## PGDM, 2017-19 Financial Statement Analysis DM-312 /IB-308

Trimester -III, End-Term Examination: March 2018

Time allowed: 1 Hrs 15 Min

Max Marks: 25

Roll No:

Instruction: Students are required to write Roll No on every page of the question paper, writing anything except the Roll No will be treated as **Unfair Means**. All other instructions on the reverse of Admit Card should be followed meticulously. Please carry a non-programmable calculator.

#### Case:

Please refer the enclosed case AT & T Versus Verizon – A Financial Comparison. Please attempt the following questions after carefully reading the case.

#### Questions:

- 1. What trends do you see in the overall wireless and wireline industry? Will wireline communication networks eventually disappear? Describe the overall strategy for each firm and what you expect to see going forward. (3 marks)
- 2. For each company, consider the financial results and provide a margin analysis. What themes are being played out for either or both companies? Please describe them. (3 marks)
- 3. Please describe any adjustments you would make, while considering the data. (2 marks)
- 4. Create a recognizable balance sheet for each company showing net operating assets. Next, create a separate table showing net working capital and net working capital ratios for each of the respective line items. (4 marks)
- Has either, or both companies been reinvesting in its business? Please provide your evidence.
   marks)
- 6. Provide a set of modified DuPont ratios for each firm. What is each firm's return from financial leverage and operating leverage? Assume the pre-tax cost of short-term borrowing is 2% and the marginal corporate tax rate is 40%. (4 marks)
- 7. For each firm, what is the trend in postpaid wireless subscribers and total wireless subscribers? What is the trend in average revenue per user (ARPU), as well as EBIT and EBITDA margins? (3 marks)
- 8. What are the driving factors behind each firm's wireless and wireline performance? Explain the likely relationships. (3 marks)



# BRIEF CASES

9-917-543

V.G. NARAYANAN JOEL L. HEILPRIN

# AT&T Versus Verizon: A Financial Comparison

In February 2015, Diane Tagert, a first-year associate with Danagger Capital Management, was covering the communications industry. In her first assignment, she was asked to prepare a report that compared the financial and operating performances of AT&T and Verizon. Although both firms had wireless and wireline businesses offering voice, data, and video solutions, they had experienced widely divergent results. See Exhibits 1A, 1B, 2A, and 2B for AT&T's and Verizon's respective income statements and balance sheets. Tagert felt she needed to understand the root cause of these differences to provide a report that could be incorporated into an actionable investment thesis.

## **Communication Industry Overview**

Over the past two decades, the communications industry had evolved from a set of fragmented technologies, sectors, and firms that employed discrete platforms for delivering voice, data, and video into a converged industry that could deliver multiple forms of communication on a single platform. Numerous technologies could achieve these goals, but the most salient point of differentiation was whether the platform was wireless or wireline.

#### Wireless Sector

The wireless communications industry had been intensely competitive and was evolving quickly. Most wireless providers had migrated from 3G to 4G networks, which allowed them to maximize the density of their spectrum. As they did so, they improved capacity and efficiency and decreased their costs. The resulting improvements had catalyzed the steady move toward 4G devices among consumers. Smartphones represented most new phone activations in the United States, while tablets, navigation, and monitoring devices had continued their rapid market penetration.

The technological evolution had also ushered in changes in customer and competitor behavior. Most industry observers believed the continued convergence of voice, data, and video on wireless

<sup>&</sup>lt;sup>a</sup>Wireless spectrum refers to the radio frequency bands resulting from electromagnetic radiation. Due to interference, no two stations can occupy the same frequency within the same geographic area at the same time.

HBS Professor V.G. Narayanan and Joel L. Heilprin, Professor at Hult International Business School, prepared this case. This case was developed from published sources. Brief Cases are developed solely as a basis for class discussion and not as an endorsement, a source of primary data, or an illustration of effective or ineffective management. Although based on real events and despite occasional references to actual companies, this case is fictitious and any resemblance to actual persons or entities is coincidents.

