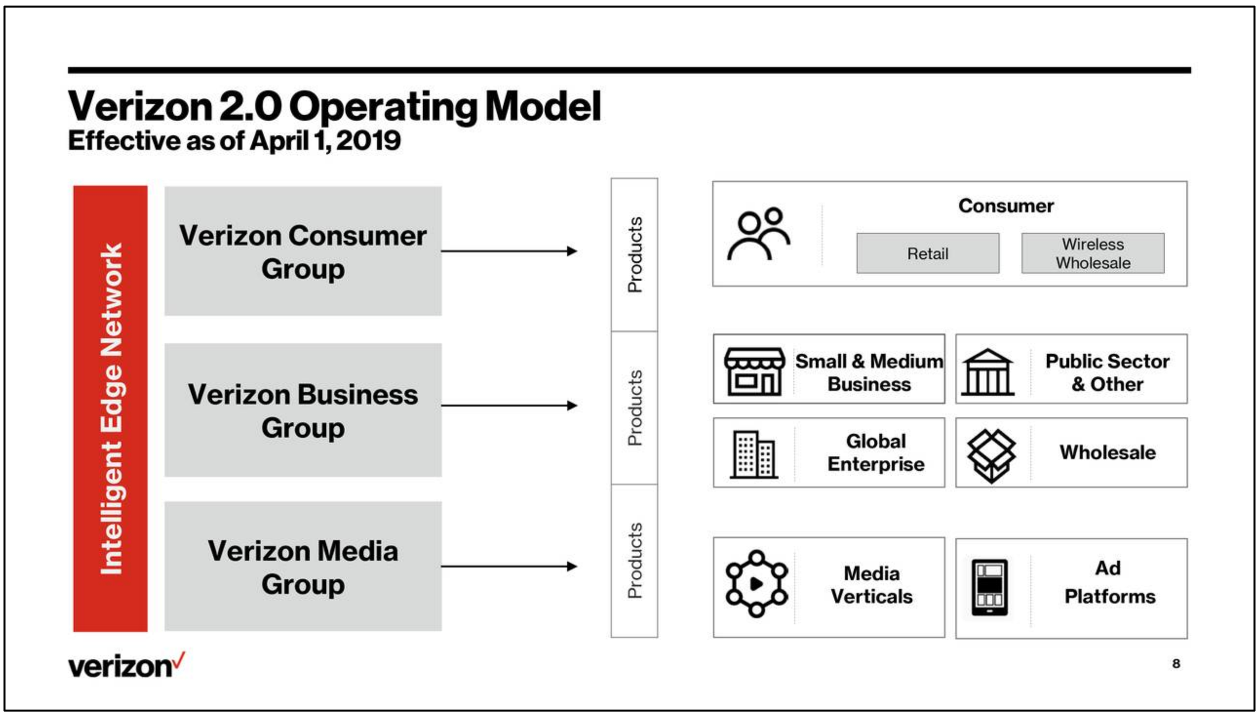


*2018 Verizon Annual Report

On April 23, 2019 Verizon reported 2019 Q1 earnings, surpassing expectations, and raised the full year earnings guidance through strong performance and growth outlook. Reported EPS was $1.22, up from $1.11 in Q1 of 2018 in addition to 1% year over year revenue growth. Wireless service revenue continues to be the main driver of growth as Verizon is a 4G market leader. Verizon announced $3.0 billion in cumulative cash savings towards the stated $10 billion goal by 2021 as a cost reduction strategy. Guidance for 2019 was adjusted, projecting single-digit growth in EPS from 2018 levels and previous guidance which is good news for investors. Verizon is currently up about 3% YTD as the market has reacted to global trade news, tariff actions, and monetary policy announcements. Telecom related news has centered on the expansion of 5G, of which Verizon has had mixed reviews, and the potential mega-merger between Sprint and T-Mobile. These are the key industry related news items investors must follow in relation to Verizon stock price fluctuations[7].

Verizon 2.0

On June 19th, 2019 Verizon held an investor presentation to introduce the Verizon 2.0 Transformation. The underlying strategy fundamentals of network leadership, customer driven models, a trusted brand, and financial discipline remain the same but the 2.0 operating model shifts the business segments of wireless, wireline, and media into segments labeled consumer, business, and corporate & other. The transformation is designed to allow for a customer centric focus, providing intelligent networks solutions across the products and services spectrum, as well as a go-to-market strategy. I believe this will have a positive result as it aligns the business segments to tailor to the various customer needs which range greatly from retail consumers, large businesses, wholesale customers, etc. Externally, the 2.0 model will provide products and services designed to meet each type of customer and allow for new customer revenue opportunities. Internally, Verizon will be able to use the new reporting structure to manage the businesses more effectively, increasing profitability and return on assets. The 2019 Q2 earnings release and SEC reports will contain the Verizon 2.0 model structure[8].



