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AT&T Inc. (T-US)

Diversified Telecommunications

- We are upgrading our rating on AT&T from Neutral to Buy as the upcoming launch of its high-speed 5G wireless communication network and the integration of Time Warner’s content now creates a significant investment opportunity.
- AT&T’s ramp up of its 5G network communications platform and its merger with Time Warner will start to drive positive Business Performance trends.
- AT&T’s Time Warner acquisition is the catalyst to start driving a reemergence of shareholder value creation.
- AT&T’s rollout of its high-speed 5G telecommunications will dramatically change communications and data access.
- AT&T’s FirstNet initiative will further drive its growth and increase its position as a leading communication service provider.
- AT&T’s recent acquisition of AlienVault will further expand its cybersecurity capabilities especially designed for small and medium-size businesses.

Research
 (646) 780-8880
research@tigressfp.com

Trading
 (646) 780-8890
trading@tigressfp.com

Tigress Financial Partners LLC

Member of FINRA / MSRB / SIPC
 410 Park Avenue
 New York, NY 10022
 (212) 430-8700
www.tigressfinancialpartners.com

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Company Note
AT&T Inc. (T-US)
 Diversified Telecommunications

Ivan Feinseth
 Director of Research
 (646) 780-8901 Direct
ifeinseth@tigressfp.com

Research Action:

Reiterate rating

Rating: Buy

Prior Rating: Neutral

Price 10/19/2018: \$32.87

52 Week High /

Low: \$39.33 / \$30.13

Key Data: (TTM as of Jun-18)

Excess Cash per Share: \$1.06

Annual Dividend: \$2.00

Dividend Yield: 6.08%

Avg. Volume (30 Day): 36.2M

Shares Outstanding: 7,262.0M

Float: 7,256.7M

Short Interest: 63.4M

SI % / Float 0.87%

Equity MV: \$238,701.9M

Sales TTM: \$158,368.0M

Beta: 0.80

EBITDAR: \$52,620.1M

NOPAT: \$38,836.1M

Total Invested Capital: \$450,014.5M

Return on Capital: 9.74%

Cost of Capital: 6.03%

Economic Profit: \$14,793.6M

Market Value Added: \$182.9M

Current Operations Value: \$643,942.3M

 Future Growth Value: **(\$193,744.9)M**

- **We are upgrading our rating on AT&T from Neutral to Buy as the upcoming launch of its high-speed 5G wireless communication network and the integration of Time Warner's content now creates a significant investment opportunity.** AT&T will significantly benefit from its merger with Time Warner creating one of the media industry's largest and most dynamic companies. The merger of AT&T's powerful communication and distribution network with Time Warner's extensive content will grow a significant user base and increasing revenue. AT&T is also reaching an inflection point where communication and entertainment subscriber revenue growth will surpass ongoing wireline service losses. AT&T is now best positioned to dominate communications and entertainment along with gains in digital advertising. Its 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 supported by AT&T's recent acquisition of AlienVault, offering cybersecurity products, targeted at small and medium-size businesses. We believe that AT&T will start to show positive revenue growth for the first time in three years that will drive higher Returns on Capital, increasing Economic Profit, and gains in shareholder value creation. AT&T also has a current dividend yield of just over 6%. We believe the opportunity for some significant gains exists from current levels and recommend purchase.
- **AT&T's ramp up of its 5G network communications platform and its merger with Time Warner will start to drive positive Business Performance trends.** For the 12 months ending June 2018, Net Sales Revenue declined 2.2% Y/Y from \$161.9 billion to \$158.3 billion. We forecast an increase of 9.4% to \$185.4 billion over the NTM as AT&T start to experience gains in its DirecTV service. Economic Operating Cash Flow (EBITDAR) declined 5.13% Y/Y from \$55.5 billion to \$52.6 billion over the LTM. We forecast an increase of 19.6% to \$62.9 billion over the NTM. Return on Capital (ROC) increased from 5.21% to 9.74% over the LTM. We forecast a further increase to 10.65% over the NTM. Economic Profit increased by almost 700% Y/Y from \$1.86 billion to \$14.8 billion over the LTM. We forecast a further increase to \$16.2 billion over the NTM. The ongoing integration of Time Warner will continue to drive accelerating business trends for the first time in almost three years.

