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AT&T Inc. (T-US)

Diversified Telecommunication

- We reiterate our Buy rating on AT&T as positive Business Performance trends continue to accelerate driven by the ramp-up of its high-speed 5G network, and the continued leverage of its WarnerMedia acquisition.
- Strong domestic wireless results and positive contributions from the WarnerMedia acquisition are starting to drive a reacceleration in Business Performance.
- AT&T is beginning to see a reacceleration of growth.
- AT&T is best positioned to benefit from the upcoming global high-speed 5G network rollout.
- AT&T is further enhancing its competitive advantage through the rollout of its edge computing services.
- AT&T is well-positioned to target and leverage its broad user base to drive significant gains in advertising revenue.

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Company Note

AT&T Inc. (T-US)

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Research Action:

Reiterate rating

Rating: Strong Buy **Prior Rating:** Strong Buy Price 07/17/2019: \$33.26 52 Week High / \$34.37 \$26.80 Low:

Key Data: (TTM as of Mar-19) **Excess Cash per Share:** -\$0.17 \$2.04 **Annual Dividend: Dividend Yield:** 6.13% 25.6M Avg. Volume (30 Day): **Shares Outstanding:** 7,298.0M Float: 5.9M Short Interest: 99.0M SI % / Float 1676.88% **Equity MV:** \$242,731.5M Sales TTM: \$177,594.0M Beta: 1.02 EBITDAR: \$58,301.3M NOPAT: \$18,942.2M **Total Invested Capital:** \$462,941.2M Return on Capital: 4.58% **Cost of Capital:** 5.06% **Economic Profit:** (\$1,994.7)M Market Value Added: \$3,247.9M

Current Operations Value:

Future Growth Value:

\$374,578.6M

\$91,610.5M

- We reiterate our Buy rating on AT&T as positive Business Performance trends continue to accelerate driven by the ramp-up of its high-speed 5G network, and the continued leverage of its WarnerMedia acquisition. AT&T will benefit significantly from its acquisition of WarnerMedia, creating one of the media industry's largest and most dynamic companies. The merger of AT&T's powerful communications and distribution network with WarnerMedia's extensive content will grow a significant user base and increase revenue. AT&T is starting to leverage ownership of WarnerMedia with the launch of its DTC (Direct to Consumer) streaming service, HBO Max, in the spring of 2020. AT&T's launch of its new advertising business. Xandr. will better target and increase the effectiveness of advertising on its multiple platforms. AT&T's extensive 5G network rollout will drive increasing connectivity on its platform for the Internet of Things (IoT) including the connected car and the connected home, along with home monitoring and security. AT&T is also focused on deleveraging its balance sheet and paying down the \$40 billion in debt used to acquire Time Warner. AT&T's reacceleration of Business Performance will drive higher Returns on Capital (ROC), increasing Economic Profit, and gains in shareholder value creation. AT&T also has a current dividend yield of 6.13%. We believe significant upside exists from current levels and continue to recommend purchase.
- Strong domestic wireless results and positive contributions from the WarnerMedia acquisition are starting to drive a reacceleration in Business Performance. For the 12 months ending March 2019, Net Sales Revenue increased 11.54% Y/Y from \$159.22 billion to \$177.59 billion. We forecast a further increase of 3.3% to \$183.42 billion over the NTM. Economic Operating Cash Flow (EBITDAR) increased 10.54% Y/Y from \$52.74 billion to \$58.30 billion over the LTM. We forecast a further increase of 4.7% to \$61.02 billion over the NTM. Net Operating Profit After Tax (NOPAT) increased 17.25% from \$16.16 billion to \$18.94 billion over the LTM. We forecast a further increase of 17.31% to \$22.22 billion over the NTM. Return on Capital ROC increased slightly from 4.56% to 4.58% over the LTM. We forecast an increase to 4.68% over the NTM. While Economic Profit remains negative, as AT&T ramps up NOPAT growth and continues to pay down debt, Economic Profit should increase over time and will start to drive greater shareholder value creation.



