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AT&T INC. – A DISTRACTING MEDIA MISSTEP

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### Abstract

This report is an Equity Research report on AT&T Inc., the US communications company. It represents an attempt to determine the fair value of AT&T's stock based on an in-depth industry and competitor analysis and a detailed analysis of the company itself, including its financial health and strategy, to give a buy, hold or sell recommendation in the context of academic purposes.

The below part is section I out of II and focuses on the AT&T's being the largest telecommunications company in the world and its attempt to enter the media and entertainment industry in recent years.

Keywords: Equity Research, Valuation, Telecommunications

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This report is part of the report 'AT&T- A Communications Giant in an Exhausted Market' (annexed) and should be read as an integral part of it.

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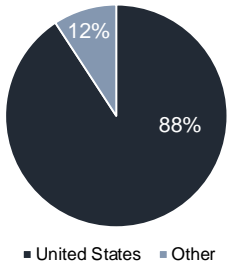
# 1. Company Overview

Based in Texas, AT&T Inc. was founded by Alexander Graham Bell in 1877. It came to run a federally approved monopoly over the telecommunications (telecom) industry. But in 1984, antitrust laws forced it to split into seven ‘Baby Bells,’ or regional companies, and AT&T was left with the original company’s long-distance operations. Ironically, five Baby Bells eventually reunited to form the current-day AT&T, the largest telecommunications company (telco) in the world by revenue (\$171.7 billion in revenue in FY20). Revenue is mainly generated domestically, as \$151.9 billion came from the United States (see figure 1: Geographic revenue split). While it is the legacy American telecom giant, AT&T has entered the media and entertainment industry as well, reflected in its three segments: Communications (79.3% of FY20 revenue), WarnerMedia (17.4% of FY20 revenue), and Latin America (3.3% of FY20 revenue) (see figure 2: Revenue split per segment 2020). Like its predecessor, the modern-day AT&T dominates the telecom market, with 44.5% market share of wireless subscriptions in the United States as of FY20 (see table 1: Wireless carrier subscriber share in the US). Verizon and T-Mobile, the second and third largest telcos in the US by revenue, had 29.1% and 24.9% market share each, respectively<sup>1</sup>.

## 1.1 Segment overview

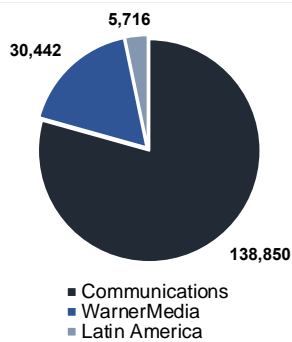
Communications segment (see figure 3: Segment overview) revenue totaled \$138.9 billion in FY20. It contains the telecom core and has three core subsegments: Mobility, which provides wireless service and equipment; which provides advanced IP-based services and traditional voice and data services to businesses. Mobility accounted for 42.2% of total FY20 revenue and encompassed 196.5 million wireless subscribers in the United States and 19.5 million wireless subscribers in Mexico as of 3Q21. Until August 2021, Communications also had a Video subsegment that operated the broadcast satellite provider DirecTV, but it was sold for \$7.1 billion.

WarnerMedia segment revenue totaled \$30.4 billion in FY20. It was created via AT&T’s \$85.4 billion acquisition of the American media conglomerate Time Warner in 2018. It creates, produces, and distributes television content, movies, and games. WarnerMedia has core subsegments such as Turner, which includes multichannel basic television networks like CNN; HBO, a premium pay television



**Figure 1: Geographic revenue split 2020**

Source: Company reporting



**Figure 2: Revenue split per segment 2020 (in \$m)**

Source: Company reporting

Carrier	Market share
AT&T	44.8%
Verizon	29.1%
T-Mobile	24.9%
US Cellular	1.2%

**Table 1: Wireless carrier subscriber share in the US**

Source: Statista, as of 1Q 21

<sup>1</sup> ‘Wireless subscriptions market share by carrier in the U.S.,’ Statista, 2021.

AT&T Inc.	
Communications	Mobility
	Video
	Broadband
	Business Wireline
WarnerMedia	Turner
	HBO
	Warner Bros.
	Eliminations & other
Latin America	Vrio
	Mexico
Corporate & Other	

**Figure 3: Segment overview**  
Source: Analyst visualization

network with 69.4 million subscribers globally as of 3Q21; and Warner Bros., one of the 'Big Five' major American film studios.

Latin America segment revenue totaled \$5.7 billion in FY20. Its core subsegment is Mexico, which provides wireless service and equipment to customers in Mexico. Latin America also contained Vrio, which provided video services to residential customers outside of the US, but this subsegment was sold to an Argentine investment group for an undisclosed amount in November 2021.

## 1.2 Entry into the media and entertainment industry

Between 2015 and 2018, AT&T spent over \$150 billion on the \$67.1 billion acquisition of DirecTV in 2015 and the \$85.4 billion acquisition of Time Warner in 2018 to turn itself into a media giant and make up for sluggish growth in the telecom market. We suggest the rationale centered around three factors.

First, AT&T aimed to stimulate growth by offering its substantial customer base, consisting of millions of wireless and broadband subscribers, bundles of its telecom products and access to DirecTV and Time Warner's products, which included HBO and brands such as Harry Potter (worth around \$25 billion)<sup>2</sup>.

Second, AT&T could mine data from this massive base to implement targeted advertising across DirecTV and Time Warner's platforms. When buying DirecTV, AT&T noted that it would own 'the largest addressable TV advertising platform in the country' after the deal closed. Facebook had already proven this strategy a success by more than doubling its average revenue per user (ARPU) after it rolled out this model (\$16 in 2015 to \$34 in 2018)<sup>3</sup>.