Tigress Financial Partners LLC - Member of FINRA / MSRB / SIPC

 Research: (646) 780-8880 research@tigressfp.com

 410 Park Avenue New York NY, 10022 (212) 430-8700 www.tigressfinancialpartners.com

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- **AT&T's Time Warner acquisition is the catalyst to start driving a reemergence of shareholder value creation.** The Time Warner acquisition is the game changer that AT&T has needed for a long time. The acquisition transforms AT&T into one of the largest entities in the telecom and media space. The merger provides AT&T with Time Warner's media content including Warner Bros.' studio and content library, HBO, and cable networks TNT, TBS, and CNN along with ownership of Turner Broadcasting which holds the rights to a broad range of sports telecast. Time Warner also owns a 10% stake in the internet video service provider Hulu. The acquisition gives AT&T a tremendous library of content for distribution on its DirecTV platform including its OTT (Over the Top) online streaming service, DirecTV Now, which provides DirecTV customers with access to content over wired or wireless connections using various connected devices without the need for a satellite dish or any additional hardware. The ability to offer direct-to-consumer entertainment with extensive content will not only drive increasing DirecTV subscriptions, but it can also be bundled with wireless subscriptions as well. The combination of AT&T's communication network and Time Warner's content will create new types of online video services that will drive increasing subscription growth and significant gains in advertising revenue growth as well.
- **AT&T's rollout of its high-speed 5G telecommunications will dramatically change communications and data access.** AT&T will begin to offer its mobile high-speed 5G network in multiple U.S. markets later this year. AT&T has been developing its 5G mobile network since 2017 and has completed its network upgrade in 23 major so far. 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 is also announced a number of 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 their IoT platform to the Chinese market.

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- **AT&T's FirstNet initiative will further drive its growth and increase its position as a leading communication service provider.** FirstNet (First Responder Network Authority) is the first dedicated nationwide wireless network for first responders. AT&T and FirstNet will cover all 50 states and U.S. territories. As part of the 25-year contract, AT&T will gain access to a slice of 20 MHz of spectrum in the 700 MHz frequency band that will provide it additional capacity. AT&T will also earn success-based payments of \$6.5 billion over the next five years to design and build out the network. It is expected to cost over \$40 billion for the 25-year life of the contract and create more than 10,000 jobs over the next two years. As an additional benefit, AT&T will be able to use this highly valuable spectrum for both consumer and commercial networks.
- **AT&T's recent acquisition of AlienVault will further expand its cybersecurity capabilities especially designed for small and medium-size businesses.** AlienVault develops open source solutions to manage cybersecurity attacks and manages the world's largest crowd-sourced computer security platform, the Open Threat Exchange. The platform currently has over 65,000 participants who contributed more than 14 million threat indicators in 2017. The acquisition will combine AlienVault security expertise and resources with AT&T's cybersecurity solutions portfolio that includes threat detection and prevention. AT&T also recently acquired cloud-based software advertising service provider AppNexus which operates the world's largest independent marketplace for digital advertising. AppNexus will increase AT&T's digital advertising sales initiatives as it maximizes the content and consumer access of its wireless and DirecTV subscriber base.

Investment Thesis

The upcoming domestic and international launch of the high-speed 5G network along with AT&T's ability to leverage its recently acquired Time Warner content on its DirecTV platform will reinvigorate the company's revenue growth and profitability. AT&T's dominant positions in wireless communication and recently acquired Time Warner assets have the potential to transform the company into one of the world's largest communications and media distribution companies. AT&T's current yield of over 6% creates a significant income opportunity as well.

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Company Overview

AT&T, Inc. (T-US) is one of the world's leading communications service providers. AT&T is the largest wireline voice service provider and the second-largest wireless service carrier in North America with over 163 million subscribers. AT&T offers 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 also one of the world's largest provider of pay-TV services after having acquired satellite TV operator DirecTV in 2015. And after its recent acquisition of Time Warner 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.

AT&T operates and reports revenue in four major business segments:

Business Solutions: (43% of revenue) provides wireless and wireline services to businesses and individual subscribers through employer-sponsored access plans. AT&T Business Services includes advanced IP-based (Internet Protocol) that includes Ethernet network connectivity services; Virtual Private Networks (VPN); FlexWare, a software-based network infrastructure that uses Software Defined Networking (SDN) and Network Functions Virtualization (NFV) to provide application-based routing and broadband networks, along with traditional data and voice services.

Entertainment Group: (32% of revenue) provides video, high-speed broadband, and voice communications services to U.S. residential customers and includes AT&T's DirecTV subscription television services.

Consumer Mobility: (20% of revenue) provides wireless voice, data, and Internet access to consumers, wholesale service providers, and service resale providers in the U.S. AT&T Consumer Mobility also provides home monitoring and home security services.

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International: (5% of revenue) provides AT&T's DirecTV and communications services to international markets primarily in Latin America. AT&T recently acquired Grupo Iusacell and Nextel Mexico to further expand its operations and service offerings in Mexico.