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platforms represented the next catalyst for industry growth. Providers had responded by bundling services to attract and retain customers. At the same time, the proliferation of internet-enabled products had shifted most customers away from buying subsidized phones that locked them into long-term service contracts? Most customers were buying handsets on an installment basis, which allowed them to upgrade their phones more frequently, incur lower monthly service charges, and eliminate service contracts. To discourage customers from dropping their service, providers required customers to pay the outstanding equipment balance in full if they switched phone companies. The shift from subsidized devices toward installment plans had also shifted providers' revenue models. In the past, carriers had often used equipment as a loss leader and instead maximized service revenues and margins. As customers shifted toward installment plans, however, service revenues and margins had decreased, while equipment revenues and margins had increased.<sup>3</sup>

Ninety-four percent of the U.S. population lived in an area with at least four providers.<sup>4</sup> Apple, Google, Microsoft, and Skype, as well as regional and bulk resellers, enabled customers to make wireless calls.<sup>5</sup> Most competition focused on price, network coverage, reliability, customer service, and the availability of new products and services.<sup>6</sup> Network utilization and spectrum efficiency were key competitive drivers.

#### Wireline Sector

Wireline networks provided voice, data, and video services to consumers, large and small enterprises, and other carriers on a wholesale basis. Legacy circuit-switched networks had continued to decline as more customers cut the cord, opting for wireless service or Voice over Internet Protocol (VoIP) and data services using cable or fiber optics. The growth of mobile platforms did not mean, however, that fixed networks would be extinct. Most of a packet's journey was made over a wire; only the transmission between the device and a cell tower or WiFi router was wireless.

Like in the wireless sector, trends in customer and carrier behavior were intertwined with advances in technology. These advances had improved network capacity, decreasing the marginal cost of moving a packet from point A to point B. In turn, improved efficiency and lower costs made new products and services available. This pattern was most evident in the movement toward IP-based data and video, where streaming entertainment services and use of cloud-based applications had become more popular. In addition, the movement toward IP-based networks changed the competitive dynamic. In most markets, network providers competed on the pricing of bundled services as well as on broadband capacity and reliability.<sup>7</sup>

## Net Neutrality

On February 26, 2015, the Federal Communications Commission (FCC) reclassified internet broadband services as telecommunications services. The ruling favored net neutrality, meaning that network providers of fixed broadband could not employ differential pricing or service quality based on application, site, user, or content. Traffic over fixed networks must be handled on a first-come, first-served basis. The ruling mandated the following: (i) internet broadband providers could not block

b Wireline, or landline, is physical wire or cable that connects two endpoints in a communications network. The term is synonymous with traditional telephony using twisted pairs of copper wire.

<sup>&</sup>lt;sup>c</sup> Legacy circuit-switched networks using twist pair refers to the traditional means of establishing a telecommunications channel using copper wires. This type of networking establishes a single physical connection between two endpoints that remains for the duration of a call.

d Packets are units of data that are encoded based on internet protocol (IP) and travel along a network. Data packets contain raw information as well as routing information and certain types of metadata.

access to lawful content, services, applications, (ii) internet broadband providers could not discriminate, or throttle, the transmission of network traffic, (iii) broadband providers could not offer paid prioritization of traffic, and (iv) fixed broadband providers had to be transparent about how they managed their networks.8

# Overview of AT&T9

AT&T was a communications network provider. It offered consumers and businesses wireless, wireline, broadband data, and video services along with managed networking and wholesale services. AT&T was organized into two operating units: wireless and wireline. Its wireless business covered every major metropolitan area within the United States, and through roaming agreements, many foreign countries. The wireline segment was the incumbent local exchange carrier (ILEC) in 21 states with retail and wholesale operations.<sup>e</sup>

#### Wireless Sector

AT&T's wireless networks covered 300 million people, and the company's total subscriber base had grown from 85.1 million at the end of 2009 to 120.6 million at the end of 2014. (See Exhibit 1C for data on AT&T's wireless business.) Its most important segment of customers—postpaid subscribers, who usually had a contract and switched carriers less frequently—had grown by a compound annual rate of only 3.3% over the same period. Tagert believed this had led to a less favorable customer mix by decreasing average revenue per user (ARPU). She also noted that AT&T had mentioned spectrum constraints in its public filings. To ameliorate these constraints, AT&T planned to free up spectrum by migrating its 2G customers to the faster 3G and 4G networks.

On the expense side, AT&T's increased equipment sales and continued penetration of smartphones had resulted in a \$2.67 billion increase in the cost of goods sold (COGS), reflected in operations and support expense. Higher network maintenance, energy, and lease expenses had increased the systems costs by another \$578 million. Selling, general, and administrative (SG&A) expenses had also increased by \$1.1 billion due to higher marketing and customer retention costs, bad debt expense, and higher professional service costs. Tagert believed the confluence of customer mix, ARPU, network constraints, and increasing costs had caused AT&T's wireless operating margins to shrink by 2.5% from 2013.