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- AT&T is beginning to see a reacceleration of growth. AT&T reported strong Q1 results driven by growth in both its domestic wireless business and a positive contribution from its WarnerMedia acquisition. We believe AT&T's growth momentum is just beginning and the increasing cash flow will enable it to invest in key initiatives including the ongoing rollout of its 5G high-speed network, as well as deleveraging its balance sheet, which we believe will drive increasing shareholder value. AT&T is wellpositioned to benefit from the rollout of the global high-speed 5G telecommunications network that will dramatically change communications and data access. AT&T will further leverage its WarnerMedia acquisition with the launch of HBO Max, its DTC streaming service. in the spring of 2020 and is anticipated to premiere with over 10,000 hours of premium content. The service will include new deals from Warner Bros. Television, including all episodes of "Friends" which will be leaving Netflix (NFLX-US, Non-Rated), in addition to other exclusive TV and movie content. AT&T's extensive communication and distribution network should drive significant growth in HBO Max subscriptions, as well as help it drive wireless subscription growth by offering HBO Max as an incentive to join its network.
- AT&T is best positioned to benefit from the upcoming global highspeed 5G network rollout. AT&T is focusing on three components in its 5G framework: fixed wireless connectivity, mobile 5G, and edge computing. AT&T is designing its network to offer seamless integration of Wi-Fi, LTE, and 5G connectivity. AT&T is on track to offer a nationwide mobile 5G network by early 2020. AT&T will deploy a 5G network utilizing millimeter wave spectrum for deployment in dense pockets for suburban and rural networks and 5G on mid- and low-band spectrum for more populated urban areas. AT&T will focus on the continual evolution of its 5G ecosystem, offering significant enhancement in coverage and speed and across all types of devices. 5G communications will dramatically enhance IoT connectivity and include much-needed data speeds that will enable autonomous driving along with empowering infotainment systems in the connected car, as well as with the connected home, and with all types of mobile and fixed devices that will benefit from data communications over 400 times faster than the existing 4G network. Currently, AT&T is ahead of other carriers in the 5G rollout. AT&T announced several new partnerships that will boost the performance of its enterprise service offering as well. AT&T is working with China Mobile to help AT&T global business customers connect and deploy its IoT platform to the Chinese market.



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- AT&T is further enhancing its competitive advantage through the rollout of its edge computing services. AT&T's Multi-access Edge Compute (MEC) will leverage its 5G high-speed network and offer increased flexibility to better manage data traffic. MEC leverages a Software Defined Network (SDN) to drive low latency, high-bandwidth applications for greater access and speed for data processing. AT&T's edge computing creates a high-speed platform for IoT connectivity that will include applications for autonomous vehicles, drones, all types of robotics and will incorporate machine learning to better manage the interconnectivity of all parts of its network. AT&T has invested almost \$150 billion in its wireless and wireline networks over the past five years. including the acquisition of wireless spectrum. AT&T recently won the bidding for 24 GHz of spectrum in 383 partial economic areas for nationwide coverage of 254 MHz in the top ten U.S. markets. Currently, AT&T's wireless network covers more than 99% of the U.S. population. Its fiber network is one of the largest in the U.S., connecting more IoT devices than any other North American provider. AT&T's broad-spectrum in high key connectivity enables it to better support high-speed connectivity for video service, for accessing its WarnerMedia content and supporting its FirstNet first-responder network. In addition, AT&T also enhanced its LTE coverage and deploys Band 14 spectrum in more than 500 markets.
- AT&T is well-positioned to target and leverage its broad user base to drive significant gains in advertising revenue. AT&T launched Xandr, its targeted advertising business, together with its acquisition of AppNexus, and is applying Xandr's customer insights to Turner's ad inventory to better target potential customers and increase advertiser ROI. Xandr Media is the industry leader in addressable and audiencebased advertising. AppNexus operates the world's largest independent marketplace for digital advertising and provides cloud-hosted tools for ad buyers and media companies to manage media campaigns and spending. Xandr is better managing the ad inventories of Turner media and its mobility business, including all of AT&T's TV and over-the-top product platforms. Xandr Media has recently signed deals with Altice USA (ATUS-US, Non-Rated) and Frontier Communications (FTR-US, Non-Rated) to aggregate and sell their addressable TV inventory. These deals mark the beginning of AT&T's vision for Xandr and its ability to offer media from other content providers enhanced with AT&T's viewership data. AT&T believes Xandr will revolutionize the advertising business by targeting more relevant ads to consumers while simultaneously increasing profitability for media companies, as well as efficiency and better ROI for advertisers.



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AT&T Inc. (T-US)

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Investment Thesis

The upcoming domestic and international launch of the high-speed 5G network will drive increasing connectivity on AT&T's platform for the Internet of Things (IoT) including the connected car and the connected home, along with home monitoring and security. AT&T's position as the second-largest North American wireless communications provider and recently-acquired WarnerMedia assets have the potential to transform the company into one of the world's largest communications and media distribution companies. AT&T's launch of its new advertising business, Xandr, will better target and increase the effectiveness of advertising on its multiple platforms. AT&T's current yield of over 6% creates a significant income opportunity for patient investors as the company begins its new growth phase.

Company Overview

AT&T, Inc. (T-US) is one of the world's leading communications service providers offering a wide range of business and communications services that include wireless, local exchange and long-distance telecommunications services, data and broadband managed networks, Internet access, wholesale telecommunications service access, directory advertising and publishing, and cloud-hosted services. AT&T is the second-largest wireless services provider in North America. AT&T is also one of the world's largest provider of pay-TV services after having acquired satellite TV operator DirecTV in 2015. After its recent acquisition of WarnerMedia in 2018, it now adds extensive entertainment and news content to its distribution capabilities.

AT&T owns wireless spectrum licenses across the entire U.S. and all of its territories. AT&T also provides wireless and mobile broadband services in over 200 countries. AT&T markets direct to businesses and consumers, and also operates its own retail stores selling mobile communication equipment and DirecTV entertainment services. Upon the conclusion of the Time Warner acquisition in 2018, AT&T has reorganized its operating segments to reflect its current business lines.