*https://seekingalpha.com/article/4271093-verizon-communications-vz-investor-presentation-slideshow?dr=1

Investment Thesis

Fundamental Drivers

There are a few fundamental drivers that will impact the outlook for Verizon communications, a few of which are surrounded by uncertainty. First, much of Verizon's success in the wireless business will be contingent on the move towards 5G networks and the race against competition to deliver a reliable 5G network. Second, with the Verizon 2.0 operating model introduction, investors must track the effectiveness of the strategic repositioning of the firm to determine the value of this business realignment. Lastly, Verizon has invested a tremendous amount of capital and holds a large amount of debt that has helped deliver the scale required to realize strong returns on wireless products and services. As competitive dynamics change and cross functional firms enter the value change, can Verizon maintain its market leading position and sustain profit margins.

5G Network Expansion

The "First to 5G, First to Tomorrow" project undertaken by Verizon is a critical fundamental to investors which will dictate potential wireless market share into the future. Verizon was first to launch commercial 5G last year in cities such as Los Angeles, Sacramento, Houston, and Indianapolis working to bring advantages of the 5G network to market first, including plans for over 20 more cities in 2019. The 5G technology is a new generation of wireless and will enable large scale deployment in Internet of Things and support consumer demand for more capacity and faster access to data. To date, there have been mixed reviews on the 5G network roll out for Verizon such as spotty coverage, only outdoor coverage and the additional fee of $10 per month for unlimited 5G data. Each of Verizon's main competitors are also lunching 5G program and starting to offer 5G version cell phones making it critical for Verizon to deliver the traditional reliable network with 5G technology to consumers. Verizon has dedicated significant capital investments to the development of 5G technology, and must maintain, if not grow, market share in order to recoup the investment and increase wireless sales into the future.

Verizon 2.0 Execution

The second fundamental which is important to an investor perspective on Verizon is the recent Verizon 2.0 operating model introduced by CEO Hans Vestberg. A change in corporate strategy can be a catalyst for success or take a company off track. Verizon 2.0 will change the business segments from wireless, wireline and media; to a consumer, business, and media group. The change in operating and reporting segments is designed to support a customer focused model, providing the best experience for users of the network, and to sustain growth and long term profitability through process improvement initiatives. Investors will want to see an effective transition to Verizon 2.0 and successful results to demonstrate Verizon can continue to lead in wireless technology in the heavily saturated and competitive market.

Sustain Network Scale Advantage

Verizon is currently the market leader in wireless technology and enjoys superior margins in its core business due to the scale developed over the years of wireless development. The high fixed-cost economies of scale have come with significant capital investment, around $17 billion annually the last few years, and a highly leverage balance sheet. Verizon's 2018 annual report recognized over $250 billion in contractual obligations, including $113 billion of total debt[9]. Fluid competition in the telecommunications industry, including potential mergers in the near future, could affect the scale Verizon relies upon for high margins. Verizon is working internally to mitigate this risk by undertaking a cost savings program aimed at saving $10 billion by 2021. For example, Verizon offered a voluntary separation program in 2018 to reduce the workforce by 6-7% and also started to outsource some jobs to an Indian IT company Infosys[10]. Continued investment in new technology, such as 5G, is another fundamental key for Verizon to maintain a loyal, market leading customer base.

Economic and Sector Conditions

Verizon and other telecommunications companies are considered defensive stocks which means they typically provide a constant dividend and produce stable earnings regardless of the stage in an economic cycle. In contrast, analysts view the new communications sector broadly as cyclical. Investors must focus on the telecommunications industry within the sector, with respect to economic drivers of stock performance. In what is believed to be a US economy nearing the end of an expansion, telecom is an industry that could be positioned well to withstand any sort of recession. Even during a weak economy, demand for telecommunications, especially wireless network products and services will remain an integral part of the economy. The well-established, large value companies such as Verizon and AT&T are poised to evolve through industry consolidation and chase the global demand for wireless internet and shift in focus video, high speed connectivity, and multi device application.

A recent S&P Global Ratings report forecast global telecom revenue growth of 2-3% in 2019 driven by mainly by broadband, supporting the increasing demand for high speed data[11]. There are several sector trends that could impact the stock performance of Verizon and other telecom companies. First, the frequently mentioned rollout of 5G technology is going to require massive capital investment and a deliberate strategy to effectively deliver the technology and capture the revenue opportunities it presents. Uncertainly is common among analysts in regards to the future cash flow related to 5G. Next, competitive dynamics continue to change as companies converge, packaging more products and services across the communications and entertainment spectrum. For example, top competitor AT&T a major cellular device company, also owns HBO, Direct TV, and Time Warner in order to control more pieces of the value chain. Other large tech companies such as Google, Apple, and Amazon are entering the space through video streaming, mobile phone services, and intellectual property development[12]. The last trend to consider is the changing technology and growth in digitalization. Technological advancements such as artificial intelligence and internet of things, specifically smart home and voice control devices, have drastically increased the digital traffic experienced on wireless networks. Telecom firms must support the consumer demand and develop ways to prosper economically as technological innovation continues.

