

Communication Services

September 2024



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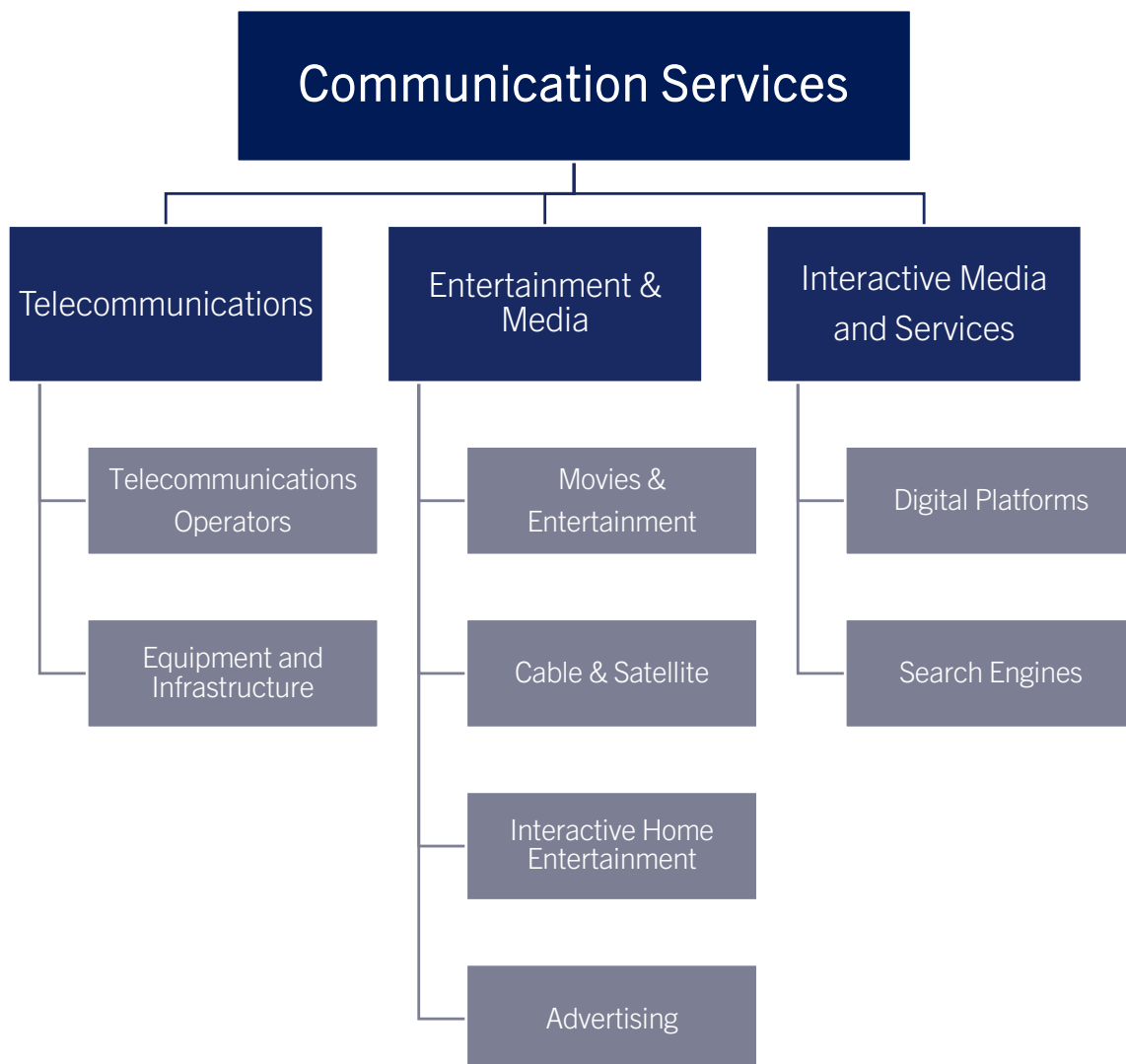
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Sector Overview