AT&T operates and reports revenue in six Business Segments:

Communications: (85% of revenue) consists of three key business lines including Business Wireline, which provides communication services to over 3 million business customers, including multinational corporations, governments, and wholesale providers of communications services. The Entertainment Group which provides video, high-speed Internet, and communication services to U.S.-based residential customers.



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Mobility provides wireless services to consumer and wholesale subscribers throughout the U.S. and its territories.

WarnerMedia: (10% of revenue) provides entertainment services including Time Warner, Turner Broadcasting, Home Box Office, Warner Bros. Studios and also includes AT&T's Regional Sports Networks as part of its Turner division and Otter Media.

Latin America: (4% of revenue) provides wireless services in Mexico and Vrio Pay-TV Entertainment Services in Latin America. AT&T also owns 41% of subscription television service provider Sky Mexico.

Xandr: (1% of revenue) is AT&T's newly created advertising and analytics firm. Xandr provides targeted advertising and leverages AT&T's data insights and is focused on creating new capabilities for advertisers and publishers to better segment and reach specific audiences in subscription, trusted access, and premium content environments.

Acquisition-Related Items: (0% of revenue)

Consolidations: (0% of revenue)

AT&T reports its revenue in seven Geographic Regions: United States (91% of revenue); Brazil (2% of revenue); Europe (2% of revenue); Mexico (2% of revenue); Other Latin American (2% of revenue); Asia/Pacific Rim (1% of revenue); and Other (0% of revenue).