AT&T reports its revenue in five geographic regions: United States (93% of revenue); Brazil (2% of revenue); Other Latin American (2% of revenue); Other (1% of revenue).



Company Report – Research Update

AT&T Inc. (T-US)

Diversified Telecommunications

Financial Data

Report Basis	LTM	LTM	LTM	LTM	LTM	LTM	LTM	NTM	5 Yr	3 Yr	Current
Reported Period Ending	06/30/2013	06/30/2014	06/30/2015	06/30/2016	06/30/2017	06/30/2018	06/30/2019	06/30/2019	Average	Average	Trend
Net Sales Revenue	\$127,468.0	\$130,372.0	\$132,987.0	\$162,265.0	\$161,933.0	\$158,368.0	\$185,413.3	\$185,413.3	\$149,185.0	\$160,855.3	\$171,890.6
Sales Growth	0.07%	2.28%	2.01%	22.02%	-0.20%	-2.20%	17.08%	17.08%	4.78%	6.54%	7.44%
Sales Growth Trend	0.58%	1.40%	2.11%	14.01%	8.68%	-1.40%	9.37%	9.37%	4.96%	7.10%	3.98%
Operating Cash Flow (EBITDAR)	\$43,149.6	\$43,699.1	\$42,327.4	\$55,786.1	\$55,465.4	\$52,620.1	\$62,952.9	\$62,952.9	\$49,979.6	\$54,623.9	\$57,786.5
EBITDAR Margin	33.85%	33.52%	31.83%	34.38%	34.25%	33.23%	33.95%	33.95%	33.44%	33.95%	33.59%
EBITDAR Growth	5.44%	1.27%	-3.14%	31.80%	-0.57%	-5.13%	19.64%	19.64%	4.85%	8.70%	7.25%
Net Operating Profit Before Tax (NOPBT)	\$21,256.6	\$21,554.1	\$19,602.4	\$24,880.1	\$26,001.4	\$23,182.1	\$28,447.4	\$28,447.4	\$23,044.0	\$24,687.9	\$25,814.7
NOPBT Margin	16.68%	16.53%	14.74%	15.33%	16.06%	14.64%	15.34%	15.34%	15.46%	15.34%	14.99%
NOPBT Growth	11.49%	1.40%	-9.06%	26.92%	4.51%	-10.84%	22.71%	22.71%	2.59%	6.86%	5.93%
Cash Operating Income Tax	\$5,178.8	\$7,112.9	\$5,367.6	\$8,210.4	\$8,274.3	(\$15,654.0)	\$5,973.9	\$5,973.9	\$2,662.2	\$276.9	(\$4,840.0)
Economic Tax Effective Rate	24.36%	33.00%	27.38%	33.00%	31.82%	0.00%	21.00%	21.00%	25.04%	21.61%	10.50%
Net Operating Profit After Tax (NOPAT)	\$16,077.7	\$14,441.3	\$14,234.7	\$16,669.7	\$17,727.2	\$38,836.1	\$22,473.4	\$22,473.4	\$20,381.8	\$24,411.0	\$30,654.7
NOPAT Margin	12.61%	11.08%	10.70%	10.27%	10.95%	24.52%	12.12%	12.12%	13.50%	15.25%	18.32%
NOPAT Growth	25.87%	-10.18%	-1.43%	17.11%	6.34%	119.08%	-42.13%	-42.13%	26.18%	47.51%	38.47%
Cash & Equivalents	\$5,379.0	\$12,254.0	\$21,734.0	\$7,829.0	\$25,987.0	\$14,643.0	\$16,014.4	\$16,014.4	\$16,489.4	\$16,153.0	\$15,328.7
Total Assets	\$272,093.0	\$293,466.0	\$326,489.0	\$401,808.0	\$420,795.0	\$534,691.0	\$584,769.5	\$584,769.5	\$395,449.8	\$452,431.3	\$559,730.2
Non - Interest Bearing Liabilities (NIBLs)	\$108,204.0	\$114,401.0	\$122,877.0	\$147,648.0	\$148,274.0	\$156,764.0	\$171,446.3	\$171,446.3	\$137,992.8	\$150,895.3	\$164,105.2
Net Assets	\$163,554.0	\$178,572.0	\$202,970.0	\$253,191.0	\$271,388.0	\$376,777.0	\$412,065.5	\$412,065.5	\$256,579.6	\$300,452.0	\$394,421.2
Economic Asset Adjustments	\$44,579.7	\$50,958.9	\$58,601.3	\$79,488.3	\$82,534.8	\$73,237.5	\$80,096.8	\$80,096.8	\$68,964.2	\$78,420.0	\$76,667.1
Net Operating Assets	\$208,133.7	\$229,530.9	\$261,571.3	\$332,679.3	\$353,922.8	\$450,014.5	\$492,162.2	\$492,162.2	\$325,543.8	\$378,872.2	\$471,088.3
Debt & Debt Equivalents	\$95,911.7	\$106,196.9	\$141,121.3	\$152,841.3	\$169,955.8	\$211,495.5	\$231,303.8	\$231,303.8	\$156,322.2	\$178,097.5	\$221,399.7
Equity & Equivalents	\$85,980.0	\$92,132.0	\$86,859.0	\$123,402.0	\$124,725.0	\$182,980.0	\$200,117.7	\$200,117.7	\$122,019.6	\$143,702.3	\$191,548.8
Total Capital - Financing Sources	\$181,891.7	\$198,328.9	\$227,980.3	\$276,243.3	\$294,680.8	\$394,475.5	\$431,421.5	\$431,421.5	\$278,341.8	\$321,799.9	\$412,948.5
Capital Adjustments	\$23,841.0	\$28,814.0	\$31,150.0	\$53,483.0	\$56,234.0	\$51,909.0	\$56,770.7	\$56,770.7	\$44,318.0	\$53,875.3	\$54,339.9
Net Capital Financing Sources	\$205,732.7	\$227,142.9	\$259,130.3	\$329,726.3	\$350,914.8	\$446,384.5	\$488,192.3	\$488,192.3	\$322,659.8	\$375,675.2	\$467,288.4