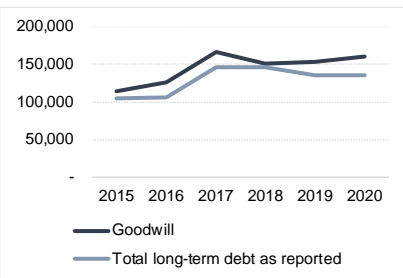
Third, Time Warner produced robust cash flows, which AT&T needed for two reasons: its high dividend and even higher debt. AT&T is a dividend aristocrat, raising its dividend every year since the 1980s (see table 2: Overview of AT&T's dividend history). Before the Time Warner deal, AT&T paid a \$0.49 quarterly dividend, equivalent to a 5.1% dividend yield. In 2021, this almost hit 9.0%, beating the entire S&P 500 and explaining why it valued Time Warner's cash flows.

Additionally, to fund the acquisitions, AT&T levered up significantly (see figure 4: Total long-term Debt & Goodwill of AT&T), becoming the largest borrower in the world that is not a bank<sup>4</sup>. Net debt hit \$180.4 billion, much higher than Verizon (\$117.1 billion in net debt) and T-Mobile (\$34.3 billion in net debt) at the time. For these reasons, Time Warner's \$4.4 billion in cash flow in FY17 made it an

	2017A	2018A	2019A	2020A
Dividend yield	5.1%	7.3%	5.3%	7.3%
Price per share (year end)	\$38.88	\$28.54	\$39.08	\$28.76
Dividend/comm . share	\$1.97	\$2.08	\$2.05	\$2.10

**Table 2: Overview of AT&T's dividend history**

Source: Company reporting, Bloomberg



**Figure 4: Total long-term Debt & Goodwill of AT&T (in \$m)**

Source: Company reporting

<sup>2</sup> Wells, N., 'Harry Potter and the \$25 billion franchise,' *CNBC*, 2017.

<sup>3</sup> Duberstein, B., 'Facebook Shines in Mary Meeker's 2018 Internet Trends Report,' *The Motley Fool*, 2018.

<sup>4</sup> Lachapelle, T., 'AT&T Looks Better, Except for Its Stock Price,' *Bloomberg*, 2021.

appealing target to help AT&T sustain its dividend, as well as manage its hefty debt load.

### 1.3 A media and entertainment misstep

Considering its limited financial flexibility, AT&T's efforts put into becoming a media company appear to be a waste. Unsurprisingly, merging a non-entertainment company in AT&T with entertainment companies in DirecTV and Time Warner did not result in a harmonious merger. The core Communications segment did not gain Mobility or Broadband subscribers after AT&T tacked a media company onto its operations. In fact, most of the growth within Mobility during the last three years came from Connected Devices, which are car components and unrelated to streaming. By the same token, a strong telecom business did not help WarnerMedia compete against the streaming giants.

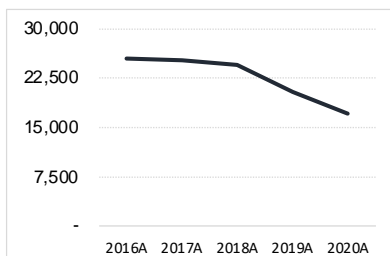
Since 2018, Netflix, Amazon and Disney have come to control digital entertainment, not WarnerMedia. Because companies like Netflix's only revenue stream is entertainment content, they are 'all-in' when it comes to paying heavily for content rights. For example, Netflix spent \$13.6 billion<sup>5</sup> on content in FY21, and Disney plans to spend \$33 billion<sup>6</sup> on content in FY22. To compete, AT&T had to match this at the very least, while also spending billions in telecom capital expenditures to defend its heritage business. As a result, it was impossible for AT&T to compete on both fronts while also balancing its high dividend and debt.

Confirming this, WarnerMedia executives have mentioned how little AT&T cared about HBO and streaming in general. Rather, attention was placed on protecting the hefty dividend, managing the enormous debt stack, and combating lost telecom market share. Streaming only ever served as a distraction.

### 1.4 DirecTV and WarnerMedia spin off

After DirecTV lost 3.0 million subscribers (see figure 5: DirecTV subscribers) in FY20 (only 15.4 million subscribers remain), AT&T spun it off in August 2021 and received \$7.1 billion in cash. It sold a 30% stake in the new company to a private equity firm at an implied \$16.3 billion valuation<sup>7</sup>. Considering the initial \$67.1 billion price tag, AT&T destroyed billions in shareholder value with this transaction alone.

Meanwhile, in January 2021, AT&T stated that it 'expects growth to come from wireless, software-based video offerings like HBO Max' in its annual report. So,



**Figure 5: DirecTV subscribers (in k)**  
Source: Company reporting

<sup>5</sup> Spangler, T., 'Netflix's Content Spending to Rise 26% to \$13.6 Billion in 2021,' *Variety*, 2021.

<sup>6</sup> Kim Murphy, J., 'Disney to Spend \$33 Billion on Content in 2022,' *Variety*, 2021.

<sup>7</sup> Munson, B., 'AT&T may sell DirecTV, U-verse and AT&T TV Now,' *Fierce Video*, 2020.

markets were taken by surprise four months later when AT&T announced that it will spin off WarnerMedia and combine it with Discovery, Inc. AT&T will receive \$43 billion and retain 71% ownership of the new business (regulatory approval for that deal is still pending).

In FY20, WarnerMedia and Discovery earned \$41 billion combined, making the new company larger than Netflix and second only to Disney<sup>8</sup>. Guidance indicates it should generate \$52 billion in revenue annually but is also planning to spend \$20 billion annually on developing content, a necessary outlay in the streaming wars.

### 1.5 Why exit now?

The exit from the media industry comes down to AT&T restraining itself financially due to its high debt and dividend. It simply cannot afford the billions in investments that both sides of the business require simultaneously. To illustrate this, in February 2021, AT&T participated in a C-Band auction, a crucial component of fifth generation (5G) technology for its telecom business. In this auction alone, AT&T spent \$23.4 billion. Afterwards, Fitch downgraded the company from A- to BBB+ because of the debt needed to fund the purchase. Given that both the telecom and media sides require multibillion-dollar investments every year, AT&T would have to take on an unsustainable amount of debt to finance both businesses, so it had to choose between the two. This decision was made easier by the demand for connectivity skyrocketing during the pandemic, as well as the criticality of scale to survive in the streaming wars. Instead of being a newcomer struggling in a crowded field of established streaming platforms, AT&T pivoted back to its legacy telecom side where it has historically been the market leader. Allowing its media and entertainment arm to merge with another media and entertainment company emerges as the logical solution.