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Financial Data

Report Basis Reported Period Ending	LTM 03/31/2014	LTM 03/31/2015	LTM 03/31/2016	LTM 03/31/2017	LTM 03/31/2018	LTM 03/31/2019	NTM 03/31/2020	5 Yr Average	3 Yr Average	Current Trend
Net Sales Revenue	\$129,872.0	\$132,547.0	\$154,760.0	\$162,616.0	\$159,219.0	\$177,594.0	\$183,423.1	\$157,347.2	\$166,476.3	\$180,508.6
Sales Growth	2.29%	2.06%	16.76%	5.08%	-2.09%	11.54%	3.28%	6.67%	4.84%	7.41%
Sales Growth Trend	1.27%	2.15%	10.88%	9.75%	0.78%	6.09%	6.59%	5.93%	5.54%	6.34%
Economic Operating Cash Flow (EBITDAR)	\$44,271.0	\$42,089.9	\$52,852.0	\$55,034.5	\$52,740.1	\$58,301.3	\$61,016.2	\$52,203.5	\$55,358.6	\$59,658.7
EBITDAR Margin	34.09%	31.75%	34.15%	33.84%	33.12%	32.83%	33.27%	33.14%	33.27%	33.05%
EBITDAR Growth	1.50%	-4.93%	25.57%	4.13%	-4.17%	10.54%	4.66%	6.23%	3.50%	7.60%
Net Operating Profit Before Tax (NOPBT)	\$22,105.0	\$19,510.9	\$23,826.0	\$25,141.5	\$23,533.1	\$23,363.3	\$26,533.0	\$23,074.9	\$24,012.6	\$24,948.1
NOPBT Margin	17.02%	14.72%	15.40%	15.46%	14.78%	13.16%	14.47%	14.70%	14.47%	13.81%
NOPBT Growth	1.43%	-11.74%	22.12%	5.52%	-6.40%	-0.72%	13.57%	1.76%	-0.53%	6.42%
Cash Operating Income Tax	\$7,294.6	\$6,279.5	\$7,862.6	\$8,074.7	\$7,377.6	\$4,421.0	\$4,311.6	\$6,803.1	\$6,624.4	\$4,366.3
Economic Tax Effective Rate	33.00%	32.18%	33.00%	32.12%	31.35%	18.92%	16.25%	29.51%	27.46%	17.59%
Net Operating Profit After Tax (NOPAT)	\$14,810.3	\$13,231.4	\$15,963.4	\$17,066.8	\$16,155.5	\$18,942.2	\$22,221.4	\$16,271.9	\$17,388.2	\$20,581.8
NOPAT Margin	11.40%	9.98%	10.31%	10.50%	24.28%	10.67%	12.11%	13.15%	15.15%	11.39%
NOPAT Growth	-9.05%	-10.66%	20.65%	6.91%	-5.34%	17.25%	17.31%	5.76%	6.27%	17.28%
Cash & Equivalents	\$4,558.0	\$5,237.0	\$10,684.0	\$15,385.0	\$49,649.0	\$7,619.0	\$8,120.8	\$17,714.8	\$24,217.7	\$7,869.9
Total Assets	\$285,340.0	\$308,028.0	\$403,638.0	\$411,903.0	\$446,343.0	\$548,384.0	\$584,498.7	\$423,659.2	\$468,876.7	\$566,441.3
Non - Interest Bearing Liabilities (NIBLs)	\$111,705.0	\$122,030.0	\$145,775.0	\$150,661.0	\$133,147.0	\$152,906.0	\$162,975.9	\$140,903.8	\$145,571.3	\$157,940.9
Net Assets	\$173,172.0	\$185,393.0	\$256,890.0	\$260,102.0	\$312,040.0	\$385,639.0	\$411,035.8	\$280,012.8	\$319,260.3	\$398,337.4
Economic Asset Adjustments	\$50,131.8	\$57,368.6	\$78,336.7	\$81,903.1	\$59,861.2	\$77,302.2	\$82,393.0	\$70,954.3	\$73,022.2	\$79,847.6
Net Operating Assets	\$223,303.8	\$242,761.6	\$335,226.7	\$342,005.1	\$371,901.2	\$462,941.2	\$493,428.9	\$350,967.1	\$392,282.5	\$478,185.0
Debt & Debt Equivalents	\$101,820.8	\$123,878.6	\$156,620.7	\$159,563.1	\$185,876.2	\$221,122.2	\$235,684.5	\$169,412.1	\$188,853.8	\$228,403.4
Equity & Equivalents	\$90,906.0	\$86,499.0	\$123,432.0	\$123,841.0	\$145,920.0	\$185,112.0	\$197,302.8	\$132,960.8	\$151,624.3	\$191,207.4
Total Capital - Financing Sources	\$192,726.8	\$210,377.6	\$280,052.7	\$283,404.1	\$331,796.2	\$406,234.2	\$432,987.4	\$302,372.9	\$340,478.2	\$419,610.8
Capital Adjustments	\$28,187.0	\$29,943.0	\$52,219.0	\$55,589.0	\$37,031.0	\$52,985.0	\$56,474.4	\$45,553.4	\$48,535.0	\$54,729.7
Net Capital Financing Sources	\$220,913.8	\$240,320.6	\$332,271.7	\$338,993.1	\$368,827.2	\$459,219.2	\$489,461.8	\$347,926.3	\$389,013.2	\$474,340.5
Net Working Capital	(\$1,800.4)	\$2,961.4	\$3,155.0	\$4,439.8	\$33.9	\$3,354.7	\$3,575.6	\$2,789.0	\$2,609.5	\$3,465.2
Cost of Net Working Capital	(\$68.6)	\$30.8	\$144.1	\$204.6	\$124.3	\$85.7	\$91.3	\$117.9	\$138.2	\$88.5