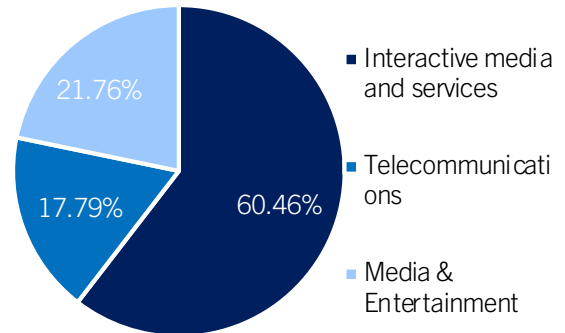
The MSCI Communication Services sector encompasses a diverse range of companies involved in aspects of communication, media, and digital services. Established in 2018, this sector's creation marked one of the most significant changes to the Global Industry Classification Standard (GICS) since its inception. Initially known as the Telecommunications sector, the rebranding to Communications Services aimed to reflect the industry's rapid evolution, integrating companies at the forefront of digital transformation. This shift brought together traditional telecommunications firms, such as those providing voice, data, and broadband services, with companies from the Consumer Discretionary and Information Technology sectors. The sector can now be broken down into three major subsectors, Interactive Media and Services, Telecommunications, and Entertainment and Media.



MSCI Communications Services Index

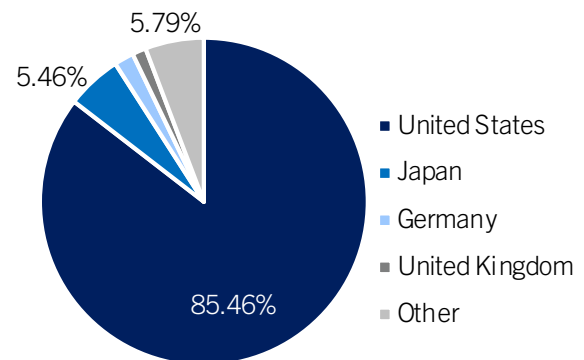
The MSCI communications index is now dominated by the Interactive Media and Services subsector. This can be attributed to the huge success that both Alphabet and Meta have enjoyed over the past few years and these two companies alone account for almost 60% of the index. The telecommunications subsector’s weight has declined since 2018 and now accounts for just over 20% of the index.

Figure 1: Weights by Subsector



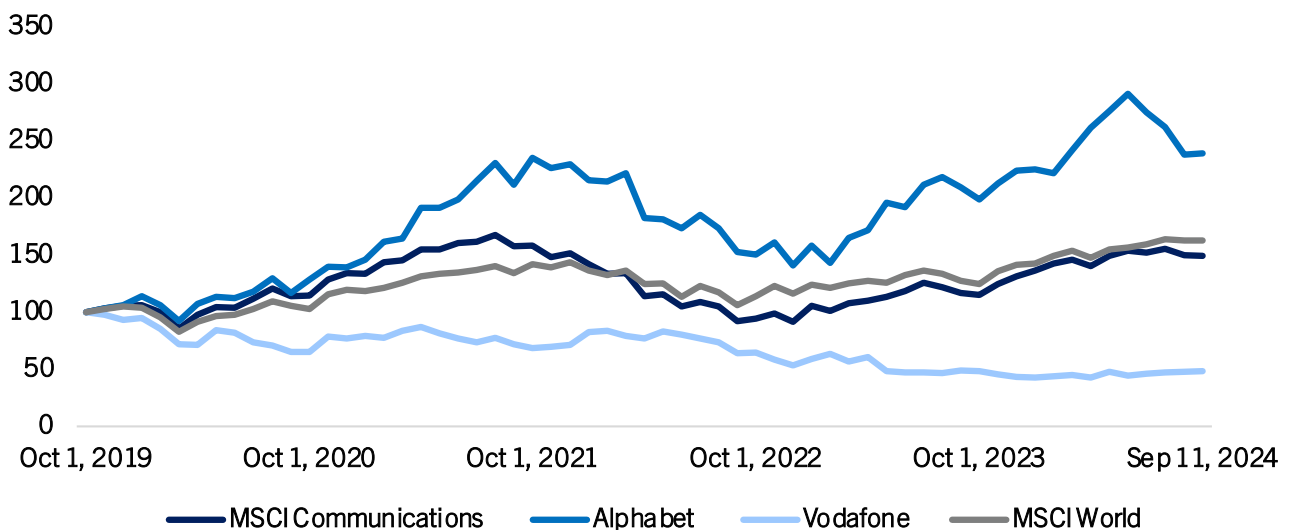
The geographic composition of the Index is dominated by developed markets, particularly the United States. Again, the United States’ weight has increased in recent years as Alphabet and Meta continue to grow in scale.

Figure 2: Geographic Breakdown



The MSCI Communications Index has generally performed in line with the broader market since 2019. Developments such as Artificial Intelligence, 5G, and increased demand for streaming have been key performance drivers in the sector.