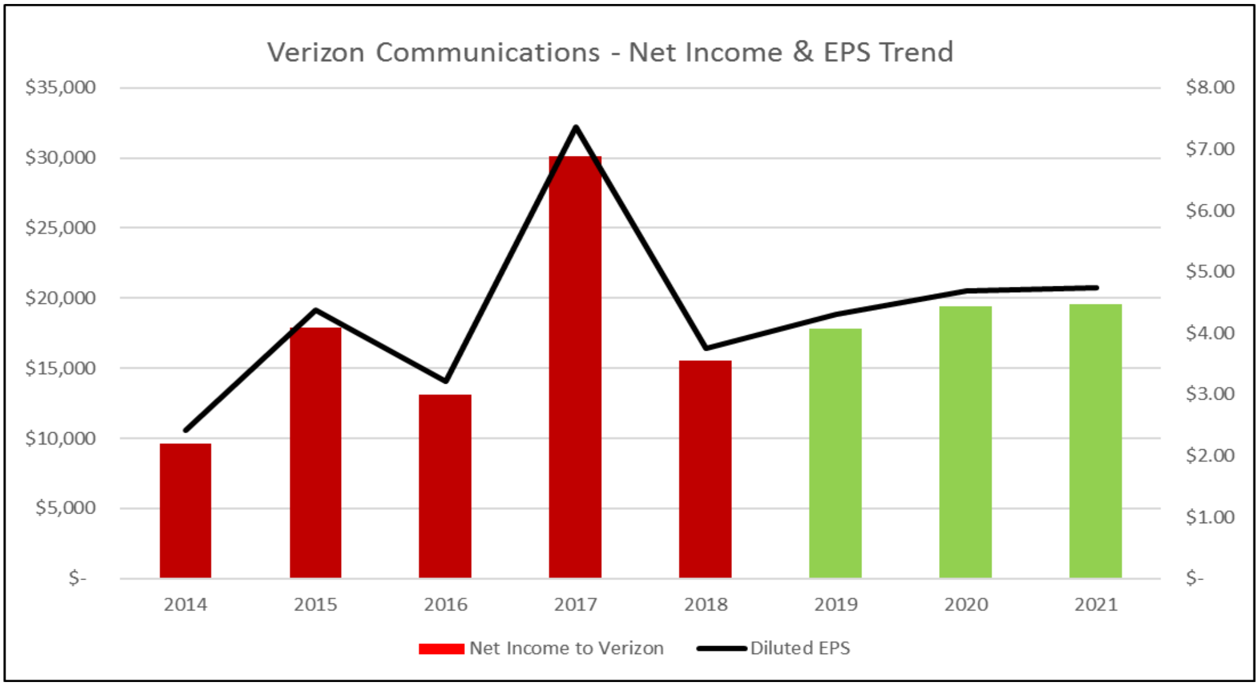
Financials

Verizon Communications has generated strong financial performance over the history of the company with an average operating margin of 20% over the last 5 years (2013-2018). The corresponding profit margins over that period range from 8-24% with revenue growth averaging about 1% per year. Net income attributable to Verizon was $15,528 million in the year ended 2018 on sales revenue of $130,863 million, up from $126,034 million in 2017. The resulting earnings per share (EPS) in 2018 was $3.76 down from $7.37 EPS in 2017 which was an outlier in the past 5 years. Capital expenditures have remained consistently high around $17 billion, or about 13% of sales, in efforts to continue building out the most reliable wireless network, development of 5G capabilities, and make strategic acquisitions like AOL and Yahoo[9].

The income statement projection forecasts modest revenue growth over the future years, consistent with recent history. Although the 5G rollout has required large capital investment, there is much uncertainty around the ability for Verizon and others to capture additional revenue because of 5G network offerings, especially in the short term. In addition, especially in the US market, the wireless market has become heavily saturated and competition is fierce. Based on this assumption the three year revenue growth projections are as follows 0.5% in 2019, 1.2% in 2020, and 1.8% in 2021, which fall in line with consensus estimates.