### 1.6 Stock performance<sup>9</sup>

What paints the clearest picture is the stock's performance. The day before announcing the DirecTV deal in May 2014, AT&T's stock closed at \$36.74. As of 10 December 2021, it trades at \$22.84, a 36.7% loss (see figure 6: *Share price of AT&T Inc. from 2015 to 2020*).

To elaborate, one week after the DirecTV purchase was announced, AT&T dropped to \$35.21 (versus the S&P 500 staying flat), as analysts did not



**Figure 6: Share price of AT&T Inc. from 2015 to 2020 (in \$)**

Source: Bloomberg

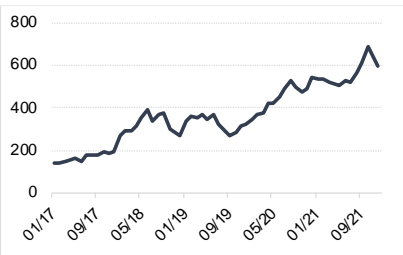
<sup>8</sup> Jasinski, N., 'What a Combined WarnerMedia and Discovery Means for the Streaming Wars,' *Barron's*, 2021.

<sup>9</sup> All historical stock prices in this section were found using Yahoo! Finance.

understand the logic behind buying a ‘dying’<sup>10</sup> technology in satellite television. When the deal finally closed in July 2015, the stock rose slightly from \$33.93 to \$34.29 (versus the S&P 500 +1.0%) and maintained this level over the next month (versus the S&P -6.0%) as markets had a positive outlook on AT&T’s unique ability to bundle satellite TV, internet, and wireless services to customers. Finally, when AT&T revealed its intentions to sell DirecTV in February 2021, the stock dropped from \$27.29 to \$26.60 at close, a -2.6% fall (versus the S&P -0.2%). Investors did not like that AT&T would lose DirecTV’s \$4 billion contribution towards EBITDA (AT&T had \$54.5 billion in adjusted EBITDA in FY20) and that the lost cash flow would pressure its dividend. In AT&T’s defense, this also meant that it would no longer be affected by the Video subsegment’s plummeting subscriber count (after losing 16% of its total subscribers in FY20) or revenues (after a -11% decline in FY20) either. In summary, AT&T made a financial decision that stung in the short term to leave an outdated technology in the past, supporting the thesis that AT&T never benefitted from its venture into media.

This is demonstrated further when examining the Time Warner deal. In late October 2016, when AT&T reported that it would acquire Time Warner, its stock fell -1.7% from \$37.49 to \$36.86 and Time Warner fell -3.1% from \$89.48 to \$86.74 (versus the S&P staying flat). Analysts were weary of the expensive price tag that AT&T would pay, a 19% premium over Time Warner’s price at the time and a 35% premium over where Time Warner’s stock was trading before the merger rumors arose<sup>11</sup>. Ironically, AT&T’s CEO at the time remarked that ‘he had never run a Hollywood studio,’ an idea that in retrospect correctly led to skepticism. It was always going to be an uphill battle to own a media company without any experience in the industry. In turn, it comes as no surprise AT&T reversed the decision less than three years after the merger closed. In May 2021, after publicizing the spin off, AT&T closed the day -2.7% down at \$31.37 (versus the S&P -0.3%). Analysts pointed out that entering the streaming space, where it had no former experience, distracted AT&T and allowed its telecom competitors to get ahead in the 5G race.

While AT&T went on its futile media journey between May 2014 and December 2021, Netflix stock jumped from \$49.59 to \$611.00 during this same timeframe, returning 1,132.1% (see figure 7: Netflix, Inc. (NFLX) share price history). Two telcos that never touched media, Charter Communications and T-Mobile, returned 347.9% and 246.3%. Therefore, we argue that investors never bought AT&T’s story that it was building a streaming giant. Instead, its trading levels reflect the



**Figure 7: Netflix, Inc. (NFLX) share price history (in \$)**  
Source: Yahoo Finance

<sup>10</sup> Chappell, B., ‘AT&T, DirecTV And Finding a Prom Date: Reactions to Merger,’ *National Public Radio*, 2014.  
<sup>11</sup> La Monica, P., ‘Why Wall Street doesn’t like the AT&T and Time Warner deal,’ *CNN*, 2016.

fact that it was a telco stuck in a low-growth, mature industry that decided to pay billions to house several media assets for a few years.

## 2. Sector Overview

### 2.1 Telecommunications

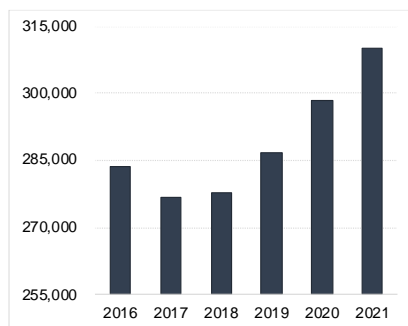
Part of a broader Communications sector, the telecom industry contains telcos and internet service providers. The American telecom subsector is a mature industry that has undergone considerable consolidation as major players acquire smaller players to gain market share, reduce costs, and widen coverage. Consequently, it is controlled by three companies: AT&T (\$171.6 billion in FY20 revenue), Verizon (\$128.3 billion in FY20 revenue), and T-Mobile (\$68.4 billion in FY20 revenue), which cover 98.9% of all wireless subscribers when combined as of FY20.

These telcos compete in two areas: wireline and wireless. With total revenue of \$325 billion<sup>12</sup> in the US last year, wireline includes legacy voice, internet, and cable services and encompasses AT&T’s Broadband and Business Wireline subsegments. With total revenue of \$310 billion<sup>13</sup> in the US last year (see figure 8: *US Wireless market size*), wireless includes mobile phone services and encompasses AT&T’s Mobility and Latin America segment.