Figure 3: Historical Performance



Subsectors

Telecommunications



The telecommunications industry is the oldest communications subsector. It covers the traditional range of equipment and infrastructure, networking products, and wireless services. As the oldest segment, growth in this industry has been slow, due to revenue effectively being a function of population growth. This is because revenues are generated through either once-off equipment sales or monthly subscriptions. Despite this, companies in this sector are reliable generators of free cash flow and attract investors by paying a nice dividend. Telecom companies also benefit from high operating leverage and low competition. This has, however, given rise to increased regulatory scrutiny in recent years.

Telecommunications Operators

Companies that provide a full range of telecommunications services, including fixed-line, mobile, broadband internet, and digital TV, often bundled together to offer comprehensive communication solutions. At one time this section might have been split into integrated and wireless operators, however, consolidation has meant that most providers operate across both wireline and wireless.

Key Players (USA) – Verizon, AT&T, T-Mobile.

Key Players (UK & EU) – Vodafone, Deutsche Telekom, Orange S.A, Telefonica, BT.

Key Performance Indicators – ARPU, churn rate, network reliability, subscriber growth, network coverage, spectrum usage efficiency.

Telecommunications Equipment and Infrastructure

Companies that supply the physical components and technology necessary for telecom networks, such as routers, switches, fibre optics, and cellular towers, enable connectivity and network expansion for service providers.

Key Players – Huawei, Ericsson, Nokia, Cellnex, American Tower Corporation.

Key Performance Indicators – book to bill, order backlog, product failure rates, tenancy ratio.

Media & Entertainment

The Media and Entertainment subsector comprises companies engaged in the creation, production, distribution, and monetization of a wide range of content, including television shows, movies, music, news, publishing, and digital streaming services. The media subsector has seen huge change over recent years as the way in which people consume content has rapidly changed. This has resulted in incumbents losing market share to new players. This subsector features a mix of traditional media companies—such as broadcasters, publishers, cable networks, and film studios—and digital-first entities like streaming platforms, social media companies, and digital content creators.

Movies & Entertainment

Companies involved in the production, distribution, and exhibition of movies, television programs, and other entertainment content, focusing on both traditional and digital distribution channels.

Key Players – The Walt Disney Company, Warner Bros. Discovery, Netflix, Sony Pictures Entertainment, Paramount Global.

Key Performance Indicators – box office revenue, streaming subscriber growth, content acquisition cost

Cable & Satellite

Providers of television programming via cable and satellite services, often bundled with internet and phone services, generating revenue through subscriptions, advertising and licencing agreements.

Key Players – Comcast Corporation, Charter Communications, Dish Network, Sky Group, Altice Europe.

Key Performance Indicators – ARPU, subscriber growth, churn rate, content costs/revenue

Interactive Home Entertainment

Companies that create and distribute interactive digital entertainment, including video games, esports, and virtual reality experiences, catering to consumer demand for immersive entertainment.

Key Players – Electronic Arts, Activision Blizzard, Nintendo, Sony Interactive Entertainment, Tencent Games.

Key Performance Indicators – monthly active users, daily active users, in-game purchase revenue, game release success (sales and player retention).

Advertising

Companies providing marketing and advertising services across various media, with an increasing focus on digital advertising driven by data analytics.

Key Players – WPP plc, Omnicom Group Inc., Publicis Groupe, Dentsu Group Inc., Interpublic Group of Companies, Inc.

Key Performance Indicators – digital advertising revenue, client retention rate, return on advertising spend (ROAS).

Publishing

Publishing companies produce and distribute content in both print and digital formats, such as newspapers, magazines, books, and other written media, with a growing emphasis on digital distribution.

Key Players – News Corporation, Pearson plc, The New York Times Company, Bertelsmann, Gannett Co., Inc.

Key Performance Indicators – Digital Subscription Growth, Circulation Revenue, Advertising Revenue (Digital and Print).

Interactive Media and Services

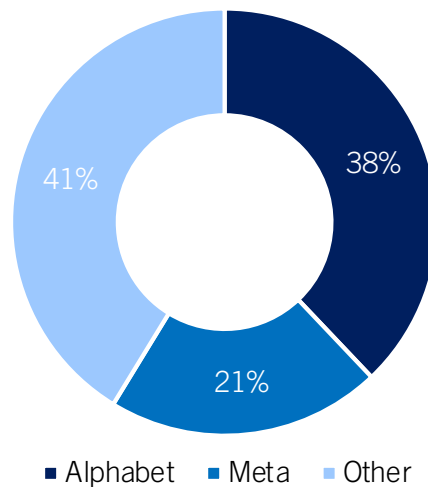
Interactive Media and Services refers to companies that create platforms that facilitate user engagement. It includes social media companies such as Meta, as well as search engines, most notably Alphabet. Companies in this sector rely on networking effects that serve as a competitive moat to prevent other businesses from entering the market and eroding their market share. In contrast to telecoms, these businesses would be considered higher-growth stocks. Many companies in this industry have very low capital intensity, making their businesses highly scalable.