Net Working Capital	(\$1,871.6)	(\$2,221.4)	(\$227.7)	\$3,473.3	\$2,365.7	\$7,148.4	\$7,817.9	\$7,817.9	\$2,107.7	\$4,329.1	\$7,483.2
Cost of Net Working Capital	(\$43.1)	(\$95.0)	(\$53.8)	\$68.4	\$136.1	\$286.9	\$313.8	\$313.8	\$68.5	\$163.8	\$300.3
% of Revenue	-0.03%	-0.07%	-0.04%	0.04%	0.08%	0.18%	0.17%	0.17%	0.04%	0.10%	0.18%
Operational Capital	\$129,601.1	\$134,283.5	\$141,571.7	\$153,015.5	\$154,850.5	\$158,032.9	\$172,834.0	\$172,834.0	\$148,350.8	\$155,299.6	\$165,433.4
Cost of Operational Capital	\$6,714.6	\$6,126.4	\$6,062.2	\$6,204.5	\$7,175.0	\$9,435.0	\$10,318.6	\$10,318.6	\$7,000.6	\$7,604.8	\$9,876.8
% of Revenue	5.27%	4.70%	4.56%	3.82%	4.43%	5.96%	5.57%	5.57%	4.69%	4.74%	5.76%
Productive Capital	\$259,069.1	\$270,412.5	\$299,798.7	\$377,731.5	\$376,654.5	\$470,084.9	\$514,112.4	\$514,112.4	\$358,936.4	\$408,157.0	\$492,098.6
Cost of Productive Capital	\$13,430.3	\$12,292.6	\$12,531.1	\$14,270.0	\$17,581.5	\$25,533.4	\$27,924.8	\$27,924.8	\$16,441.7	\$19,128.3	\$26,729.1
% of Revenue	10.54%	9.43%	9.42%	8.79%	10.86%	16.12%	15.06%	15.06%	10.93%	11.92%	15.59%
Total Operating Capital	\$209,128.1	\$223,795.5	\$246,486.7	\$332,963.5	\$336,032.5	\$443,289.9	\$484,807.8	\$484,807.8	\$316,513.6	\$370,762.0	\$464,048.8
Cost of Total Operating Capital	\$11,091.5	\$10,050.9	\$10,335.0	\$12,204.3	\$15,591.4	\$23,500.4	\$25,701.4	\$25,701.4	\$14,336.4	\$17,098.7	\$24,600.9
% of Revenue	8.70%	7.71%	7.77%	7.52%	9.63%	14.84%	13.86%	13.86%	9.49%	10.66%	14.35%
Non - Operating Capital	(\$994.4)	\$5,735.4	\$15,084.7	(\$284.3)	\$17,890.4	\$6,724.6	\$7,354.4	\$7,354.4	\$9,030.2	\$8,110.2	\$7,039.5
Cost of Non - Operating Capital	(\$124.1)	\$110.1	\$457.5	\$311.7	\$410.3	\$742.3	\$811.8	\$811.8	\$406.4	\$488.1	\$777.0
% of Revenue	-0.10%	0.08%	0.34%	0.19%	0.25%	0.47%	0.44%	0.44%	0.27%	0.30%	0.45%
Total Capital	\$208,133.7	\$229,530.9	\$261,571.3	\$332,679.3	\$353,922.8	\$450,014.5	\$492,162.2	\$492,162.2	\$325,543.8	\$378,872.2	\$471,088.3
Cost of Total Capital	\$10,967.4	\$10,160.9	\$10,792.5	\$12,516.0	\$16,001.8	\$24,242.7	\$26,513.2	\$26,513.2	\$14,742.8	\$17,586.8	\$25,377.9
% of Revenue	8.60%	7.79%	8.12%	7.71%	9.88%	15.31%	14.30%	14.30%	9.76%	10.97%	14.80%
Cost of Capital (WACC)	5.20%	4.64%	4.40%	4.21%	4.66%	6.03%	6.03%	6.03%	4.79%	4.97%	6.03%
Capital Structure											
Debt & Debt Equivalents	\$95,911.7	\$106,196.9	\$141,121.3	\$152,841.3	\$169,955.8	\$211,495.5	\$231,303.8	\$231,303.8	\$156,322.2	\$178,097.5	\$221,399.7
Debt & Debt Equivalents % of Market Value	33.49%	36.65%	43.35%	36.49%	42.29%	47.34%	47.34%	47.34%	41.51%	42.15%	47.34%
Preferred Equity	\$0.0	\$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%	0.00%
Market Value of Common Equity	\$190,452.0	\$183,536.4	\$184,455.4	\$266,020.7	\$231,964.0	\$235,247.5	\$257,280.5	\$257,280.5	\$220,244.8	\$244,410.7	\$246,264.0
Common Equity % of Market Value	66.51%	63.35%	56.65%	63.51%	57.71%	52.66%	52.66%	52.66%	58.49%	57.85%	52.66%
Total Economic Market Value (MV)	\$286,363.7	\$289,733.3	\$325,576.7	\$418,862.0	\$401,919.9	\$446,742.9	\$488,584.3	\$488,584.3	\$376,567.0	\$422,508.3	\$467,663.6
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Excess Cash	(\$994.4)	\$5,735.4	\$15,084.7	(\$284.3)	\$17,890.4	\$6,724.6	\$7,354.4	\$7,354.4	\$9,030.2	\$8,110.2	\$7,039.5
Economic Enterprise Value	\$287,358.1	\$283,997.9	\$310,492.1	\$419,146.2	\$384,029.5	\$440,018.3	\$481,229.9	\$481,229.9	\$367,536.8	\$414,398.0	\$460,624.1
Average Capital	\$208,306.7	\$216,437.8	\$243,136.6	\$294,428.3	\$340,320.6	\$398,649.6	\$467,288.4	\$467,288.4	\$298,594.6	\$344,466.2	\$432,969.0
Capital Δ	(\$5,147.9)	\$21,410.2	\$31,987.4	\$70,595.9	\$21,188.6	\$95,469.6	\$41,807.8	\$41,807.8	\$48,130.3	\$62,418.0	\$68,638.7