# Wireline Sector

AT&T's wireline business provided traditional and IP-based voice connections, as well as broadband and video services to consumer and wholesale markets. Traditional circuit-switched voice services had been in decline as customers migrated to wireless and VoIP solutions. (See Exhibit 1D for data on AT&T's wireline business.) To stem the tide, AT&T's management adopted a bundled services strategy that combined broadband internet and video over its U-verse network along with wireless services. Tagert noticed that both U-verse offerings had enjoyed steady customer growth; according to the company's management, advanced IP-data services represented 35% of wireline revenue. She wondered whether these services could fill the hole left by the decline in circuit-switched business.

<sup>&</sup>lt;sup>e</sup> Incumbent local exchange carriers are the local, or regional, telephone companies that had a monopoly on providing telecom services prior to the industry opening to competition. In the United States, these companies were the Regional Bell Operating Companies (RBOCs) that began operating when AT&T was divested into separate entities.

f Note the company does not break out the cost of goods sold independently from the cost of service revenue or other operating

The broadband, video, and VoIP offered through U-verse had shown consistently high growth for several years. U-verse was available in more than 57 million locations by the end of 2014. However, operating margins for the wireline segment had fallen since 2010, and U-verse content costs had increased by \$621 million in 2014. Tagert also believed that many of the company's business customers who had discontinued traditional voice and data services that had moved to competitors' networks.

Finally, there was some uncertainty surrounding U-verse video services, which were regulated as a TV service. Numerous municipalities and cable companies had petitioned to have U-verse regulated as a cable service. This classification would affect how AT&T provisioned public, educational, and governmental programming. According to AT&T's management, there could be a material adverse effect on the cost and extent of U-verse's offerings if the petitioners were successful.

## Recent Acquisitions

- In July 2013, AT&T had agreed to acquire Leap Wireless, a prepaid wireless provider operating
  under the Cricket brand name. The transaction was valued at \$1.26 billion, plus a contingent
  payment from the sale of 700 MHz spectrum in the Chicago market. Leap had a CDMA network
  covering approximately 96 million people and an LTE network covering an additional 21 million
  people. It had 4.5 million subscribers.
- In September 2013, AT&T had agreed to acquire Atlantic Tele-Network for \$806 million in cash.
   Atlantic Tele-Network had 550,000 wireless subscribers.
- In December 2013, AT&T had consummated a transaction with Crown Castle International for 9,675 cell towers. The transaction was valued at \$4.8 billion, and AT&T had agreed to lease the towers at market rates for an average of 10 years. As the leases expired, Crown Castle would have the option to purchase the towers. The approximate value of the purchase options was \$4.2 billion.
- In May 2014, AT&T agreed to purchase DIRECTV for a combination of cash and stock that valued DIRECTV at \$48.5 billion. The transaction was expected to close during the first half of 2015. DIRECTV had 20 million digital TV subscribers in the United States and an additional 18 million subscribers in Latin America. Within three years of closing, AT&T expected to realize \$1.6 billion in annual synergies from increased video scale.
- In January 2015, AT&T had completed the acquisition of GSF Telecom. The transaction was valued
  at \$2.5 billion, less net debt of \$700 million. GSF was a wireless provider operating in Mexico, with
  a network covering approximately 70% of the country's 120 million people.
- In January 2015, AT&T had also entered an agreement to purchase Nextel Mexico from NII for approximately \$1.88 billion. Nextel Mexico had 3.0 million subscribers.

# Overview of Verizon Communications<sup>10</sup>

Verizon Communications was a communications network provider that serviced businesses, governments, and consumers with voice, data, and video solutions using wireless and wireline networks. Its wireless network was available in over 500 markets, covering 98% of the U.S. population. It was the largest wireless provider in the United States in terms of revenue and customers. The company's wireline business offered voice, data, and video, as well as data center, networking, cloud, and security services to businesses, consumers, government, and other carriers. In 2014, Verizon was the second-largest ILEC in the United States, with operating revenue of \$38.4 billion.

### Wireless Sector

Verizon Wireless was the largest wireless provider in the United States in terms of revenue. It offered voice, data, and video services nationwide to more than 108 million customers. The business had been organized as a joint venture, with Vodafone of the United Kingdom owning 45% of the unit. However, in September 2013, Verizon had agreed to purchase Vodafone's interest for \$130 billion. That transaction closed in February 2014.