Interactive Media and Services account for over 60% of the MSCI communications services index and this is largely due to the two companies previously mentioned. Meta and Alphabet account for over 55% of the index, which has led to concerns among investors that the index is overconcentrated.

Key Players – Alphabet, Meta, Snap, Pinterest, Tencent Holdings

Key Performance Indicators – MAU, DAU, ARPU, user engagement, advertising revenue

Figure 4: Alphabet and Meta Index Weights



Current Climate

Telecommunications

Since COVID-19, data traffic has increased dramatically, this coupled with the 5G roll-out has led to huge spending on infrastructure by telecom operators (1). Despite the central role that telecommunications companies have played in the digital transformation, they have failed to convert this into shareholder returns (2). In response, some operators attempted to diversify into entertainment. This was unsuccessful and led to unhealthy

amounts of debt on companies' balance sheets. Over the past two years, operators have refocused on their core operations, and now things may be beginning to turn around for the industry. It appears we are past peak 5G capital expenditure, and the competitive environment in the US is beginning to ease (3). On top of this, rate cuts are finally in sight which will have two positive effects. Firstly, this will make income-yielding stocks such as telecom companies more attractive, as bond yields fall. Secondly, rate cuts reduce the cost of borrowing, which is important due to the capital-intensive nature of the industry.

In Europe, price wars in France are indicative of the fierce competition in the industry. Traditionally, 4-5 players are competing in each European country compared to the 3 main players in the US. Regulators now appear to be taking a more lenient stance when it comes to consolidation and the merger between Mas Movil and Orange is an example of this (4). This trend should continue to ensure Telecommunications companies are sufficiently incentivized to invest in critical 5G infrastructure.

Media & Entertainment

The Media and Entertainment industry is navigating a rapidly changing landscape driven by digital transformation, changing consumer preferences that were accelerated by the pandemic, and heightened competition. Over the past decade, streaming platforms like Netflix have entered the market and taken market share from incumbents. Now, however, the majority of streaming companies are struggling to achieve profitability, due to high content acquisition costs and intense competition as both new and traditional players enter the market. As companies such as Comcast face structural challenges (chord cutting, increasing digital ad spend) they have been forced to play catch up in entering a market which is already characterized by intense competition.

Interactive Media & Services

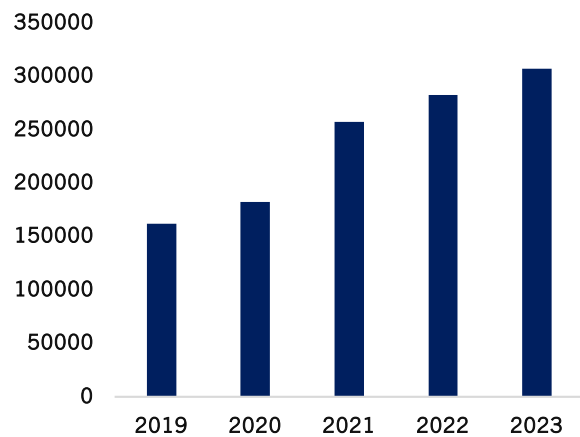
Over the last year, the Interactive Media and Services sector has delivered a very strong performance, driven by robust user engagement, continued demand for digital advertising across platforms and the leveraging of both user data and artificial intelligence to facilitate targeted advertising. These companies have performed so well that they are now under intense regulatory scrutiny in Europe and from the FTC (5)(6). Another driver of these companies' performance has been the emergence of generative AI. Since the launch of Chat GPT in 2022, companies like Meta and Alphabet have invested huge amounts into the emerging technology, with investors anticipating that this would yield even greater returns. So far, this has not entirely materialised, which has led to investors becoming increasingly cautious regarding these companies' hefty valuations and whether they should believe the hype behind Artificial Intelligence.

Current Holdings

Alphabet Inc. (NASDAQ: GOOG) – HOLD

Alphabet Inc. is a multinational conglomerate and the parent company of Google, with a leading position in digital advertising, search, and cloud computing services. It operates key platforms like Google Search, YouTube, Google Maps, and Google Cloud, which generate substantial revenue through targeted advertising and subscription services. The company's diverse portfolio enables it to maintain a dominant position in the digital ecosystem while driving innovation across various tech sectors, most notably artificial intelligence.