% of Revenue	-0.05%	0.02%	0.09%	0.13%	0.08%	0.05%	0.05%	0.07%	0.08%	0.05%
Operational Capital	\$132,953.4	\$143,584.9	\$152,726.7	\$156,045.9	\$147,988.1	\$179,957.9	\$191,809.3	\$156,060.7	\$161,330.6	\$185,883.6
Cost of Operational Capital	\$7,515.8	\$7,331.5	\$6,982.4	\$8,318.8	\$8,449.5	\$8,292.0	\$8,838.1	\$7,874.8	\$8,353.4	\$8,565.1
% of Revenue	5.79%	5.53%	4.51%	5.12%	5.31%	4.67%	4.82%	5.03%	5.03%	4.74%
Productive Capital	\$268,772.4	\$300,908.9	\$377,812.7	\$377,916.9	\$367,105.1	\$488,965.9	\$521,167.5	\$382,541.9	\$411,329.3	\$505,066.7
Cost of Productive Capital	\$15,101.5	\$15, 103.2	\$15,993.6	\$20,360.5	\$20,705.0	\$21,645.5	\$23,071.0	\$18,761.6	\$20,903.7	\$22,358.3
% of Revenue	11.63%	11.39%	10.33%	12.52%	13.00%	12.19%	12.58%	11.89%	12.57%	12.38%
Total Operating Capital	\$225,239.4	\$244,151.9	\$332,280.7	\$334,750.9	\$330,213.1	\$464,201.9	\$494,772.6	\$341,119.7	\$376,388.6	\$479,487.2
Cost of Total Operating Capital	\$12,453.6	\$12,444.4	\$13,583.2	\$17,970.9	\$18,480.1	\$20,086.6	\$21,409.4	\$16,513.0	\$18,845.9	\$20,748.0
% of Revenue	9.59%	9.39%	8.78%	11.05%	11.61%	11.31%	11.67%	10.43%	11.32%	11.49%
Non - Operating Capital	(\$1,935.6)	(\$1,390.4)	\$2,946.0 \$36.7	\$7,254.2 \$274.8	\$41,688.1 \$1,360.2	(\$1,260.7) \$1,022.2	(\$1,343.7) \$1,089.5	\$9,847.4 \$521.1	\$15,893.9 \$885.7	(\$1,302.2) \$1,055.9
Cost of Non - Operating Capital % of Revenue	(\$102.0) -0.08%	(\$88.2) -0.07%	0.02%	0.17%	0.85%	0.58%	0.59%	0.31%	0.53%	0.58%
Total Capital	\$223,303.8	\$242,761.6	\$335,226.7	\$342,005.1	\$371,901.2	\$462,941.2	\$493,428.9	\$350,967.1	\$392,282.5	\$478,185.0
Cost of Total Capital	\$12,351.6	\$12,356.2	\$13,619.9	\$18,245.7	\$19,840.3	\$21,108.8	\$22,498.9	\$17,034.2	\$19,731.6	\$21,803.8
% of Revenue	9.51%	9.32%	8.80%	11.22%	12.46%	11.89%	12.27%	10.74%	11.86%	12.08%
Cost of Capital (WACC)	5.72%	5.30%	4.71%	5.39%	5.56%	5.06%	5.06%	5.20%	5.33%	5.06%
Capital Structure										
Debt & Debt Equivalents	\$101,820.8	\$123,878.6	\$156,620.7	\$159,563.1	\$185,876.2	\$221,122.2	\$235,684.5	\$169,412.1	\$188,853.8	\$228,403.4
Debt & Debt Equivalents % of Market Value	35.85%	42.22%	39.38%	38.47%	45.92%	49.19%	49.19%	43.21%	44.64%	49.19%
Preferred Equity	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Preferred Equity % of Market Value	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Market Value of Common Equity	\$182,188.6	\$169,551.5	\$241,130.5	\$255,182.2	\$218,945.7	\$228,444.7	\$243,489.3	\$222,650.9	\$234,190.9	\$235,967.0
Common Equity % of Mark et Value	64.15%	57.78%	60.62%	61.53%	54.08%	50.81%	50.81%	56.79%	55.36%	50.81%
Total Economic Market Value (MV)	\$284,009.4	\$293,430.0	\$397,751.2	\$414,745.4	\$404,821.8	\$449,566.9	\$479,173.8	\$392,063.1	\$423,044.7	\$464,370.4
Total %	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Excess Cash	(\$1,935.6)	(\$1,390.4)	\$2,946.0	\$7,254.2	\$41,688.1	(\$1,260.7)	(\$1,343.7)	\$9,847.4	\$15,893.9	(\$1,302.2)
Economic Enterprise Value	\$285,945.0	\$294,820.4	\$394,805.2	\$407,491.2	\$363,133.8	\$450,827.6	\$480,517.6	\$382,215.6	\$407,150.9	\$465,672.6
Average Capital	\$213,584.6	\$230,617.2	\$286,296.1	\$335,632.4	\$353,910.1	\$414,023.2	\$474,340.5	\$324,095.8	\$367,855.2	\$444,181.8
Capital Δ	\$14,658.4	\$19,406.8	\$91,951.1	\$6,721.5	\$29,834.0	\$90,392.0	\$30,242.6	\$47,661.1	\$42,315.8	\$60,317.3
Source: Company Data, Financial statements and Tigress F	Research									