Verizon Wireless's 108.2 million subscriber base comprised 102 million postpaid users and 6.1 million prepaid customers. (See Exhibit 2C for data on Verizon's wireless business.) Further, Tagert noticed that although the compound annual growth in total subscribers was only 2.3%, the growth in postpaid subscribers was 4.9%. In contrast, Verizon's base of prepaid users had declined by 17.5%. She viewed the shifting customer mix as favorable. In the most recent 10-K filing, management had cited growth in 4G smartphones and tablets and growth in connections per postpaid account as service revenue drivers. (Table A below shows this growth.)

Table A Growth in Revenue and Postpaid Accounts for Verizon, 2009-2014

	2009	2010	2011	2012	2013	2014	
Average Monthly Revenue Per Postpaid Account (\$)	NA	125.75	134,51	144.04	153.93	159.86	
Postpaid Accounts (000s)	NA	34,268	34,561	35,057	35,083	35,616	

Source: Verizon Communications, Inc. December 31, 2014 10-K, filed February 23, 2015.

The shift away from subsidized sales and toward installment sales had affected Verizon. According to Verizon's management, the \$5.3 billion increase in the cost of services and sales was driven primarily by increases in device sales and unit costs. Tagert saw that a shift in operating costs had occurred. Selling, general, and administrative costs as a percent of operating revenue had decreased, and the percentage costs of service revenue had increased. She also noted the segment operating margin had decreased.

#### Wireline Sector

Like AT&T, Verizon's wireline business offered voice, data, and video services, as well as networking, data center, security, and cloud-based solutions. Its wireline business had suffered, as customers had moved away from traditional voice and circuit-switched services. The number of circuit-switched connections had decreased steadily, leading to a decrease in revenue. (See Exhibit 2D for data on Verizon's wireline business.) To counter these trends, Verizon's management had focused on higher growth and margin businesses such as wireless and IP-based wireline services including broadband, video, network management, and cloud-based services. It had also reduced its wireline footprint. In 2010 and 2015, it shed much of its ILEC business to Frontier Communications in successive transactions. (See recent acquisitions below.)

Again, like AT&T, Verizon's IP-based broadband and video services had improved this segment's results. Verizon's FiOS internet and video services had grown over 15% on a compound annual basis over the preceding five years, and the company's most recent 10-K filing noted that these services had constituted 76% of wireline consumer retail revenue by the end of 2014. At that time, FiOS services were available to nearly 20 million premises, and internet and video services had penetration rates of 41.1% and 35.8%, respectively. Management believed the company's passive optical network technology would continue to be a catalyst for growth as consumers demanded more bandwidth for applications like streaming video, which would require more symmetric services for cloud-based storage and solutions. Nonetheless, Tagert noticed the global enterprise and wholesale segments had

declined in recent years, and wondered about competition and margins in those segments. She noted management's comment that the recent declines in the cost of services and selling, general, and administrative expenses were due mainly to a reduction in headcount.

#### Recent Transactions

- In July 2010, Verizon completed the spinoff of its ILEC businesses in 14 states to Frontier Communications. Verizon shareholders received approximately \$8.6 billion, of which \$5.3 billion
- In April 2011, Verizon acquired Terremark Worldwide for approximately \$1.3 billion. Terremark
  was a global provider of IT and cloud-based services with a focus on the government market.
- In June 2012, Verizon acquired Hughes Telematics for \$600 million. Telematics was used for vehicular information, tracking, and control.
- In February 2014, Verizon completed the acquisition of Vodafone PLC's 45% interest in Verizon Wireless for cash, stock, and other consideration totaling approximately \$130.0 billion.
- In February 2015, Verizon sold its ILEC businesses in California, Texas, and Florida to Frontier Communications for approximately \$10.5 billion. Frontier agreed to acquire the associated FiOS customers, which included 1.5 million internet and 1.2 million video customers. The business units sold generated approximately \$5.4 billion of revenue.
- In February 2015, American Tower agreed to pay Verizon \$5.0 billion upfront, and received the
  right to operate and lease 11,300 cell towers for 28 years. Verizon agreed to lease the towers at
  market rates for 10 years.

## **Understanding Historical Performance**

Tagert also noticed both firms had large, highly-unionized workforces with substantial benefit obligations to retirees. These obligations came with significant actuarial gains and losses. This meant changes in assumptions related to the returns on plan assets (among other things) could have a significant impact on operating results, as these non-cash gains and losses flowed through the income statement. It also meant she needed to decide how to handle these benefit obligations in her analysis. Table B shows the non-cash gains and losses that affected operating income for AT&T and Verizon.