Figure 5: Annual Revenue 2019-2023



Hold Thesis

YouTube and Cloud: YouTube continues to expand its user base and ad revenue, while Google Cloud’s robust growth provides a strong diversification stream. These areas are less likely to be disrupted by AI and will deliver revenue and profit growth beyond traditional search.

Shift to Digital Ad Spend: As advertising budgets increasingly shift from traditional to digital channels, Alphabet benefits as the dominant player in digital advertising, capturing a significant share of global ad spending through Google Search, YouTube, and programmatic ad offerings.

Reengineering of Cost Base: Alphabet has taken measures to reengineer its cost base in the last year and these improved efficiencies will offset some of the increased AI spend.

Valuation – 23x P/E: Despite being at the forefront of advancements in AI, Alphabet is valued at a discount to other peers in the tech space such as Meta and Microsoft. In our view this is unwarranted, and that investor’s fears over Antitrust and the future of search are now fully priced in, while growth prospects in other areas are currently being overlooked.

Risks to Thesis: Generative AI disruption of core search division, antitrust scrutiny, weakening US consumer, and investor concerns of high AI CapEx.

Vodafone (LON: VOD) – SELL

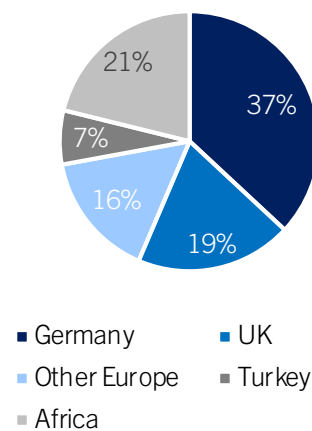
Vodafone plc is a leading British multinational telecommunications provider operating in Europe and Africa. It operates mobile and fixed-line networks in 15 countries with stakes in further 7 through its joint ventures and associates. It is partnered with mobile networks in another 43 countries. The business is comprised of infrastructure assets, shared operations, growth platforms, and retail and service operations. Retail and service operations are divided across 3 business lines: Vodafone Business, Europe Consumer, and Africa Consumer.

Vodafone Business: Provides a range of connectivity services to private and public sector customers.

Europe Consumer: Provides mobile and fixed line connectivity in European markets. Other services include its consumer 'Internet of Things' (IoT) propositions, and security and insurance products.

Africa Consumer: Provides mobile services in Africa. Provides financial services, business and merchant services through its VodaPay super-app and the M-Pesa payment platform (7).

Figure 6: Revenue by Geography



Sell Thesis

Investment Thesis Has Played Out: Vodafone was purchased on the basis that it was undergoing a period of simplification. This investment thesis has since played out, following the €5bn sale of Vodafone Spain to Zegona, the €8bn sale of Vodafone Italy to Swisscom, and the approval of the merger between Vodafone UK and Three UK by the Secretary of State responsible for the 'National Security and Investment Act' (8).

Share Price Growth: We have also seen substantial share price growth of over 15% since February 2024 when it stood at £63.90 GBP. The share price now stands at £74.42 GBP and we believe we should capitalise on this increase.

Stagnant Growth and Regulation: Finally, Vodafone is experiencing stagnant revenue growth alongside high levels of debt. Revenue growth has slowed in Europe, particularly in Germany following regulatory changes. A recent legal change prevents housing associations from bundling TV with rental costs. Vodafone Germany is expected to lose half of the 8.5 millions households as a result of these changes (9). A simplified Vodafone is now also a smaller Vodafone, battling a fiercely competitive European telecoms landscape. Regulators have a strong chokehold on the industry meaning that large investments in new technologies are required for Vodafone to maintain its market share.

Investment Themes

Shift to Digital Advertising

The remarkable performance of both Meta and Alphabet can in large be attributed to businesses reconfiguring their ad budgets to spend more and more on digital advertising each year (10). These giants, which at their core are technology companies, have gained an extremely dominant position in the digital advertising space. This is due to their ability to leverage advanced data analytics, vast user bases, and ad-targeting capabilities. Traditional advertising companies still rely on outdated advertising methods, that deliver inferior results to clients.