AT&T’s revenue in these four segments has been declining, reflecting a shift in consumer preferences industrywide. Consumers are moving away from the older legacy voice and data services that make up a large portion of revenue in these segments to more recent technological advancements and higher-speed services, like 5G and fiber broadband. The decline is compounded by the set of unique challenges each area faces.

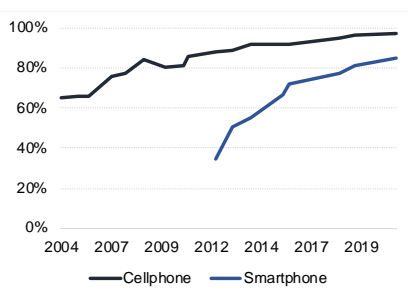
For wireline, this comes in the form of over-the-top (OTT) services that allow users to stream content through a website and avoid the cable or broadcast intermediary that AT&T traditionally operated. Unlike AT&T’s legacy wireline services with negative growth, these OTT services have a 12.9% CAGR<sup>14</sup> through 2030.

For wireless, the threat comes from the extreme commoditization of the area due to 97%<sup>15</sup> of Americans owning a cell phone as of April 2021 (see figure 9: *Share of US citizens with a Mobile phone over the years*). The chance to increase



**Figure 8: US Wireless market size (in \$m)**

Source: IBISWorld



**Figure 9: Share of US citizens with a Mobile phone over the years**

Source: Pew Research Center

<sup>12</sup> Mahale, V., 'U.S. Enterprise Wireline Telecommunications Services Provider Market,' *IDC*, 2019.

<sup>13</sup> 'Wireless Telecommunications Carriers in the US,' *IBISWorld*, 2021.

<sup>14</sup> 'The show must go on,' *Goldman Sachs Equity Research*, 2020.

<sup>15</sup> 'Mobile Fact Sheet,' *Pew Research Center*, 2021.

penetration is non-existent, and it is estimated that at least 75%<sup>16</sup> of new subscribers each year are just switching from one wireless provider to another. Telcos have no option but to lower prices aggressively to prevent defections.

The high-growth prospects in the OTT market combined with commoditization in wireless explains why AT&T attempted to enter the OTT space through its media acquisitions. However, as the OTT market approaches saturation with 40% of Americans considering cancelling at least one subscription service in the next six months due to the costs<sup>17</sup>, exclusive, high-quality content becomes the differentiating factor. As we saw, AT&T spread itself too thin financially to keep up with the spending needed to survive. However, this failure to enter the media space goes for all the major telcos, as none of the three major players operate a streaming platform. That is not because of a lack of trying, as Verizon sold its media arm, Verizon Media, consisting of brands such as AOL and Yahoo, for \$5 billion in September 2021. With the WarnerMedia and Verizon Media sales, all the major telcos are solely focusing on telecom, specifically building out networks for the recent innovations that customers are shifting towards, 5G and fiber broadband.

In the three years since the Time Warner deal closed, the emergence of 5G technology, which is up to 10 times faster than its 4G precursor, has revolutionized the telecom industry. It has been labeled as the 'the network of the future' by JP Morgan because it facilitates the Internet of Things and allows devices to intercommunicate. Despite 5G being a universal priority, each telco has approached expanding its coverage differently. AT&T ranked 5G as its number three priority in 2018, giving more importance its newly purchased media assets. Verizon made a \$18 billion bet on low-band airwaves<sup>18</sup> being key and lost when it was discovered the airwaves do not reach far enough to build a substantial network. Contrastingly, T-Mobile made the smartest move by buying Sprint for \$26 billion, as Sprint had a gigantic stockpile of unused mid-band airwaves that T-Mobile turned into a 5G network. As a result, T-Mobile became the first mover in the United States and launched its network in mid-2020.

T-Mobile is currently winning the 5G race, covering 200 million people, far ahead of Verizon, which aims to cover 100 million people by 1Q22, and AT&T, which aims to cover 75 million people by 4Q22. This places AT&T solidly in third. Although 5G-compatible smartphones only made up 20% of total smartphone shipments in

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<sup>16</sup> Rudin, E., 'The Value of Loyalty for Telecoms Brands,' *Oracle*, 2020.

<sup>17</sup> 'TV Viewership Index,' *Mohu*, 2021.

<sup>18</sup> Low-band spectrum is any spectrum that is lower than 1 GHz on the spectrum chart (Source: Nokia).

2020, this proportion is expected to hit 70% by 2023<sup>19</sup>, representing a serious threat to AT&T, as customer demand for speed increases.

Similarly, fiber internet is changing wireline, as it is up to 20 times faster than the industry standard of cable broadband internet and provides more reliable connectivity. Still, fiber rollout is in its nascence due to the high cost associated with installing the cables to serve residential homes directly, as it can cost up to \$30,000 per mile for the cable alone. Large American cities still lack availability and mostly use cable broadband, and even places like Chicago and Miami only have 21% and 32% fiber broadband coverage.

As opposed to 5G, AT&T and Verizon are leading the pack. As the market leader, AT&T covers 11.8% of the country (see figure 10: Largest Fiber providers in the US), while Verizon covers 10.7%<sup>20</sup>. Conversely, T-Mobile only launched its first fiber broadband pilot program in several Manhattan apartments in August 2021, but it is not ignoring the growing demand. It simply decided to offer 5G broadband instead. By leveraging its vast, T-Mobile hopes to serve up to 8 million homes by the end of 2025 (versus AT&T with 5 million fiber broadband connections as of FY20). However, in the long run, 5G broadband will not be able to handle the terabyte of data that will be used per household per month, meaning that this strategy is unsustainable and that owning a dense fiber-optic cable network will be crucial for telcos. This is highlighted by the fact that the pandemic increased demand so much that the US experienced the equivalent of one year worth of internet usage in two weeks in April 2020<sup>21</sup>.