Source: Company Data, Financial statements and Tigress Research

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AT&T Inc. (T-US)
Diversified Telecommunications
Financial Analysis

Report Basis	LTM	LTM	LTM	LTM	LTM	LTM	LTM	NTM	5 Yr	3 Yr	Current
Reported Period Ending	06/30/2013	06/30/2014	06/30/2015	06/30/2016	06/30/2017	06/30/2018	06/30/2019	Average	Average	Average	Trend
Return on Market Value (NOPAT / MV)	5.61%	4.98%	4.37%	3.98%	4.41%	8.69%	9.51%	5.29%	5.69%	9.10%	
Return on Enterprise Value (NOPAT / EV)	5.60%	5.08%	4.58%	3.98%	4.62%	8.83%	9.65%	5.42%	5.81%	9.24%	
Return on Capital (NOPAT / Average Capital)	7.72%	6.67%	5.85%	5.66%	5.21%	9.74%	10.65%	6.63%	6.87%	10.20%	
Cost of Capital (WACC)	5.20%	4.64%	4.40%	4.21%	4.66%	6.03%	6.03%	4.79%	4.97%	6.03%	
Economic Return Spread	2.52%	2.03%	1.46%	1.45%	0.55%	3.71%	4.06%	1.84%	1.90%	3.88%	
Capital Charge	\$10,838.5	\$10,049.8	\$10,686.4	\$12,402.4	\$15,862.8	\$24,042.5	\$26,294.3	\$14,608.8	\$17,435.9	\$25,168.4	
Economic Profit (EP)	\$5,239.2	\$4,391.5	\$3,548.3	\$4,267.3	\$1,864.3	\$14,793.6	\$16,179.1	\$5,773.0	\$6,975.1	\$15,486.3	
Economic Profit Improvement (EPI)	\$2,064.0	(\$847.7)	(\$843.2)	\$719.0	(\$2,403.0)	\$12,929.2	\$1,385.5	\$1,910.9	\$3,748.4	\$7,157.4	
EP Growth	65.01%	-16.18%	-19.20%	20.26%	-56.31%	693.50%	9.37%	124.41%	219.15%	351.43%	
Economic Profit Margin on Sales	4.11%	3.37%	2.67%	2.63%	1.15%	9.34%	8.73%	3.83%	4.37%	9.03%	
Economic Profit Per Share	\$0.90	\$0.82	\$0.68	\$0.76	\$0.30	\$2.40	\$2.62	\$0.99	\$1.15	\$2.51	
GAAP Earnings Per Share	\$1.33	\$3.41	\$1.01	\$2.33	\$2.13	\$5.15	\$3.58	\$2.80	\$3.20	\$4.36	
Excess Cash Per Share	(\$0.18)	\$1.10	\$2.90	(\$0.05)	\$2.90	\$1.06	\$1.16	\$1.58	\$1.30	\$1.11	
Performance Drivers											
Sales Growth	0.07%	2.28%	2.01%	22.02%	-0.20%	-2.20%	17.08%	4.78%	6.54%	7.44%	
Sales Growth Trend (ROC Sales Growth)	0.58%	1.40%	2.11%	14.01%	8.68%	-1.40%	9.37%	4.96%	7.10%	3.98%	
EBITDAR Margin	33.85%	33.52%	31.83%	34.38%	34.25%	33.23%	33.95%	33.44%	33.95%	33.59%	
EBITDAR Growth	5.44%	1.27%	-3.14%	31.80%	-0.57%	-5.13%	19.64%	4.85%	8.70%	7.25%	
NOPBT Margin	16.68%	16.53%	14.74%	15.33%	16.06%	14.64%	15.34%	15.46%	15.34%	14.99%	
NOPBT Growth	11.49%	1.40%	-9.06%	26.92%	4.51%	-10.84%	22.71%	2.59%	6.86%	5.93%	
NOPAT Margin	12.61%	11.08%	10.70%	10.27%	10.95%	24.52%	12.12%	13.50%	15.25%	18.32%	
NOPAT Growth	25.87%	-10.18%	-1.43%	17.11%	6.34%	119.08%	-42.13%	26.18%	47.51%	38.47%	
Economic Profit Margin on Sales (EP / Sales)	4.11%	3.37%	2.67%	2.63%	1.15%	9.34%	8.73%	3.83%	4.37%	9.03%	