Table B Non-Cash Actuarial Gains and Losses at AT&T and Verizon, 2009–2014 (\$ millions)

	2009	2010	2011	2012	2013	2014
AT&T	(215)	(2,521)	(6,280)	(9,994)	7,584	(7,869)
Verizon	(2,964)	(3,988)	(7,426)	(8,198)	5,052	(8,130)

Sources: AT&T, Inc. December 31, 2014 10-K, filed February 20, 2015 and Verizon Communications, Inc. December 31, 2014 10-K, filed February 23, 2015.

Tagert felt the past could provide insight about how each firm got to its respective position and how these positions might influence each firm's future. She decided she needed to understand each firm's operating performance, investment in operations, free cash flow generation, and operating efficiency.

# Exhibit 1A AT&T Income Statements

Operating Results (\$ millions):	2010	2011	2012	2013	2014
Total Operating Revenue	124,280	126,723	127,434	128,752	132,447
Less: Cost of Services (Excluding Depreciation)	52,379	57,374	55,228	51,464	60,611
Less: Selling, General & Administrative	32,864	38,844	41,066	28,414	39,697
Less: Impairment & Other Charges	85	2,910	0	0	2,120
EBITDA	38,952	27,595	31,140	48,874	30,019
Less: Depreciation & Amortization	19,379	18,377	18,143	18,395	18,273
EBIT	19,573	9,218	12,997	30,479	11,746
Less: Interest Expense	2,994	3,535	3,444	3,940	3,613
Plus: Equity in Net Income of Affiliates	762	784	752	642	175
Plus: Other Income <sup>a</sup>	1,676	249	134	596	1,652
EBT	19,017	6,716	10,439	27,777	9,960
Less: Taxes	(1,162)	2,532	2,900	9,224	3,442
Net Income	20,179	4,184	7,539	18,553	6,518
Less: Income Attributable to Minority Interest	315	240	275	304	294
Net Income Attributable to AT&T Shareholders	19,864	3,944	7,264	18.249	6,224

<sup>&</sup>lt;sup>a</sup> Other income for 2010 includes \$779 million of income from discontinued operations. Source: Adapted from Company 10-Ks.

### Exhibit 1B AT&T Balance Sheets

Assets (\$ millions):	2009	2010	2011	2012	2013	2014
Cash & Cash Equivalents	3,741	1,437	3,045	4,868	3,339	8,603
Accounts Receivable	14,845	13,610	13,231	12,657	12,918	14,527
Prepaid Expenses	1,562	1,458	1,102	1,035	960	831
Deferred Taxes	1,247	1,170	1,470	1,036	1,199	1,142
Other Current Assets	3,792	2,276	4,137	3,110	4,780	6,925
Total Current Assets	25,187	19,951	22,985	22,706	23,196	32,028
Property, Plant & Equipment	99,519	103,196	107,087	109,767	110,968	112,898
Licenses	48,741	50,372	51,374	52,352	56,433	60,824
Goodwill & Other Intangibles	78,276	79,041	76,054	74,805	75,052	75,831
Customer Lists	7,393	4,708	2,757	1,391	. 0	0
Investments in Affiliates	2,921	4,515	3,718	4,581	3,860	250
Other Assets	6,275	6,705	6,467	6,713	8,278	10,998
Total Assets	268,312	268,488	270,442	272,315	277,787	292,829
Liabilities & Owners' Equity (\$ millions):						
Accounts Payable & Accrued Liabilities	21,260	20,055	19,956	20,911	21,107	23,592
Prepaid Revenue & Customer Deposits	4,170	4,086	3,872	3,808	4,212	4,105
Deferred Taxes	1,681	72	1,003	1,026	1,774	1,091
Dividends Payable	2,479	2,542	2,608	2,556	2,404	2,438
Current Portion of Long-Term Debt	7,361	7,196	3,453	3,486	5,498	6,056
Total Current Liabilities	36,951	33,951	30,892	31,787	34,995	37,282
Long-Term Debt	64,720	58,971	61,300	66,358	69,290	76,011
Post-Retirement Obligations	27,847	28,803	34,011	41,392	29,946	37,079
Deferred Taxes	23,579	22,070	25,748	28,491	36,308	37,544
Other Long-Term Liabilities	13,226	12,743	12,694	11,592	15,766	17,989
Total Owners' Equity	101,989	111,950	105,797	92,695	91,482	86,924
Total Liabilities & Owners' Equity	268,312	268,488	270,442	272,315	277,787	292,829

Source: Adapted from Company 10-Ks.