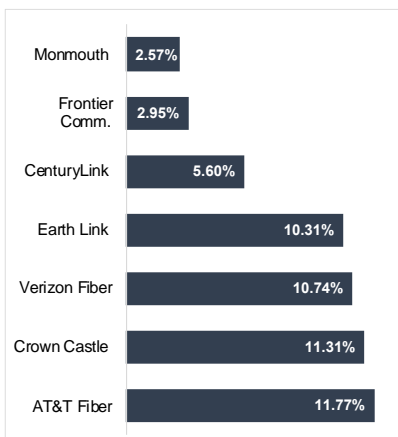


Figure 10: Largest Fiber providers in the US

Source: Broadband Now

## 2.2 AT&T versus Verizon and T-Mobile

Now that AT&T focuses on the telecom industry, its most relevant domestic competitors are Verizon, T-Mobile, United States Cellular Corp, and Lumen Technologies. Because US Cellular and Lumen focus on submarkets, this analysis will focus on the most comparable companies, Verizon and T-Mobile.

	AT&T		Verizon		T-Mobile US	
	2019A	2020A	2019A	2020A	2019A	2020A
<b>Operations</b>						
Revenue (\$m)	181,193	171,760	131,868	128,292	44,998	68,397
EBITDA (\$m)	61,856	40,817	51,531	50,243	14,896	25,225
<b>Profitability</b>						
Operating Margin (%)	15.4	3.7	23.0	22.4	12.7	9.7
ROA (%)	2.6	(1.0)	6.9	5.9	4.4	2.1
ROE (%)	7.5	(3.1)	33.6	27.5	13.0	6.5
<b>Balance Sheet</b>						
Total Debt/Total Equity (%)	93.3	102.1	211.9	217.3	147.0	164.1
PP&E Net (\$m)	154,167	152,029	114,609	117,364	35,632	72,224

Table 3: AT&T vs Peers – key KPI's

Source: Bloomberg

<sup>19</sup> '5G smartphone shipment share worldwide,' Statista, 2020.

<sup>20</sup> 'Fiber friendly cities' by Broadband Now. 2021.

<sup>21</sup> Wheeler, T., '5 steps to get the internet to all Americans,' The Brookings Institute, 2020.

First, looking at capital structure (see table 3 for the following paragraph), the increasing debt of all three companies reflects the nature of the telecom industry as an asset heavy industry. It requires huge investments in real assets like bandwidth, especially now that a 5G network is necessary to stay relevant. AT&T's financial leverage (total debt to total assets) is 35% as of FY20, which is comparably low versus Verizon at 48% and T-Mobile at 54%. However, both peers have already invested heavily in their networks. Verizon made \$52.9 billion in purchases during 2021 to increase its spectrum holdings 120% across the US, while T-Mobile created the largest 5G network through its acquisition of Sprint.

Both T-Mobile's and Verizon's expansions have already been reflected in a significant rise in PPE. Conversely, AT&T saw a decline in PPE between FY19 and FY20, as AT&T's debt level is a substantial burden on its ability to expand. Predicted capital expenditures suggest that AT&T will struggle to catch up, as it forecasts capital expenditures of \$24 billion annually, which include investments in 5G and fiber broadband and amounts of a \$7 billion upgrade versus current levels. In comparison, Verizon plans to spend up to \$28.5 billion, and T-Mobile plans to spend \$9 to \$12 billion. Given AT&T spend significant financial resources on its media excursion in the last years, it is difficult to understand how it will make up this ground without outspending its competitors.

In terms of profitability indicators, AT&T is beaten by its largest competitor, Verizon. Verizon's operating margin came in at 32.6%, while AT&T's operating margin stood at 3.7% (versus 15.4% in FY19), largely hurt by a large \$15.5 billion asset impairment expense for DirecTV. AT&T also posted a negative return on assets of -0.96% compared to Verizon's 5.9%. These figures show how AT&T suffers for operating two large-scale businesses across two distinct industries.

T-Mobile has never owned a media company, while Verizon Media only had 3 million subscribers (versus HBO's 69.4 million subscribers). This meant that competitors could concentrate more on their core telecom business and therefore used resources in a more targeted and efficient manner. Breaking revenues down per employee supports this assumption, as T-Mobile and Verizon make more money per employee (see table 4: Revenue per employee of AT&T vs Peers). That difference is not minor, with AT&T making \$740,000 per employee in 2020 (versus Verizon's \$972,000 per employee and T-Mobile's \$912,000 per employee).

Additionally, AT&T also pays 4.3% in interest on total debt (see table 5: Implied average interest rate of AT&T vs Peers.), nearly double that of Verizon and T-Mobile (Verizon pays 2.8%; T-Mobile 2.5%). Moreover, AT&T's credit is rated BBB+, while Verizon is rated A- and T-Mobile is rated B+ according to Fitch. Fortunately for AT&T, spinning off WarnerMedia to free up financial capacity could

	Employees (k)	Revenue (\$m)	Revenue/ Employee
AT&T	232	171,750	740
Verizon	132	128,290	972
T-Mobile	75	68,400	912

**Table 4: Revenue per employee of AT&T vs Peers (k)**

Source: Bloomberg

in \$m	Total debt	Interest expense	Implied interest
AT&T	182,983	7,925	4.3%
Verizon	150,547	4,247	2.8%
T-Mobile	107,247	2,729	2.5%

**Table 5: Implied average interest rate of AT&T vs Peers**

Source: Bloomberg

potentially result in an improved credit rating and cheaper refinancing opportunities.

To conclude, AT&T falls short of its competitors, reinforcing our thesis that venturing into media was nothing but a distraction that gave competitors room to purchase valuable telecom assets. Looking at its capital structure and profitability, AT&T is not positioned favorably to take back market share from its competitors and does not appear to be a better investment than Verizon or T-Mobile.

### 3. Assumptions

#### 3.1 Macroeconomic environment

The telecom industry historically included ‘traditional’ telcos like AT&T, and Verizon, and T-Mobile. In recent years, the structure has changed, and it now includes several companies that would have been classified as consumer discretionary, such as media companies like Netflix and entertainment groups like Disney. Moreover, it now overlaps with the information technology sector and companies like Alphabet and Meta that develop disruptive communications and entertainment services. Therefore, the industry is now referred to as Communications sector. This development is relevant because it changed the industry from being rather ‘defensive’ to partly ‘cyclical’<sup>22</sup>. Due to its exposure to entertainment and IT companies, the industry has a much stronger correlation to the business cycle than it used to. This is specifically true for AT&T, which has a significant exposure to cyclical businesses due to its share in WarnerMedia. Thus, it is relevant to take macroeconomic factors into consideration for the valuation.