Economic Profit Growth	65.01%	-16.18%	-19.20%	20.26%	-56.31%	693.50%	9.37%	124.41%	219.15%	351.43%	
Economic Return Spread (ROC-WACC)	2.52%	2.03%	1.46%	1.45%	0.55%	3.71%	4.62%	1.84%	1.90%	4.17%	
Economic Return Ratio (ROC / WACC)	148.34%	143.70%	133.20%	134.41%	111.75%	161.53%	176.66%	136.92%	135.90%	169.10%	
Economic Profit Momentum (ΔEP/Capital)	1.00%	-0.37%	-0.33%	0.22%	-0.68%	2.90%	0.28%	0.35%	0.81%	1.59%	
Economic Profit Momentum Margin (AEP/Sales)	1.62%	-0.65%	-0.63%	0.44%	-1.48%	8.16%	0.75%	1.17%	2.37%	4.46%	
Capital Growth	-2.44%	10.41%	14.08%	27.24%	6.43%	27.21%	9.37%	17.07%	20.29%	18.29%	
Capital Turns	0.62X	0.57X	0.51X	0.49X	0.46X	0.35X	0.38X	0.48X	0.44X	0.37X	
EVC Acceleration Margin	1.62%	-0.67%	-0.65%	0.54%	-1.48%	7.98%	0.87%	1.03%	2.51%	4.45%	
EVC Acceleration Spread	0.95%	-0.41%	-0.39%	0.30%	-0.82%	3.80%	0.35%	0.41%	1.26%	2.08%	
Risk Factors											
Free Cash Flow (NOPAT - Δ Capital)	\$21,225.6	(\$6,968.9)	(\$17,752.7)	(\$53,926.3)	(\$3,461.4)	(\$56,633.5)	(\$19,334.4)	(\$27,748.6)	(\$38,007.1)	(\$37,984.0)	
Free Cash Flow Rate (FCF / Capital)	10.32%	-3.07%	-6.85%	-16.35%	-0.99%	-12.69%	-3.96%	-7.99%	-10.01%	-8.32%	
Free Cash Flow Yield (FCF / MV)	7.41%	-2.41%	-5.45%	-12.87%	-0.86%	-12.68%	-3.96%	-8.85%	-8.80%	-8.32%	
Total Debt / Total Capital	46.62%	46.75%	54.68%	46.35%	48.43%	47.38%	47.38%	48.68%	47.39%	47.38%	
Total Debt / EBITDAR	222.28%	243.02%	333.40%	273.98%	306.42%	401.93%	367.42%	311.75%	327.44%	384.68%	
Excess Cash	(\$994.4)	\$5,735.4	\$15,084.7	(\$284.3)	\$17,890.4	\$6,724.6	\$0.0	\$9,030.2	\$8,110.2	\$3,362.3	
Financial Leverage (Total Debt - Excess Cash) / Pension Leverage (Net Pension Liability / MV)	33.84%	34.67%	38.71%	36.56%	37.83%	45.84%	47.34%	38.72%	40.08%	46.59%	
Equity Risk Index (S&P 500 = 1.00)	0.77	0.77	0.77	0.76	0.80	0.80	0.80	0.78	0.78	0.80	
Stock Price Volatility	2.15	2.05	2.08	2.07	2.30	2.57	2.57	2.22	2.31	2.57	
Sales Index (NL Sales)	11.76	11.78	11.80	12.00	11.99	11.97	12.13	11.91	11.99	12.05	
Market Value Index (NL Market Value)	12.57	12.58	12.69	12.95	12.90	13.01	13.10	12.83	12.95	13.05	
Size Index (NL Sales: MV)	12.16	12.18	12.25	12.47	12.45	12.49	12.61	12.37	12.47	12.55	
Beta	0.66	0.66	0.66	0.64	0.70	0.69	0.69	0.67	0.68	0.69	
TFP Adjusted Beta	0.77	0.77	0.77	0.76	0.80	0.80	0.80	0.78	0.78	0.80	
Stock Price Volatility	2.15	2.05	2.08	2.07	2.30	2.57	2.57	2.22	2.31	2.57	
Valuation Measures											
Total Economic Market Value (MV)	\$286,363.7	\$289,733.3	\$325,576.7	\$418,862.0	\$401,919.9	\$446,742.9	\$488,584.3	\$376,567.0	\$422,508.3	\$467,663.6	