Exhibit 1C AT&T Wireless Segment Data

Wireless Operating Results (\$ millions).a	2009	2010	2011	2012	2013	2014
Service Revenue	48,563	53,510	56,726	59,186	***************************************	
Equipment Revenue	4,941	4,990	6,486		61,552	61,032
Total Segment Operating Revenue	53,504	58,500	63,212	7,577	8,347	12,960
Less: Operations & Support Expense	33,631	36,746	41,581	66,763 43,296	69,899 44,508	73,992
Less: Depreciation & Amortization	6,043	6,497	6,324	6,873		48,924
Total Segment Operating Income	13,830	15,257	15,307	16,594	7,468	7,941
Plus: Net Income (Loss) in Affiliates	9	9	(29)		17,923	17,127
Total Wireless Segment Income	13,839	15,266	15,278	16,532	( <u>75)</u> 17,848	(112) 17,015
Wireless Subscribers (000s):	2009	2010	2011	2012	2013	2014
Postpaid	64,627	68,041	69,309	70,497	72,638	75,931
Prepaid	5,350	6,524	7,225	7,328	7,384	10,986
Resellers	10,439	11,645	13,644	14,875	14,028	13,855
Connected Devices	4,704	9,326	13,069	14,257	16,326	19,782
Total Wireless Subscribers	85,120	95,536	103,247	106,957	110,376	120,554
Net Wireless Additions (000s):			41.00		224,070	ALUJUATE.
Postpaid	4,199	2,153	1.429	1,438	1,776	3,290
Prepaid	(801)	952	674	128	(13)	(775)
Reseller	1,803	1,140	1,874	1,027	(1,074)	(346)
Connected Devices	2,077	4,608	3,722	1,171	2,032	3,439
Total Net Wireless Additions	7,278	8,853	7,699	3,764	2,721	5,608
Total Churn Rate	1.47%	1.31%	1.37%	1.35%	1.37%	1.45%
Postpaid Churn Rate	1.13%	1.09%	1.18%	1.09%	1.06%	1.04%

<sup>&</sup>lt;sup>a</sup> Segment results are not of actuarial gains and losses from post-retirement benefits. Source: Adapted from Company 10-Ks.

# Exhibit 1D AT&T Wireline Segment Data

Service Revenue Equipment Revenue	NA		2011	2012	2013	2014
Equipment Revenue	1477	NA	NA	58,271	57,700	57,405
	NA	NA	NA	1,302	1,114	1,020
Total Segment Operating Revenue	63,621	61,300	59,765	59,573	58,814	58,425
Less: Operations & Support Expense	42,439	41,096	40,879	41,207	41,638	42,471
Less: Depreciation & Amortization	12,743	12,371	11,615	11,123	10,907	10,323
Total Segment Operating Income	8,439	7,833	7,271	7,243	6,269	5,631
Plus: Equity in Income (Loss) of Affiliates	17	11	0	(1)	2	0,001
Total Wireline Segment Income	8,456	7,844	7,271	7,242	6,271	5,631
Wireline Broadband Connections (000s):	2009	2010	2011	2012	2013	2014
U-verse High Speed Internet	NA	NA	NA	7,717	10,375	
DSL & Other Broadband Connections	NA	NA	NA	8,673	6,050	12,205
<b>Total Wireline Broadband Connections</b>	15,789	16,309	16,427	16,390	16,425	3,823 16,028
Wireline Video Connections (000s):					- 1	
U-verse Video Connections	2,065	2,987	3,791	4,536	5,460	5,943
Wireline Voice Connections (000s):						
Consumer Switched Access	26,378	22,515	18,954	15,707	12,403	0.232
Business Switched Access	18,486	17,006	15,613	11,483		9,243
Wholesale Switched Access	2,590	2,300	2,120		10,363	8,939
Total Switched Access Lines	47,454	41,821	36,687	1,776 28,966	1,627 24,393	1,514 19,696
U-verse VoIP Connections	NA	NA	NA	2,905	3,849	
Total Wireline Voice Connections	47,454	41,821	36,687	31,871	28,242	4,759 24,455

<sup>\*</sup> Segment results are net of actuarial gains and losses from post-retirement benefits. Source: Adapted from Company 10-Ks.