The operating cost forecast is projected using historical percent of sales ratios broken down between services and equipment. I've estimated a slight increase in the cost as percent of sales ratio for services, which is the more significant revenue and cost component; and decreased the ratio for equipment which operates about breakeven but operating costs have been decreasing as a percent of sales over the last five years which is a trend I assume will continue. The selling, general, and administrative cost is projected to decrease as a percent of sales based on the recent $10 billion cost reduction efforts outline by new CEO Hans Vestberg. Depreciation and amortization, other operating costs, and interest expenses are projected to remain consistent from a percent of sales perspective. Lastly, the tax rate assumed is 21% based on the Tax Cuts and Job Act of 2017 which will lessen the future income tax burden estimate for Verizon.

As a result of the above revenue, expense, and tax projections the estimated operating margin over the next three years increase slightly from 2018 in the range of 20-22%. Corresponding profit margins range from 13-14% which is an increase over the 5 year average. EPS estimates increase from 2018 to $4.31 in 2019, raising to $4.69 in 2020 and $4.73 in 2021. These estimates assume weighted average shares outstanding remain at the 2018 volume of 4,132 million. Comparing to consensus EPS, the forecast is slightly more conservative, especially in 2021 where my projection is about 5% less then consensus at $4.99. In summary, the income statement projection is fairly consistent with consensus estimates, with increased EPS over recent years driven by improving margins from a leading US wireless market share, although with slow revenue growth, and cost control initiatives improving bottom line results.



Valuation and Price Target

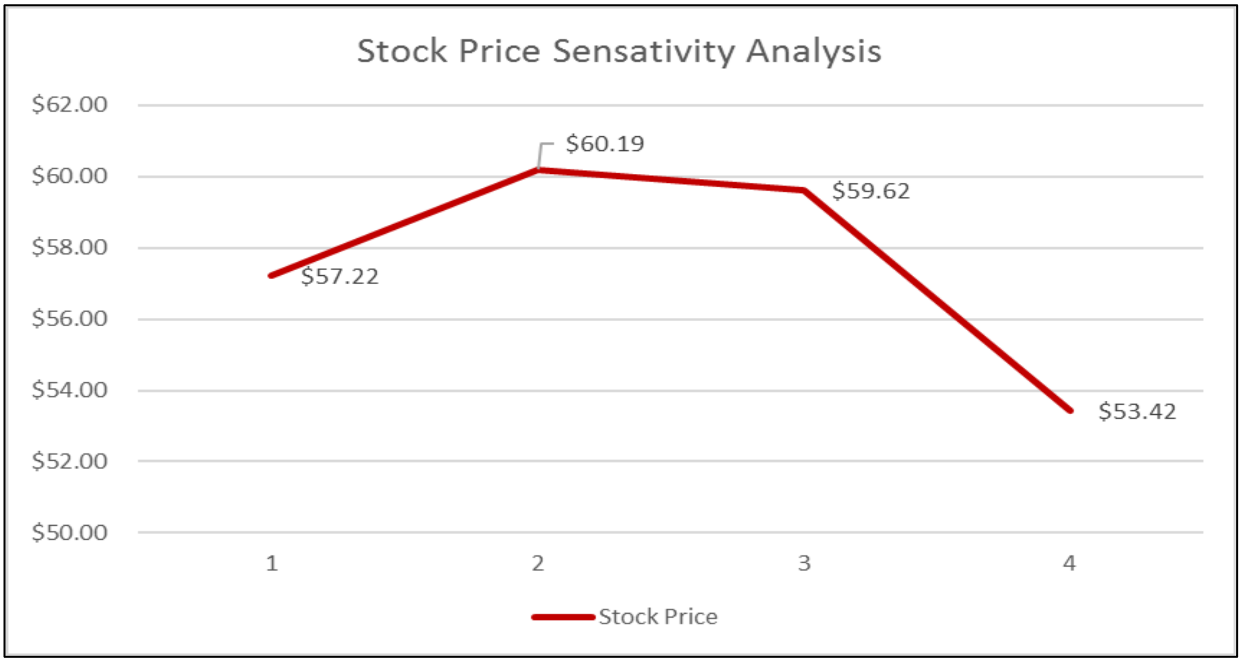
In order to provide a valuation and price target for the Verizon Communications stock, I've decided to take two approaches including using various price multiples and the discounted cash flow method (DCF). From the multiples perspective, I've benchmarked several multiple ratios from Verizon to the S&P 500, Communication Services sector, and the top competitors in the telecommunication's industry. The price multiples utilized are the Price/Earnings, Price/Book, Price/Sales, and Equity Value/EBITDA. Competitors include AT&T, Sprint, and T-Mobile. The table below summarizes the various multiples with respect to select benchmarks which can be utilized to value the stock price of Verizon.