Economic Enterprise Value	\$287,358.1	\$283,997.9	\$310,492.1	\$419,146.2	\$384,029.5	\$440,018.3	\$481,229.9	\$367,536.8	\$414,398.0	\$460,624.1	
Equity Market Value	\$190,452.0	\$183,536.4	\$184,455.4	\$266,020.7	\$231,964.0	\$235,247.5	\$257,280.5	\$220,244.8	\$244,410.7	\$246,264.0	
Total Capital	\$208,133.7	\$229,530.9	\$261,571.3	\$332,679.3	\$353,922.8	\$450,014.5	\$492,162.2	\$325,543.8	\$378,872.2	\$471,088.3	
Market Value Created MVC (MV - Capital)	\$78,230.0	\$60,202.4	\$64,005.4	\$86,182.7	\$47,997.0	(\$3,271.5)	(\$3,271.5)	\$51,023.2	\$43,636.1	(\$3,424.7)	
MVC Margin (MVC / Sales)	61.37%	46.18%	48.13%	53.11%	29.64%	-2.07%	-1.93%	34.20%	27.13%	-1.99%	
MVC Spread (MVC / Capital)	37.59%	26.23%	24.47%	25.91%	13.56%	-0.73%	-0.73%	15.67%	11.52%	-0.73%	
Current EVC Value (EP / WACC)	\$100,692.6	\$94,578.2	\$80,730.3	\$101,304.7	\$39,997.5	\$245,292.7	\$268,266.5	\$120,557.4	\$140,395.5	\$256,779.6	
Current Operations Value COV	\$308,999.2	\$311,016.0	\$323,867.0	\$395,733.0	\$380,318.1	\$643,942.3	\$735,554.8	\$419,152.0	\$484,861.7	\$689,748.6	
Current Operations Value Per Share	\$53.27	\$57.94	\$62.22	\$70.32	\$61.66	\$104.47	\$128.90	\$73.45	\$80.99	\$116.21	
Future Growth Value (MVC - EVA Value)	(\$22,635.5)	(\$21,282.7)	\$1,709.7	\$23,129.0	\$21,601.8	(\$197,199.4)	(\$246,970.5)	(\$42,585.0)	(\$62,353.4)	(\$222,084.9)	
Future Growth Value Reliance (FGV / MV)	-7.90%	-7.35%	0.53%	5.52%	5.37%	-44.14%	-50.55%	-11.31%	-14.76%	-47.49%	
Share Price	\$35.40	\$35.36	\$35.52	\$43.21	\$37.73	\$32.11	\$32.11	\$6.79	\$7.68	\$32.11	
Dividend Yield	5.06%	5.18%	5.26%	4.42%	5.17%	6.20%	6.20%	0.00%	14.56%	2.44%	-14.79%
Total Shareholder Return (TTM)	4.33%	5.06%	5.72%	26.07%	-7.51%	-8.70%	0.00%	14.56%	2.44%	-14.79%	
MV to IC Ratio	1.38X	1.26X	1.24X	1.26X	1.14X	0.99X	0.99X	1.16X	1.12X	0.99X	
EV / EBITDAR Multiple	6.66X	6.50X	7.14X	7.51X	6.92X	8.36X	7.64X	7.35X	7.59X	7.97X	
EV / NOPBIT Multiple	13.52X	13.18X	15.84X	16.85X	14.77X	18.98X	16.92X	15.95X	16.79X	17.84X	
EV / NOPAT Multiple	17.87X	19.67X	21.81X	25.14X	21.66X	11.33X	21.41X	18.03X	16.98X	15.03X	
EV / EP Multiple	54.85X	64.67X	87.50X	98.22X	205.99X	29.74X	29.74X	63.66X	59.41X	29.74X	
Future Growth Value (% of MV)	-7.90%	-7.35%	0.53%	5.52%	5.37%	-44.14%	-50.55%	-11.31%	-14.76%	-47.49%	
Current Operations Value (% of MV)	107.90%	107.35%	99.47%	94.48%	94.63%	144.14%	150.55%	111.31%	114.76%	147.49%	
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	5,801.0	5,368.0	5,205.0	5,628.0	6,168.0	6,164.0	5,706.6	5,706.6	5,986.7	5,935.3	