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AT&T Inc. (T-US)

Diversified Telecommunication

Financial Analysis

Report Basis Reported Period Ending	LTM 03/31/2014	LTM 03/31/2015	LTM 03/31/2016	LTM 03/31/2017	LTM 03/31/2018	LTM 03/31/2019	NTM 03/31/2020	5 Yr	3 Yr	Current
Return on Market Value (NOPAT / MV)	5.21%	4.51%	4.01%	4.12%	3.99%	4.21%	4.49%	Average 4.17%	Average 4.11%	Trend. 4.35%
Return on Enterprise Value (NOPAT / EV)	5.18%	4.49%	4.04%	4.19%	4.45%	4.20%	4.48%	4.27%	4.28%	4.34%
Return on Capital (NOPAT / Average Capital)	6.93%	5.74%	5.58%	5.08%	4.56%	4.58%	4.68%	5.11%	4.74%	4.63%
Cost of Capital (WACC)	5.72%	5.30%	4.71%	5.39%	5.56%	5.06%	5.06%	5.20%	5.33%	5.06%
Economic Return Spread	1.22%	0.44%	0.86%	-0.30%	-0.99%	-0.48%	-0.51%	-0.10%	-0.59%	-0.50%
Capital Charge	\$12,213.5	\$12,228.1	\$13,492.7	\$18,084.9 (\$1,018.1)	\$19,671.2	\$20,936.9	\$22,315.8	\$16,882.8	\$19,564.3 (\$2,176.2)	\$21,626.3
Economic Profit (EP) Economic Profit Improvement (EPI)	\$2,596.8 (\$1,239.8)	\$1,003.3 (\$1,593.5)	\$2,470.7 \$1,467.3	(\$1,018.1)	(\$3,515.7) (\$2,497.5)	(\$1,994.7) \$1,521.0	(\$2,126.1) (\$131.4)	(\$610.9) (\$918.3)	(\$2,176.2)	(\$2,060.4) \$694.8
EP Growth	-32.31%	-61.36%	146.25%	-141.21%	-245.30%	43.26%	-6.59%	-51.67%	-114.42%	18.34%
Economic Profit Margin on Sales	2.00%	0.76%	1.60%	-0.63%	-2.21%	-1.12%	-1.16%	-0.32%	-1.32%	-1.14%
Economic Profit Per Share	\$0.48	\$0.19	\$0.44	(\$0.17)	(\$0.57)	(\$0.29)	(\$0.31)	(\$0.08)	(\$0.34)	(\$0.30)
GAAP Earnings Per Share	\$3.44	\$1.11	\$2.36	\$2.05	\$4.97	\$2.69	\$3.62	\$2.63	\$3.23	\$3.15
Excess Cash Per Share	(\$0.37)	(\$0.27)	\$0.48	\$1.18	\$6.77	(\$0.17)	(\$0.18)	\$1.60	\$2.59	(\$0.18)
Performance Drivers										
Sales Growth Sales Growth Trend (ROC Sales Growth)	2.29%	2.06%	16.76%	5.08%	-2.09%	11.54%	3.28%	6.67%	4.84%	7.41%
	1.27%	2.15%	10.88%	9.75%	0.78%	6.09%	6.59%	5.93%	5.54%	6.34%
EBITDAR Margin EBITDAR Growth	34.09% 1.50%	31.75% -4.93%	34.15% 25.57%	33.84% 4.13%	33.12% -4.17%	32.83% 10.54%	33.27% 4.66%	33.14% 6.23%	33.27% 3.50%	33.05% 7.60%
NOPBT Margin	17.02%	14.72%	15.40%	15.46%	14.78%	13.16%	14.47%	14.70%	14.47%	13.81%
NOPBT Growth	1.43%	-11.74%	22.12%	5.52%	-6.40%	-0.72%	13.57%	1.76%	-0.53%	6.42%
NOPAT Margin	11.40%	9.98%	10.31%	10.50%	24.28%	10.67%	12.11%	13.15%	15.15%	11.39%
NOPAT Growth	-9.05%	-10.66%	20.65%	6.91%	-5.34%	17.25%	17.31%	5.76%	6.27%	17.28%
Economic Profit Margin on Sales (EP / Sales)	2.00%	0.76%	1.60%	-0.63%	-2.21%	-1.12%	-1.16%	-0.32%	-1.32%	-1.14%
Economic Profit Growth	-32.31%	-61.36%	146.25%	-141.21%	-245.30%	43.26%	-6.59%	-51.67%	-114.42%	18.34%
Economic Return Spread (ROC-WACC)	1.22%	0.44%	0.86%	-0.30%	-0.99%	-0.48%	-0.37%	-0.10%	-0.59%	-0.43%
Economic Return Ratio (ROC / WACC) Economic Profit Momentum (ΔΕΡ/Capital)	121.26% -0.56%	108.21% -0.66%	118.31% 0.44%	94.37% -1.03%	82.13% -0.68%	90.47% 0.33%	92.64% -0.03%	98.70% -0.32%	88.99% -0.46%	91.56% 0.15%
Economic Profit Momentum (ΔΕΡ/Capital) Economic Profit Momentum Margin (ΔΕΡ/Sales)	-0.95%	-1.20%	0.44%	-2.15%	-1.57%	0.86%	-0.03%	-0.62%	-0.46%	0.15%
Capital Growth	7.11%	8.78%	38.26%	2.02%	8.80%	24.51%	6.59%	16.48%	11.78%	15.55%
Capital Turns	0.59X	0.55X	0.47X	0.48X	0.43X	0.39X	0.37X	0.46X	0.43X	0.38X
EVC Acceleration Margin	-0.98%	-1.23%	1.11%	-2.25%	-1.54%	0.96%	-0.07%	-0.50%	-0.95%	0.42%
EVC Acceleration Spread	-0.59%	-0.75%	0.64%	-1.22%	-0.74%	0.43%	-0.03%	-0.19%	-0.46%	0.19%
Risk Factors										
Free Cash Flow (NOPAT - A Capital)	\$151.9	(\$6,175.3)	(\$75,987.7)	\$10,345.3	(\$13,678.5)	(\$71,449.8)	(\$8,021.2)	(\$31,389.2)	(\$24,927.7)	(\$39,735.5)
Free Cash Flow Rate (FCF / Capital)	0.07%	-2.57%	-22.87%	3.05%	-3.71%	-15.56%	-1.64%	-8.33%	-5.41%	-8.60%
Free Cash Flow Yield (FCF / MV)	0.05%	-2.10%	-19.10%	2.49%	-3.38%	-15.89%	-1.67%	-7.60%	-5.59%	-8.78%
Total Debt / Total Capital	46.09%	51.55%	47.14%	47.07%	50.40%	48.15%	48.15%	48.86%	48.54%	48.15%