Ticker	P/E Ratio	P/S Ratio	P/B Ratio	EV/EBITDA
Verizon	11.14	1.78	4.18	8.25
S&P 500	19.58	2.08	3.47	13.59
Communication Services	20.13	2.92	3.38	12.99
AT&T	10.73	1.33	1.32	7.21
Sprint	16.21	0.84	1.08	6.22
T-Mobile	18.99	1.45	2.45	7.24
Average	16.13	1.73	2.65	9.25

*Source: Bloomberg

The discounted cash flow valuation method yields similar results in terms of a target stock price for Verizon Communications. Using the income statement projection discussed earlier and included in appendix 1, I put together four discount cash flow models to allow for sensitivity in the discount and terminal growth rate factors. These factors have a material influence on the stock price valuation so I wanted to see how various combinations of the discount and terminal growth rate effected the valuation. For the discount rate I used a range of 9.25% to 10% because I assumed Verizon is slightly less risk than the overall market which is typically around the 10% rate benchmark. The terminal growth rate was assume in the 1-2% range based on the slow revenue growth projections incorporated in my income statement and DCF models.

Based on the above rate assumptions and income statement forecast, the DCF model estimates net income from the four scenarios ranging from $17 billion to almost $23 billion. Free cash flow is estimated in a similar range due to the offset of depreciation/amortization and capital expenditures which are assumed to remain level into the future. Across the four sensitivity scenarios the projected equity value of Verizon spans from $220 billion to $250 billion, which yields an implied equity value per share ranging from $53 to $60. Verizon shares, as of the 7/8/2019 market close, are trading $57.89, so depending on the scenario rate assumption differences the DCF model suggests both a slight downside and upside from -7% to 4%. The average implied stock price from the sensitivity analysis is $57.61 which is right where the stock is trading currently suggesting the stock is well priced, and offers limited upside for investors.



Using the weighted price multiples and discounted cash flow method, we priced Verizon Communications stock at $56.23. The valuation metrics, weights, and price targets are shown in the table below.

Valutation Metric	Weight	Price Target
DCF	70%	$ 57.61
P/E Ratio	10%	$ 57.16
P/S Ratio	5%	$ 56.91
P/B Ratio	10%	$ 47.09
EV/EBITDA	5%	$ 52.63
Final Price Target		**$ 56.23**

Risks

The Verizon Communications stock faces risk from the industry and internal company performance. Industry risks include macro-economic factors such as a possible recession, interest rates fluctuations, and trade wars with China. Risks specific to the telecommunications industry are primarily related to consolidation, new entrants, and technology advancements. Internal to Verizon risks include operational performance on controlling cost and, most importantly, the shift to a 5G network.

Industry Risks

The US economy is currently experiencing one of the longest economic expansions since the Great Recession in 2008/2009. Many industry experts predict some scale of recession to occur in the next two years which is a risk to the overall stock market. One key benefit of investing in Verizon is the defensive nature of the stock, providing some insulation from a potential economic downturn. The consistent dividend yield is another positive aspect of Verizon stock ownership within a portfolio. Verizon's core business, wireless services, should continue to see strong demand even if a recession strikes the US economy. Our world relies so heavily on communication, data usage, cell phones, and other technology devices that Verizon is well positioned to maintain consistent revenue.

The trade war with China is another economic situation that could impact Verizon's business ventures. In May 2019, the US government put Chinese tech company Huawei on a blacklist barring it from doing business with US companies without government approval. As a result, many global tech firms have cut ties with the world's largest telecom manufacturer which has increased pressures on Huawei, US tech companies, and the US government. A recent example of this pressure is Huawei asking Verizon to pay licensing fees for more than 230 patients totaling over $1 billion. The patients cover various network equipment for about 20 of Verizon's major vendors in network equipment, wireline infrastructure, and internet of things technology[13].

Changes within the telecom industry also pose risk to Verizon's futures stock performance. The industry is experiencing consolidation, as evidence by the potential mega merger between Sprint and T-Mobile. Consolidation could be both a positive and negative with respect to Verizon depending on how the major players decide to compete on a global scale for wireless customer business. Price competition among firms could reduce revenues and bottom line profits, while alternatively, market share concentration and scale advantages could limit the threat of new entrants, preserving revenues.

Cross industry tech company convergence is another risk Verizon faces moving into the future. Consumers are accessing data in more ways than ever and other tech companies are starting to notice by cross industry lines. Firms are looking for ways to package more products and services together across communications and entertainment customers. Verizon faces this pressure from its main competitor AT&T must also must be aware of other large tech companies looking to operate in the wireless space.