Valuation assumptions are based on the overall economic outlook. The global macroeconomic environment is currently shaped by a post-Covid recovery supported by broader access to vaccinations, as well as ongoing inflation concerns and supply disruptions. Following sharp economic slumps in 2020, the International Monetary Fund (*see table 6: Economic growth projections*) projects global economic growth of 5.9% in 2021<sup>23</sup> and 4.9% in 2022 (annual % change of real GDP). With 88.4% of FY20 revenues coming from the US, it is AT&T’s core geography. The American economic recovery is estimated to be going slightly better (+6.0% in 2021; +5.2% in 2022), and the country has seen a significant increase in inflation in 2021 driven by ongoing supply constraints. Inflation has surpassed the Fed’s expectations, and even reached 6.8%, an increase not seen

in %	2020	2021E	2022E
World Output	(3.1)	5.9	4.9
United States	(3.4)	6.0	5.2
Euro Area	(6.3)	5.0	4.3
Latin America & Caribbean	(7.0)	6.3	3.0
Mexico	(8.3)	6.2	4.0

**Table 6: Economic growth projections (real GDP, annual % change)**

Source: IMF – World Economic Outlook

<sup>22</sup> Chrisholm, D., ‘Sectors Are Shifting: The Impact of the New GICS Framework,’ *Fidelity*, 2018.

<sup>23</sup> ‘Global Macroeconomic Outlook,’ *International Monetary Fund*, 2021.

Year	Inflation (in %)
2005	3.39
2006	3.23
2007	2.85
2008	3.84
2009	-0.36
2010	1.64
2011	3.16
2012	2.07
2013	1.46
2014	1.62
2015	0.12
2016	1.26
2017	2.13
2018	2.44
2019	1.81
2020	1.23
2021	4.49*

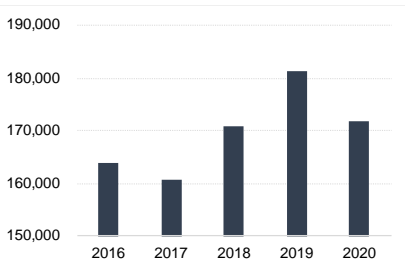
**Table 7: Historic US inflation**

Source: Bureau of Labor Statistics  
\* Average of monthly inflation Jan-Nov 21

over a 12-month period since 1982<sup>24</sup>. With the new Coronavirus variant Omicron emerging in the beginning of December 2021, uncertainty rose in markets. There seems to be consensus that inflation is not just transitory and might linger a bit longer than the anticipated peak in 1Q22. This implies the possibility of a rate hike in mid-2022, which could impact AT&T's cost of debt. However, while these developments are relevant for the share price in the next 12 months, they only have a minor impact on the long-term outlook and growth assumptions. Also, the period after the 2008 financial crisis shows that inflation normalized about two to three years post-crisis and has stagnated around the Fed's 2% target in the long-term ever since (see *table 7: Historic US Inflation*).

To conclude, while Covid-19 will continue to shape the macroeconomic environment near-term, we consider its impact on AT&T's day-to-day business to be largely in the past. Lockdowns caused revenue declines and rising costs due to safety measures to protect front-line staff, but we expect operations to go back to normal in 1H22 and base our assumptions on an overall positive outlook for the US. Additionally, we consider the pandemic and the transformation it prompted in the telecom industry as an overall positive for AT&T's Communications segment. For Latin America, economic growth is also estimated to be higher than average by the IMF. We expect demand and consumption to bounce back strongly this year and next after the region was severely hit by the pandemic.

### 3.2 Revenues throughout Covid-19



**Figure 11: Total operating revenues of AT&T (\$m)**

Source: Company information

AT&T splits its revenues into three segments: Communications, WarnerMedia, and Latin America. Communications and Latin America include the telecom businesses in the United States and Latin America, while WarnerMedia includes all the media and entertainment content under Turner, HBO, and Warner Bros. In the years before the pandemic, AT&T experienced healthy overall revenue growth of 6.4% in 2018 and 6.1% in 2019 (see *figure 11: Total operating revenues of AT&T*). This increase is largely attributed to the acquisition of Time Warner in mid-2018 and the impressive growth of WarnerMedia afterwards. During this same period, both Communications and Latin America experienced falling revenues. In Communications, this is largely due to the commoditization of the wireless subsector affecting Mobility, as well as the shift away from outdated technology in the Broadband and Business Wireline subsegments. The recently sold Video subsegment that suffered the most, declining -10.9% in FY20 due to the satellite television provider DirecTV losing customers to streaming platforms. Additionally,

<sup>24</sup> 'Consumer Price Index for All Urban Consumers (CPI-U),' Bureau of Labor Statistics. 2021.

due to being such a highly concentrated industry with only three main competitors, telcos are left to differentiate their products by lowering prices to encourage defections from one of the other two providers. Meanwhile, weakness in Latin America stems from unfavorable foreign exchange trends, like the weakening of the Mexican peso and Argentina's hyperinflationary economy, and political instability in Venezuela that forced AT&T to withdraw its operations altogether.

In FY20, AT&T's revenue fell 5.2% from \$181.2 billion to \$171.7 billion. Revenues falling in the Video, Broadband, and Business Wireline subsegments in Communications was largely the continuation of ongoing trends of affordability and the replacement of outdated technology instead of a reaction to the pandemic. Notably, the Mobility subsegment grew revenue 2.1% to \$72.6 billion because of a large increase in contracts for Connected Devices, primarily devices placed in automobiles, as well as the 5G upgrade cycle resulting in more phone sales.

Within WarnerMedia, the sporting event cancellations and theater closures that negatively affected Turner and Warner Bros stemmed from the Covid-19 outbreak and can be viewed as a one-off event. HBO grew revenue 0.9% as the virus forced everyone to stay at home and seek entertainment online.