Total Debt / EBITDAR	229.99% (\$1,935.6)	294.32%	296.34%	289.93%	352.44% \$41,688.1	379.28%	386.27%	322.46%	340.55%	382.77%
Excess Cash Financial Leverage ((Total Debt - Excess Cash) /	36.53%	(\$1,390.4) 42.69%	\$2,946.0 38.64%	\$7,254.2 36.72%	35.62%	(\$1,260.7) 49.47%	\$0.0 49.19%	\$9,847.4 40.63%	\$15,893.9 40.60%	(\$630.4) 49.33%
Pension Leverage (Net Pension Liability / MV)	2.59%	2.33%	1.52%	1.37%	1.73%	1.45%	0.00%	1.68%	1.52%	0.72%
Equity Risk Index (S&P 500 = 1.00)	1.04	1.03	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Stock Price Volatility	2.15	2.09	1.99	1.94	2.54	3.13	3.13	2.34	2.54	3.13
Sales Index (NL Sales)	11.77	11.79	11.95	12.00	11.98	12.09	12.12	11.96	12.02	12.10
Market Value Index (NL Market Value)	12.56	12.59	12.89	12.94	12.91	13.02	13.08	12.87	12.95	13.05
Size Index (NL Sales: MV)	12.17	12.19	12.42	12.47	12.44	12.55	12.60	12.42	12.49	12.58
Beta	1.05	1.05	1.04	1.03	1.03	1.03	1.03	1.04	1.03	1.03
TFP Adjusted Beta	1.04	1.03	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Stock Price Volatility	2.15	2.09	1.99	1.94	2.54	3.13	3.13	2.34	2.54	3.13
Valuation Measures										
Total Economic Market Value (MV)	\$284,009.4	\$293,430.0	\$397,751.2	\$414,745.4	\$404,821.8	\$449,566.9	\$479,173.8	\$392,063.1	\$423,044.7	\$464,370.4
Economic Enterprise Value	\$285,945.0	\$294,820.4	\$394,805.2	\$407,491.2	\$363,133.8	\$450,827.6	\$480,517.6	\$382,215.6	\$407,150.9	\$465,672.6
Equity Market Value	\$182,188.6	\$169,551.5 \$242,761.6	\$241,130.5	\$255,182.2	\$218,945.7	\$228,444.7	\$243,489.3 \$493,428.9	\$222,650.9	\$234,190.9	\$235,967.0
Total Capital Market Value Created MVC (MV - Capital)	\$223,303.8 \$60,705.6	\$50,668.5	\$335,226.7 \$62,524.5	\$342,005.1 \$72,740.2	\$371,901.2 \$32,920.7	\$462,941.2 (\$13,374.3)	\$493,428.9 (\$14,255.0)	\$350,967.1 \$41,095.9	\$392,282.5 \$30,762.2	\$478,185.0 (\$13,814.6)
MVC Margin (MVC / Sales)	46.74%	38.23%	40.40%	44.73%	20.68%	(\$13,374.3) -7.53%	(\$14,255.0) -7.77%	26.12%	18.48%	-7.65%
MVC Spread (MVC / Capital)	27.19%	20.87%	18.65%	21.27%	8.85%	-2.89%	-2.89%	11.71%	7.84%	-2.89%
Current EVC Value (EP / WACC)	\$45,411.7	\$18,922.6	\$52,424.2	(\$18,895.4)	(\$63,251.4)	(\$39,444.6)	(\$42,042.3)	(\$11,739.6)	(\$40,794.2)	(\$40,743.4)
Current Operations Value COV	\$258,996.2	\$249,539.7	\$338,720.3	\$316,737.0	\$290,658.7	\$374,578.6	\$432,298.2	\$312,356.2	\$327,061.0	\$403,438.4
Current Operations Value Per Share	\$48.25	\$47.94	\$60.18	\$51.35	\$47.15	\$55.26	\$72.19	\$52.16	\$51.34	\$63.20
Future Growth Value (MVC - EVA Value)	\$25,013.2	\$43,890.3	\$59,030.9	\$98,008.3	\$114,163.1	\$74,988.4	\$46,875.6	\$79,706.9	\$95,983.7	\$60,932.0
Future Growth Value Reliance (FGV / MV)	8.81%	14.96%	14.84%	23.63%	28.20%	16.68%	9.78%	20.33%	22.69%	13.12%
Share Price	\$35.07	\$32.65	\$39.17	\$41.55	\$35.65	\$31.36	\$31.36	\$36.08	\$36.19	\$31.36
Dividend Yield	5.19%	5.70%	4.85%	4.67%	5.55%	6.44%	0.0001	45.0461	0.0461	40.0401
Total Shareholder Return (TTM)	0.77%	-1.20%	24.82%	10.75%	-8.65%	-5.59%	0.00%	15.04%	0.31%	-13.34%
MV to IC Ratio	1.27X	1.21X	1.19X	1.21X	1.09X	0.97X	0.97X	1.12X	1.08X	0.97X
EV / EBITDAR Multiple EV / NOPBIT Multiple	6.46X 12.94X	7.00X 15.11X	7.47X 16.57X	7.40X 16.21X	6.89X 15.43X	7.73X 19.30X	7.88X 18.11X	7.32X 16.56X	7.35X 16.96X	7.81X 18.67X
EV / NOPAT Multiple EV / NOPAT Multiple	12.94X 19.31X	22.28X	24.73X	23.88X	22.48X	23.80X	21.62X	23.49X	23.42X	22.63X
EV / EP Multiple	110.11X	293.84X	159.80X	-400.23X	-103.29X	-226.01X	-226.01X	-625.66X	-187.10X	-226.01X
Future Growth Value (% of MV)	8.81%	14.96%	14.84%	23.63%	28.20%	16.68%	9.78%	20.33%	22.69%	13.12%
Current Operations Value (% of MV)	91.19%	85.04%	85.16%	76.37%	71.80%	83.32%	90.22%	79.67%	77.31%	86.88%
Market Value (COV + FGV %)	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Basic Shares Outstanding	5,368.0	5,205.0	5,628.0	6,168.0	6,164.0	6,778.0	5,988.6	5,988.6	6,370.0	6,383.3
Source: Company Data, Financial statements and Tigress R	esearch									