Company Risks

While many of the risks facing Verizon's sustained value to shareholders are economic and industry related, the company also experiences internal risks. Two main factors identified are the 5G network expansion efforts and cost control efforts underway. The most important risk to profile is the 5G network expansion. As the current US wireless market leader, Verizon enjoy significant scale advantages and profitability. However, data needs are changing and 5G is believed to the next great technology to support the consumer demands. Verizon is already heavily invested in delivering this network to its customer, but has faced challenges during the initial roll out stages. If Verizon falters with this project, allowing competitors to bypass Verizon, the current market share could be at risk which poses significant risk for the firm's financial outlook. Lastly, the cost reduction efforts announced by new CEO Hans Vestberg are a risk if not implemented successfully. As mentioned in the paper, Verizon carries significant levels of debt and invests billions in capital each year, which is critical to the 5G mission. The cost control efforts are critical to supporting the capital investment strategy and improving operating margins into the future. Additionally, success in this program will demonstrate the leadership of the new CEO and support investor confidence in the direction of the company under his guidance.

Conclusion

SELL Verizon Communications Inc. (NYSE: VA) with a target price of $56.23 and an implied downside of -2.9%.

While my price target for Verizon is close to where the stock is currently trading, it offers limited upside for future investor returns. The company faces heavy competition in the wireless market, and will be defined by the move to 5G networks, which has committed significant capital expenditures among uncertain revenue growth. In addition, the wireline business is shrinking and margins have struggled putting more pressure on profitability and reliance on the wireless business. The stock is trading about 6% off its high and at a higher P/E multiple than its main competitor AT&T. Lastly, with an economic recession likely still more than twelve months out, Verizon does not offer the upside other sectors could provide investors. I recommend investors trim their position on Verizon in the short term and revisit the stock closer to the economic recession when a defensive company such as Verizon can help diversify a portfolio.