Latin America revenues fell because of weak foreign exchange rates affecting the conversion of locally denominated revenues to USD. One US dollar went from equaling 18.61 Mexican peso on 14 February 2020 to equaling 25.34 Mexican peso on March 23, 2020, an all-time high. The peso has yet to recover, explaining why segment revenues fell -10.7% despite an increase in subscribers.

### 3.3 Forecasting Revenues

The results discussed in this section are from the base case in which we predict that AT&T invests heavily in its telecom operations after the WarnerMedia spin off is completed. The \$24 billion in forecasted capital expenditures per year that will largely go towards increasing 5G and fiber broadband coverage will lead AT&T to recover significant market share. It is also assumed that WarnerMedia will continue to expand HBO globally, as it recently launched in various European countries and plans to enter over sixty territories in total in the coming years. Upon a successful expansion, we project subscribers to nearly double to around 120 million by the end of the forecast period in 2025, serving as the main driver of revenue growth for the segment. The upside and downside case are both discussed further in the report in the section labeled ['4.6 Scenario Analysis'](#).

We projected the percentage of YoY growth for each subsegment throughout the explicit forecasting period that ends in 2025. It is important to note that even though

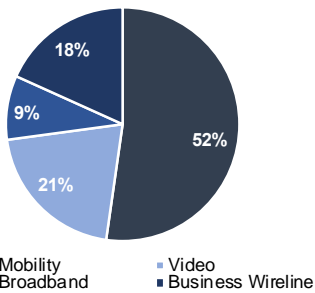
AT&T provides key performance indicators (KPIs) like subscriber count for each subsegment within its three revenue streams, it is never stated how much revenue is generated per user. For example, the quantity of Mobility subscribers is released, but not the revenue generated solely from Mobility subscribers. As a result, revenue cannot be forecasted by calculating the average revenue generated per user and then multiplying that by the predicted number of subscribers. Despite this, we forecasted subscriber growth to justify the revenue driver within each subsegment, and these predictions were taken into consideration when forecasting the percentage of YoY growth for each subsegment. For the years between 2026 and 2032, we took subsegment-specific and macroeconomic factors into account to determine a long-term linear growth rate.

### 3.3.1 Communications

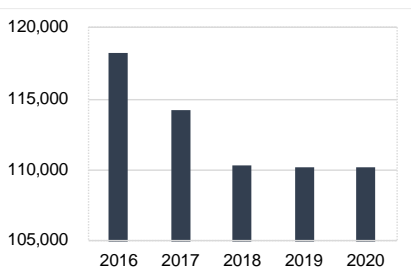
Communications is the largest segment and has four subsegments: Mobility, Video, Broadband, and Business Wireline (see figure 12: *Communications revenue split 2020*). Sold for \$7.1 billion in August due to not fitting into AT&T's telecom core, Video was the only subsegment to be considered non-core. Core Communications revenue accounted for \$110.2 billion in revenue in 2020, which is equivalent to 64.2% of total revenue and 77.0% of total core revenue (see figure 13: *Total Communications revenue*).

Mobility provides nationwide wireless service and equipment across the US. In previous years, this subsegment has experienced minimal, and even negative, revenue growth due to shift towards affordability. After experiencing a 2.1% drop in revenue in 2017 and 0.8% drop in 2018, the subsegment returned to growth with a 0.8% increase in 2019 and a 2.1% increase in 2020. This can largely be explained by the increase in Connected Devices and 5G upgrade cycle causing elevated smartphone sales.

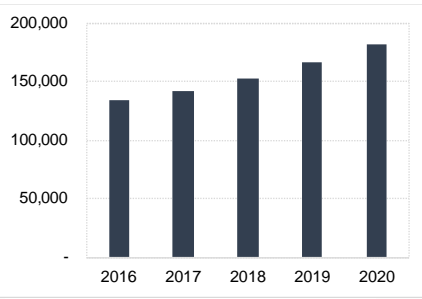
We project this to increase substantially in 2021. In fact, as of 3Q21, equipment and service sales, which made up 76.5% of Mobility revenues in FY20, had risen 4.6% YoY. Therefore, we project 6.25% growth in 2021 resulting from a continuation of the 5G-compatible smartphone cycle that is currently underway. This was further supported by the iPhone 13 launching in September, as well as one-off events such as stimulus checks giving millions of Americans the financial power to upgrade. However, because basically no opportunity exists for further market penetration, this recent growth is driven by temporary trends that will not lead to consistent outperformance. As a result, we expect that such outsized growth is unsustainable and predict much more subdued growth that will largely be driven by Connected Devices related to cars and not phone sales.



**Figure 12: Communication revenue split 2020**  
Source: Company information



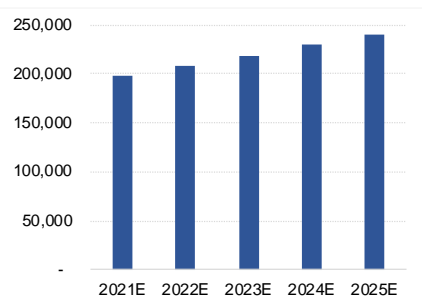
**Figure 13: Total Communications revenue development as reported (\$m)**  
Source: Company information



**Figure 14: Historical Mobility subscriber growth (in k)**

Source: Company information

In 2020, total Mobility subscribers grew 10.0% to 182.6 million (see figure 14: *Historical Mobility subscriber growth*). This is in line with total subscribers growing at an increasing rate since 2017, with 5.0%, 7.6%, and 9.2% YoY growth in 2017, 2018, and 2019, respectively. This is primarily originating from a large increase in Connected Devices, which are data devices included in cars. Connected devices make up 80.8 million of total Mobility subscribers, or 44.2% of total subscribers. In the four fiscal years between 2017 and 2020, connected devices subscribers grew 23.4%, 31.7%, 28.5%, and 22.4% chronologically on YoY basis. This is the opposite of smartphone subscribers, which has consistently hovered around 102 million subscribers since 2016. As such, we predict that as smartphone sales taper off, Connected Devices will become the main source of growth.