Exhibit 2A Verizon Income Statements

Operating Results (5 millions):	2000	2010	2012	2013	2014
Total/Openiang Revenue	106,565	110,875	115,646	120,550	127,079
Less: Cost of Services (Excluding Depreciation)	44,149	45,875	46,275	44,887	49,931
Less: Selling, General & Administrative	31,366	35,624	39,951	27,089	41,016
EBITDA	31,050	29,376	29,620	48,574	36,132
Less: Depreciation & Amortization	16,405	16.496	16,460	NO 1806	16533
ERIL	14,645	12,880	13,160	31,968	19,599
Less: Interest Expense	2,523	2,827	2,571	2.667	4.915
Plus: Equity in Net Income of Affiliates	508	444	324	142	1,780
Plus: Other Income (Expense)	54	(14)	(1,016)	(166)	(1,194)
EBT	12,684	10,483	9,897	29,277	15,270
Less: Taxes	2,467	285	(660)	5,730	3,314
Net Income	10,217	10,198	10,557	23,547	11,956
Less: Income Attributable to Noncontrolling Interest	7,668	7,794	9,682	12,050	2,331
Net Income Attributable to Verizon Shareholders	2,549	2,404	875	11,497	9,625

Source: Adapted from Company 10-Ks.

Exhibit 2B Verizon Balance Sheets

Assets (\$ millions):	2009	2010	2011	2012	2013	2014	1
Cash & Cash Equivalents	2,009	6,668	13,362	3,093	53,528	10,598	,
Short-Term Investments	490	545	592	470	601	555	
Accounts Receivable	12,573	11,781	11,776	12,576	12,439	13,993	
Inventory	1,426	1,131	940	1,075	1,020	1,153	
Prepaid Expenses & Other Current Assets	5,247	2,223	4,269	4,021	3,406	3,324	
Total Current Assets	21,745	22,348	30,939	21,235	70,994	29,623	
Property, Plant & Equipment	91,985	87,711	88,434	88,642	88,956	89,947	
Wireless Licenses	72,067	72,996	73,250	77,744	75,747	75,341	
Goodwill & Other Intangibles	29,236	27,818	29,235	30,072	30,434	30,367	
Investments in Unconsolidated Businesses	3,118	3,497	3,448	3,401	3,432	802	
Other Assets	8,756	5,635	5,155	4,128	4,535	6,628	
Total Assets	226,907	220,005	230,461	225,222	274,098	232,708	
Liabilities & Owners' Equity (\$ millions):							
Accounts Payable & Accrued Liabilities	15,223	15,702	14,689	16,182	16,453	16,680	
Other Current Liabilities	6,708	7,353	11,223	6,405	6,664	8,649	
Current Portion of Long-Term Debt	7,205	7,542	4,849	4,369	3,933	2,735	
Total Current Liabilities	29,136	30,597	30,761	26,956	27,050	28,064	
Long-Term Debt	55,051	45,252	50,303	47,618	89,658	110,536	
Post-Retirement Obligations	32,622	28,164	32,957	34,346	27,682	33,280	
Deferred Taxes	19,190	22,818	25,060	24,667	28,639	41,578	
Other Long-Term Liabilities	6,765	6,262	5,472	6,092	5,653	5,574	
Total Equity Attributable to Shareholders	41,382	38,569	35,970	33,157	38,836	12,298	
Plus: Non-Controlling Interest	42,761	48,343	49,938	52,376	56,580	1,378	
Total Owners' Equity	84,143	86,912	85,908	85,533	95,416	13,676	
Total Liabilities & Owners' Equity	226,907	220,005	230,461	225,212	274,098	232,708	

Source: Adapted from Company 10-Ks.