Appendix 1 – Income Statement Forecast

Consolidated Statements of Income - USD ($) shares in Millions, $ in Millions	Projected 12 Months Ended			12 Months Ended				
	Dec. 31, 2021	Dec. 31, 2020	Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2015	Dec. 31, 2014
Operating Revenues								
Operating Revenues	**$ 135,491**	**$ 133,096**	**$ 131,517**	**$ 130,863**	**$ 126,034**	**$ 125,980**	**$ 131,620**	**$ 127,079**
Consensus	*$ 134,880*	*$ 133,530*	*$ 131,950*					
Operating Expenses								
Total Cost of Goods Sold	$ 57,229	$ 55,996	$ 55,114	$ 55,508	$ 53,063	$ 52,701	$ 52,557	$ 49,931
Selling, general and administrative expense	$ 30,486	$ 29,946	$ 29,591	$ 31,083	$ 28,592	$ 28,102	$ 29,986	$ 41,016
Depreciation and amortization expense	$ 18,122	$ 17,802	$ 17,591	$ 17,403	$ 16,954	$ 15,928	$ 16,017	$ 16,533
Oath goodwill impairment	$ -	$ -	$ -	$ 4,591	$ -	$ -		
Restructuring and Other Cash Charges	$ -	$ -	$ 1,800					
Total Operating Expenses	**$ 105,837**	**$ 103,744**	**$ 104,096**	**$ 108,585**	**$ 98,609**	**$ 96,731**	**$ 98,560**	**$ 107,480**
Operating Income	**$ 29,655**	**$ 29,351**	**$ 27,421**	**$ 22,278**	**$ 27,425**	**$ 29,249**	**$ 33,060**	**$ 19,599**
EBITDA	**$ 47,777**	**$ 47,153**	**$ 45,012**	**$ 39,681**	**$ 44,379**	**$ 45,177**	**$ 49,077**	**$ 36,132**
Equity in losses of unconsolidated businesses	$ (127)	$ (125)	$ (123)	$ (186)	$ (77)	$ (98)	$ (86)	$ 1,780
Other income (expense), net	$ 677	$ 665	$ 658	$ 2,364	$ (2,021)	$ (3,789)	$ 186	$ (1,194)
Interest expense	$ (4,797)	$ (4,713)	$ (4,788)	$ (4,833)	$ (4,733)	$ (4,376)	$ (4,920)	$ (4,915)
Income Before (Provision) Benefit For Income Taxes	**$ 25,408**	**$ 25,179**	**$ 23,168**	**$ 19,623**	**$ 20,594**	**$ 20,986**	**$ 28,240**	**$ 15,270**
(Provision) benefit for income taxes	$ (5,336)	$ (5,288)	$ (4,865)	$ (3,584)	$ 9,956	$ (7,378)	$ (9,865)	$ (3,314)
Net Income	**$ 20,072**	**$ 19,892**	**$ 18,302**	**$ 16,039**	**$ 30,550**	**$ 13,608**	**$ 18,375**	**$ 11,956**
Net income attributable to noncontrolling interests	$ 511	$ 511	$ 511	$ 511	$ 449	$ 481	$ 496	$ 2,331
Net income attributable to Verizon	$ 19,561	$ 19,381	$ 17,791	$ 15,528	$ 30,101	$ 13,127	$ 17,879	$ 9,625
Net Income	**$ 20,072**	**$ 19,892**	**$ 18,302**	**$ 16,039**	**$ 30,550**	**$ 13,608**	**$ 18,375**	**$ 11,956**
Basic Earnings Per Common Share								
Basic Earnings Per Share Attributable to Verizon (in USD per share)	$ 4.74	$ 4.69	$ 4.31	$ 3.76	$ 7.37	$ 3.22	$ 4.38	$ 2.42
Basic, Weighted-average shares outstanding (in shares)	4,128	4,128	4,128	4,128	4,084	4,080	4,085	3,974
Diluted Earnings Per Common Share								
Diluted, Net income attributable to Verizon (in USD per share)	$ 4.73	$ 4.69	$ 4.31	$ 3.76	$ 7.36	$ 3.21	$ 4.37	$ 2.42
Diluted, Weighted-average shares outstanding (in shares)	4,132	4,132	4,132	4,132	4,089	4,086	4,093	3,981
Consensus - GAAP	*$ 4.99*	*$ 4.73*	*$ 4.38*					
Guidance								
Segment Financials								
Operating Revenues								
Service	$ 112,446	$ 110,458	$ 109,148	$ 108,605	$ 107,145	$ 108,468	$ 114,696	$ 116,122
Equipment	$ 23,045	$ 22,638	$ 22,369	$ 22,258	$ 18,889	$ 17,512	$ 16,924	$ 10,957
Total Operating Revenue	**$ 135,491**	**$ 133,096**	**$ 131,517**	**$ 130,863**	**$ 126,034**	**$ 125,980**	**$ 131,620**	**$ 127,079**
Operating Expenses								
Service	$ 34,184	$ 33,358	$ 32,744	$ 32,185	$ 30,916	$ 30,463	$ 29,438	$ 28,306
% of Sales	30.4%	30.2%	30.0%	29.6%	28.9%	28.1%	25.7%	24.4%
Equipment	$ 23,045	$ 22,638	$ 22,369	$ 23,323	$ 22,147	$ 22,238	$ 23,119	$ 21,625
% of Sales	100.0%	100.0%	100.0%	104.8%	117.2%	127.0%	136.6%	197.4%
Total Cost of Goods Sold	**$ 57,229**	**$ 55,996**	**$ 55,114**	**$ 55,508**	**$ 53,063**	**$ 52,701**	**$ 52,557**	**$ 49,931**
Gross Margin	**$ 78,262**	**$ 77,100**	**$ 76,404**	**$ 75,355**	**$ 72,971**	**$ 73,279**	**$ 79,063**	**$ 77,148**
Metrics:								
Tax Rate	21.0%	21.0%	21.0%	18.3%	-48.3%	35.2%	34.9%	21.7%
D&A	$ 17,498	$ 17,189	$ 16,985	$ 17,403	$ 16,954	$ 15,928	$ 16,017	$ 16,533
% of Sales	12.9%	12.9%	12.9%	13.3%	13.5%	12.6%	12.2%	13.0%
CapEx	$ 18,969	$ 18,633	$ 17,948	$ 16,658	$ 17,247	$ 17,059	$ 17,775	$ 17,191
% of Sales	14.0%	14.0%	13.6%	12.7%	13.7%	13.5%	13.5%	13.5%
Receivables	$ 25,623	$ 25,170	$ 24,871	$ 25,102	$ 23,493	$ 17,513	$ 13,457	$ 13,993
% of Sales	18.9%	18.9%	18.9%	19.2%	18.6%	13.9%	10.2%	11.0%
Inventory	$ 1,261.15	$ 1,239	$ 1,224	$ 1,336	$ 1,034	$ 1,202	$ 1,252	$ 1,153
% of Sales	0.9%	0.9%	0.9%	1.0%	0.8%	1.0%	1.0%	0.9%
Payables	$ 22,398	$ 22,002	$ 21,741.14	$ 22,501	$ 21,232	$ 19,593	$ 19,362	$ 16,680
% of Sales	16.5%	16.5%	16.5%	17.2%	16.8%	15.6%	14.7%	13.1%
Change in Working Capital	$ (79)	$ (52)	$ (417)	$ (642)	$ (4,173)	$ (3,775)	$ 3,119	
Sales	1.8%	1.2%	0.5%	3.8%	0.0%	-4.3%	3.6%	
Expenses as % of Sales								
Gross Margin	57.8%	57.9%	58.1%	57.6%	57.9%	58.2%	60.1%	60.7%
Cost of Goods Sold	42.2%	42.1%	41.9%	42.4%	42.1%	41.8%	39.9%	39.3%
SG&A	22.5%	22.5%	22.5%	23.8%	22.7%	22.3%	22.8%	32.3%
Depreciation and Amortization expense	13.4%	13.4%	13.4%	13.3%	13.5%	12.6%	12.2%	13.0%
Equity in losses of unconsolidated businesses	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	1.4%
Other income (expense), net	0.5%	0.5%	0.5%	1.8%	-1.6%	-3.0%	0.1%	-0.9%
Interest expense	3.5%	3.5%	3.6%	3.7%	3.8%	3.5%	3.7%	3.9%
Operating Margin	21.9%	22.1%	20.9%	17.0%	21.8%	23.2%	25.1%	15.4%
Profit Margin	14.44%	14.56%	13.53%	11.87%	23.88%	10.42%	13.58%	7.57%