**Figure 15: Estimated Mobility subscriber growth (in k)**

Source: Analyst estimates

In the explicit forecast period, we predicted 3% growth in FY22, as sales start to normalize without one-off events (see figure 15: *Estimated Mobility subscriber growth*). Sales are still propped up by the upgrade cycle but dampened as the world continues to deal with the pandemic. We expect continued supply chain problems and lower roaming revenues resulting from depressed international travel. Growth falls even further to a 1.25% growth rate in 2023, as the upgrade cycle will have mostly played out by this point. At this point, any growth within Mobility is almost entirely from Connected Devices, as AT&T takes advantage of the increased device interconnectivity resulting from wider spread 5G networks to gain subscribers. In the long term, we forecast 0.75% growth, significantly under the long-term expected GDP growth rate, as there are so few new customers left for the telecom market without introducing an innovative product. This leaves customer defections and Connected Devices to sustain revenues.

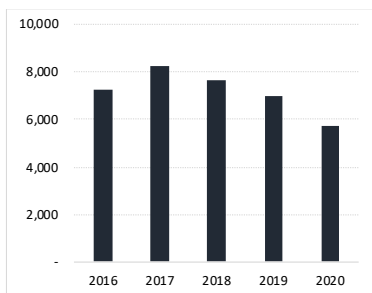
Broadband provides internet, including broadband fiber, and legacy telephone voice communication services to residential customers. This subsegment is facing two opposing trends. The total number of legacy broadband customers is falling, but many of these subscribers are not leaving altogether. Instead, they are switching to fiber broadband, which has ultimately stopped revenues from collapsing completely. Fiber broadband has a higher ARPU due to its higher price point (Broadband's ARPU climbed from \$52.43 to \$55.16 between FY19 and FY20). Despite Broadband revenues falling -5.7%, -5.2%, -0.7%, and -5.3% chronologically YoY in the last four fiscal years since FY17, revenues are up 3.4% YoY this fiscal year as of 3Q21. Since a significant portion of AT&T's expected \$24 billion in capital expenditures per year is expected to be dedicated to expanding its fiber network, we expect fiber broadband revenues to continually offset revenue losses coming from the decline of legacy broadband customers. In fact, we predict the subsegment to maintain positive revenue growth after this year, as AT&T wants

to double its existing fiber broadband base and hit 30 million fiber broadband customers by 2025. Currently, there are 53 million households in AT&T's service area, and 14.9 million have access to fiber broadband.

AT&T's legacy broadband subscribers have been dropping since 2016, losing -10.0% of its subscribers in FY20. On the opposite end of the spectrum, fiber broadband subscribers have grown at an average rate of 40.3% per year between 2017 and 2020. Between FY19 and FY20, this figure was 27.4%. By projecting fiber broadband customers to increase 22.0% per year and legacy broadband customers to decline -14.0% per year due to the shift towards fiber accelerating, higher ARPU fiber broadband subscribers outnumber legacy broadband subscribers as early as FY22 (7,081 legacy broadband customers vs. 7,369 fiber broadband customers). By the end of the explicit forecasting period, this difference becomes even more defined with 3,852 legacy broadband customers versus 11,297 fiber broadband customers. We argue that fiber broadband being adopted by more customers as it becomes more available across the country and its higher price point is what will drive its 2.25% long-term growth rate.

Business Wireline provides advanced IP-based services, as well as traditional voice and data services to business customers. It is going through the same shift as Broadband, with technological advancements such as security and cloud solutions being the main driver of revenue that offset the loss of legacy voice and data service clients. Likewise, we predict revenue to slowly decline in line with past years. Although because this subsegment has not been talked about much by AT&T in comparison to Mobility and Broadband, we do not expect substantial revenue growth, nor do we expect higher demand for higher cost products to outweigh the loss of legacy customers. This is also a conservative prediction, as Business Wireline subscriber numbers are not made publicly available. Therefore, the growth rate versus the attrition rate cannot be analyzed.

We project a -5.0% decline in revenues for 2021, in line with the -5.2% YTD decline as of 3Q21. We predict this decline to continue at a slower rate until it turns slightly positive at the end of the forecasting period upon AT&T completing the streamlining of the product portfolio to contain only higher margin products like security and cloud solutions. Long term, we expect growth to hover around 0.5%, as newer, higher-ARPU products will sustain revenue. However, since this subsegment is not a priority, it will not receive the same attention as others.

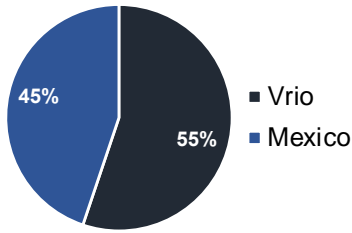


**Figure 16: Total Latin America revenue development (in \$m)**

Source: Company information

### 3.3.2 Latin America

Latin America is AT&T's smallest segment, acting as the international extension of AT&T's telecom services. It contains two subsegments: Mexico and Vrio (see



**Figure 17: Latin America revenue split 2020**

Source: Company information

figure 16: Total Latin America revenue development and figure 17: Latin America revenue split 2020), but only Mexico is classified as a core operation. The Vrio subsegment was sold for an undisclosed amount this year. Core Latin America revenue from the Mexico subsegment of \$2.6 billion represents 1.5% of total revenue and 1.8% of total core revenue, making it a small caption overall.

Mexico provides wireless service and equipment to customers in Mexico, similarly to the Mobility subsegment within the United States. This segment declined -10.7% last year, primarily because of the weakening of the Mexican peso. However, we expect the Mexico subsegment to increase significantly due to combination of the expected economic revival in Mexico and slow recovery of the peso in comparison to the US dollar. Revenues have climbed 12.6% YTD as of 3Q21. As such, we expect revenue to rise substantially in the next two years coming out of the pandemic before tapering off as the economic situation in the country stabilizes.

the merged company's growth potential might prefer to purchase AT&T stocks. Thus, we do not think the company will be able to realize the suggested upside potential and assume a median EV of \$34.9 billion (of which 71% is added to AT&T's valuation).