Exhibit 2C Verizon Wireless Segment Data

Militar 20 College College						
Wireless Operating Results (\$ millions)a	2009	2010	2011	2012	2013	2014
Service Revenue	52,046	55,629	59,157	63,733	69,033	72,630
Equipment & Other Revenue	8,279	7,778	10,997	12,135	11,990	15,016
Total Segment Revenue	60,325	63,407	70,154	75,868	81,023	87,646
Less: Cost of Service Revenue	19,348	19,245	24,086	24,490	23,648	28,825
Less: Selling, General & Administrative	17,309	18,082	19,579	21,650	23,176	23,602
Less: Depreciation & Amortization	7,030	7,356	7,962	7,960	8,202	8,459
Segment Operating Income	16,638	18,724	18,527	21,768	25,997	26,760
Wireless Subscribers (000s).b	2009	2010	2011	2012	2013	2014
Postpaid	80,495	83,125	87,382	92,530	96,752	102,079
Prepaid	16,000	19,121	20,416	5,700	6,047	6,132
Total Wireless Subscribers	96,495	102,246	107,798	98,230	102,799	108,211
Net Wireless Additions (000s).c						
Postpaid	3,987	2,529	4,252	5,024	4,118	5,482
Prepaid	948	2,988	1,167	893	354	86
Total Net Wireless Additions	4,935	5,517	5,419	5,917	4,472	5,568
Fotal Churn Rate	1.41%	1.38%	1.26%	1.19%	1.27%	1.33%
Postpaid Churn Rate	1.07%	1.02%	0.95%	0.91%	0.97%	1.04%
Average Monthly Revenue Per Postpaid Account (\$)	NA	125.75	134.51	144.04	153.93	159.86
Postpaid Accounts (000s)	NA	34,268	34,561	35,057	35,083	35,616
Postpaid Connections Per Account	NA	2.43	2.53	2.64	2.76	2.87

<sup>&</sup>lt;sup>a</sup> Pension and other post-retirement benefits are excluded from segment results.

Source: Adapted from Company 2009 to 2014 10-Ks.

Exhibit 2D Verizon Wireline Segment Data

MILLOR MEN I CAMPONI LINE COMPANIE CONTRACTOR	7					
Wireline Operating Results (\$ millions)a	2009	2010	2011	2012	2013	2014
Consumer & Small Business	16,115	16,256	16,337	16,746	17,383	18,047
Global Enterprise	15,289	15,316	15,622	14,577	14,182	13,684
Global Wholesale	9,533	8,746	7,973	7,094	6,594	6,222
Other Revenue	1,514	909	750	528	465	476
Total Segment Revenue	42,451	41,227	40,682	38,945	38,624	38,429
ess: Cost of Services & Sales	22,693	22,618	22,158	21,657	21,396	21,332
ess: Selling, General & Administrative	9,947	9,372	9,107	8,860	8,571	8,180
ess: Depreciation & Amortization	8,238	8,469	8,458	8,424	8,327	7,882
Segment Operating Income	1,573	768	959	4	330	1,035
Vireline Broadband Connections (000s):	2009	2010	2011	2012	2013	2014
GOS Internet Subscribers	3,286	4,082	4,817	5,424	6,072	6,616
Circuit-Switched Broadband	4,874	4,310	3,853	3,371	2,943	2,589
Total Wireline Broadband Connections	8,160	8,392	8,670	8,795	9,015	9,205
iOS Video Subscribers	2,750	3,472	4,173	4,726	5,262	5,649
otal Voice Connections	28,323	26,001	24,137	22,503	21,085	19,795

<sup>&</sup>lt;sup>a</sup> Pension and other post-retirement benefits are excluded from segment results.

Source: Adapted from Company 2009 to 2014 10-Ks.

<sup>&</sup>lt;sup>b</sup> As of the end of the period.

<sup>&</sup>lt;sup>c</sup> Excludes acquisition adjustments.

## Endnotes

- <sup>1</sup> AT&T Inc, December 31, 2014 Form 10-K, filed February 20, 2015, accessed June 2017.
- 2 Ibid
- <sup>3</sup> Verizon Communications, Inc. December 31, 2014 Form 10-K. Filed February 23, 2015, accessed June 2017.
- 4 Ibid.
- 5 Ibid.
- 6 Ibid.
- 7 Ibid.

- 8 "FCC Adopts Strong, Sustainable Rules to Protect the Open Internet," Federal Communications Commission press release (Washington, DC, February, 26, 2015),
- http://transition.fcc.gov/Daily\_Releases/Daily\_Business/2015/db0226/DOC-332260A1.pdf, accessed May 2017.
- 9 All the references in the Overview of AT&T section come from AT&T Inc, December 31, 2014 Form 10-K, filed February 20, 2015, accessed June 2017.
- $^{10}$  All the references in the Overview of Verizon section come from Verizon Communications, Inc. December 31, 2014 Form 10-K, filed February 23, 2015, accessed June 2017.
- <sup>13</sup> AT&T Inc, December 31, 2014 Form 10-K, filed February 20, 2015, accessed June 2017 and Verizon Communications, Inc. December 31, 2014 Form 10-K, filed February 23, 2015, accessed June 2017.