Source: Company Data, Financial statements and Tigress Research

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Research: (646) 780-8880 research@tigressfp.com

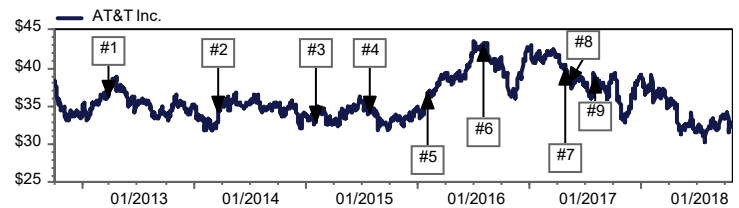
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AT&T Inc. (T-US)
Diversified Telecommunications
Ratings History

AT&T Inc. (T-US)				
Item #	Date	Research Action	Rating	Price
#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.

For more information on our research methodology, please review the *Tigress Investment Research Guide to Company Valuation and Analysis*.

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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Research: (646) 780-8880 research@tigressfp.com

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Contacts

Ivan Feinseth
 Director of Research
 (646) 780-8901 Direct
ifeinseth@tigressfp.com

Aaron Ju
 Research Associate
 (646) 780-8887 Direct
aaronju@tigressfp.com

Steven Pikowski
 Operations / Sales & Trading
 (646) 780-8894 Direct
spikowski@tigressfp.com

Barney Greengrass
 Capital Markets / Sales & Trading
 (646) 780-8914 Direct
bgreengrass@tigressfp.com

Ernest Williams
 Institutional Sales & Trading
 (646) 780-8886 Direct
ewilliams@tigressfp.com

Lily Li
 Global Wealth Management
 (646) 780-8903 Direct
lilyeli@tigressfp.com

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Rating:	Meaning:	Rating Distribution (10/19/2018)				
		Companies Under Coverage		Relationship Companies Under Coverage*		
		#	%	#	%	
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.	52	44%	5	70%	
Neutral:	Expect little or no outperformance opportunity over the next 12 months.	45	38%	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	
		Total	118	100%	72	100%

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Specific Disclosures for the companies that are the subject of this Report

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

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Tigress Financial Partners LLC - Member of FINRA / MSRB / SIPC**Research: (646) 780-8880 research@tigressfp.com****410 Park Avenue New York NY, 10022 (212) 430-8700 www.tigressfinancialpartners.com**

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