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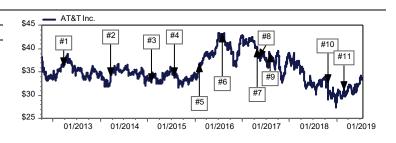
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AT&T Inc. (T-US)

Diversified Telecommunication

Ratings History

Item #	Date	Research Action	Rating	Price
#11	02/26/2019	Reiterate Rating	Buy	\$31.22
#10	01/22/2018	Upgrade Rating	Buy	\$32.67
#9	08/01/2017	Reiterate Rating	Neutral	\$38.88
#8	05/09/2017	Upgrade Rating	Neutral	\$38.22
#7	04/27/2017	Reiterate Rating	Underperform	\$39.91
#6	08/01/2016	Reiterate Rating	Underperform	\$43.18
#5	02/03/2016	Reiterate Rating	Underperform	\$36.72
#4	07/28/2015	Reiterate Rating	Underperform	\$34.33
#3	01/30/2015	Reiterate Rating	Underperform	\$35.07
#2	03/31/2014	Reiterate Rating	Underperform	\$35.07
#1	03/25/2013	Initiation of Coverage	Underperform	\$36.39



Tigress Research Methodology Overview

We employ proprietary quantitative valuation models combined with dynamic fundamental analysis based on the principles of Economic Profit to formulate timely and insightful investment ratings, analysis, strategies, and recommendations.

We make key adjustments to reported financial data eliminating GAAP-based accounting distortions and measuring all companies on a cash operating basis.

Our proprietary research framework is a multi-factor model that scores and ranks companies based on their risk-adjusted ability to create Economic Profit relative to their current market value focusing on three key components:

Business Performance: Measuring economic profitability, growth and operating efficiency.

Risk: Measuring business sustainability, volatility, strength, and consistency.

Valuation: Linking business performance to market value. Measuring value created relative to capital employed and enterprise multiples of economic profit and cash flow.

We score and rank 24 key measurements of performance, risk, and value into relative market and industry investment recommendations.

Glossary of Key Terms and Measures

Excess Cash per Share: Excess Cash per Share is the amount of excess cash divided by basic shares outstanding. Excess Cash consists of all

cash and short-term securities less operating cash needed to run the business. Operating Cash is 5% of TTM net sales

revenue.

EBITDAR: Earnings Before Interest, Taxes, Depreciation, Amortization, and Restructuring and Rent Costs. This is especially

important when comparing companies that use a significant amount of leased assets like restaurants and retailers.

NOPAT: Net Operating Profit after Tax represents a company's after-tax cash operating profit excluding financing costs.

Total Invested Capital: Total Invested Capital the total cash investment that shareholders and debt holders have made during the life of the

company.

Return on Capital: Return on Capital equals NOPAT divided by Total Invested Capital. It is a key measure of operating efficiency. ROC

quantifies how well a company generates cash flow relative to the capital invested in its business.

Cost of Capital: Is the proportionately weighted cost of each category of capital – common equity, preferred equity and debt.

Economic Profit: Economic Profit is the net operating income after tax less the opportunity cost of the total capital invested. It is the most

important driver of shareholder value.

Current Operations Value: Current Operations Value is the portion of market value based on the discounted present value of the current earnings

stream assuming it remains constant forever.

Future Growth Value: Future Growth Value is the portion of market value based on un-earned Economic Profit

For more information on the key terms and measures, please review the Tigress Investment Research Guide to Company Valuation and Analysis.



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Rating Distribution (07/17/2019)

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potential return associated with owning the common equity of rated firms within our research universe. The potential return is measured on a relative basis to the general market which is represented by the S&P 500 and to the subject company's industry peer group as indicated.				rtating Biothbation (6171172616)					
				Companies Under Coverage		Relationship Companies Under Coverage*			
Rating:	Meaning:		#	%	#	%			
Strong Buy:	Expect significant price gains in the price of the stock relative to its industry peer group and general market over the next 12 months.		16	14%	1	15%			
Buy:	Expect out-performance for the price of the stock relative to its industry peer group and general market over the next 12 months.		54	45%	5	70%			
Neutral:	Expect little or no outperformance opportunity over the next 12 months.		44	37%	1	15%			
Underperform:	Expect underperformance for the price of the stock relative to its industry peer group and general market over the next 12 months.		5	4%	0	0%			
Sell:	Expect price decline or significant relative market and industry underperformance over the next 12 months.		0	0%	0	0%			
Not Rated	No Current Research Rating		NA	NA	65	NA			
Partners LLC or or investment banking	panies under research coverage are companies in which Tigress Financial ne of its affiliates has received compensation for investment banking or nonge services from the company, affiliated entities and / or its employees within the sor expects to do so within the next three months.	Total	119	100%	72	100%			

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Company:	Disclosure:	
AT&T Inc. (T-US)	14	
Key Disclosure:		

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