Appendix 2 – Discount Cash Flow Model

Below is scenario 1. The three additional DCF scenarios are not included in the appendix.

Verizon Communications											
				Terminal Discount Rate =	9.75%						
				Terminal FCF Growth =	1.50%						
$ in Millions											
Year	**2019E**	**2020E**	**2021E**	**2022E**	**2023E**	**2024E**	**2025E**	**2026E**	**2027E**	**2028E**	**2029E**
Revenue	131,517	133,096	135,491	137,930	140,413	142,519	144,657	146,827	149,029	151,264	153,533
% Growth		1.2%	1.8%	1.8%	1.8%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Operating Income	27,421	29,351	29,655	**30,188**	**30,732**	**31,193**	**31,661**	**32,136**	**32,618**	**33,107**	**33,603**
Operating Margin	20.9%	22.1%	21.9%	21.9%	21.9%	21.9%	21.9%	21.9%	21.9%	21.9%	21.9%
Interest Income, net	(4,254)	(4,172)	(4,247)	(4,323)	(4,401)	(4,467)	(4,534)	(4,602)	(4,671)	(4,741)	(4,812)
Interest % of Sales	-3.2%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%
Taxes	4,865	5,288	5,336	5,432	5,529	5,612	5,697	5,782	5,869	5,957	6,046
Tax Rate	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%
Net Income	**17,791**	**19,381**	**19,561**	**20,433**	**20,801**	**21,113**	**21,430**	**21,751**	**22,078**	**22,409**	**22,745**
% Growth		8.9%	0.9%	4.5%	1.8%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Add Depreciation/Amort	17,591	17,802	18,122	18,449	18,781	18,527	18,805	18,353	18,629	18,908	19,192
% of Sales	13.4%	13.4%	13.4%	13.4%	13.4%	13.0%	13.0%	12.5%	12.5%	12.5%	12.5%
Plus/(minus) Changes WC	(417)	(52)	(79)	(81)	(82)	(83)	(85)	(86)	(87)	(89)	(90)
% of Sales	-0.3%	0.0%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%
Subtract Cap Ex	17,948	18,633	18,969	19,310	19,658	18,527	18,805	18,353	18,629	18,908	19,192
Capex % of sales	13.6%	14.0%	14.0%	14.0%	14.0%	13.0%	13.0%	12.5%	12.5%	12.5%	12.5%
Free Cash Flow	**17,017**	**18,497**	**18,635**	**19,491**	**19,842**	**21,030**	**21,345**	**21,665**	**21,990**	**22,320**	**22,655**
% Growth		8.7%	0.7%	4.6%	1.8%	6.0%	1.5%	1.5%	1.5%	1.5%	1.5%
NPV of Cash Flows	**126,508**	54%									
NPV of terminal value	**109,934**	46%								**Terminal Value**	**278,726**
Projected Equity Value	**236,442**	100%									
Free Cash Flow Yield	**7.11%**									**Free Cash Yield**	**8.13%**
Current P/E	**13.4**	**12.3**	**12.2**							**Terminal P/E**	**12.3**
Projected P/E	*13.3*	*12.2*	*12.1*								
Current EV/EBITDA	**7.8**	**7.4**	**7.3**							**Terminal EV/EBITDA**	**7.4**
Projected EV/EBITDA	*7.7*	*7.3*	*7.2*								
Shares Outstanding	**4,132**										
Current Price	**$ 57.89**										
Implied equity value/share	**$ 57.22**										
Upside/(Downside) to DCF	**-1.2%**										
Debt	**113,063**	short term plus long term									
Cash	**3,416**	cash plus short term securities									
Cash/share	**0.83**										

Verizon Stock Price Valuation			
Sensitivity Matrix			
Scenario	**Discount Rate**	**Terminal Growth Rate**	**Stock Price**
1	9.75%	1.50%	$ 57.22
2	9.75%	2.00%	$ 60.19
3	9.25%	1.25%	$ 59.62
4	10.00%	1.00%	$ 53.42
		Average	$ 57.61

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