As digital transformation accelerates, traditional media companies will need to make significant investments in technology, data analytics, and digital platforms to attempt to keep pace. However, given the rapid innovation and scale that Meta, Alphabet, and other tech-centric companies have already achieved, it will be a formidable challenge for traditional players to close the gap and capture the same level of advertising spend and effectiveness. While some traditional media companies may appear to be undervalued, their growth prospects are bleak and huge capital expenditure will be required to turn things around.

Strategic Partnerships

Strategic partnerships are increasingly advantageous for telecommunications companies as they expand their capabilities and offer new, high-value services that meet the growing demands of the digital economy. These partnerships allow telecom operators to deliver innovative solutions, such as IoT connectivity, smart city infrastructure, and real-time analytics, which are essential for modern enterprises looking to digitalize their operations.

These new offerings provide telecom companies with opportunities to move into higher-margin areas and diversify their revenue streams. Unlike traditional telecom services, which often face pricing pressure and regulatory constraints, these advanced services cater to sectors that are willing to invest significantly in technology to enhance their efficiency and productivity.

Rotation from Tech Stocks to Value

In recent weeks, market sentiment toward the technology sector has shown signs of cooling due to several factors, including growing concerns about market concentration and increasing antitrust scrutiny from regulators. These regulatory pressures are targeting the dominance of major tech firms, raising fears about potential limitations on their business practices and future growth. Additionally, the valuations of tech companies, which have soared in recent years, are now facing more scepticism, as investors question whether these high multiples can be sustained.

This shift in sentiment has led to a noticeable broadening of the market, with investors rotating out of tech stocks and into other sectors. This trend is reflected in the performance of the Russell 2000 index, which has surged 10% since August 7th, highlighting renewed interest in smaller-cap stocks that were previously overshadowed by the tech giants.

Furthermore, with potential rate cuts on the horizon, the attractiveness of income-yielding stocks has increased. As lower interest rates typically make bonds less appealing, dividend-paying stocks, which include telecommunications, are becoming more favourable to investors seeking stable returns in an uncertain market environment.

Risks

5G Vulnerabilities

The ongoing rollout of a global 5G network faces significant challenges. These networks are more software-dependent than the previous 3G and 4G networks. Thus, they are a more attractive target for attackers who could exploit weaknesses in the software supply chain.

As a laggard in the 5G rollout, Europe risks falling behind which would put it at a disadvantage on a global scale. As the first generation of machine-to-machine communication, 5G infrastructure is fundamental for future innovations. Compared to the more consumer-focused 4G network, the focus of 5G is on industry. The technology has the potential to drive future innovations such as smart cities, autonomous driving, and the next generation of manufacturing. A delay in the rollout of this network would mean that Europe would fall behind in utilising 5G slicing, low-latency applications and robotics compared to other regions. This could greatly hinder European competitiveness in the industry as well as European job creation (11).

Antitrust Scrutiny

Mega-cap companies such as Alphabet and Meta are at the forefront of advances in generative AI. However, they face serious regulatory pressures. The AI industry's biggest players NVIDIA, OpenAI, and Microsoft all face scrutiny from U.S. antitrust enforcers. Concerns over data safety and security, fears that AI could replicate and in turn replace jobs, and transparency regarding partnerships between AI companies and cloud service providers such as Alphabet have sparked concerns among regulators (12).

Antitrust along with anti-competitiveness fears in the industry have left these companies open to extensive scrutiny. Both the Federal Trade Commission (FTC) and the US Department of Justice have launched a market inquiry into these major players, including Alphabet and Amazon, and have formed an antitrust oversight agreement. Regulators are concerned that the power over the transformative technology is being concentrated among a few individuals (13). Overreliance on these companies in an

uncertain competitive environment is a major risk overshadowing the sector.

AI-Focused Capital Expenditure

Companies investing in AI are subject to high levels of capital expenditure which creates financial and technological risks. In order to keep up with developments in the industry, companies may have to invest heavily in trends which may then fail to see an adequate return on investment. Commitment to capital which may not deliver substantial returns creates a massive opportunity cost for companies as this capital could be deployed elsewhere. Furthermore, the benefits of AI investments often involve a long payback period. The benefits may take years to materialise, meaning that capital is tied up for long periods. This can place liquidity strains on companies.

AI is also a rapidly evolving technology. This creates a risk that significant investments in AI may quickly become outdated and require further investments to stay competitive. AI projects can be unpredictable and may not deliver the expected outcomes if the technology does not integrate well with the business model. Successfully implementing this technology requires complex integration of other technologies and systems. Challenges related to data quality, system compatibility, and cybersecurity all create further obstacles. These companies must balance this opportunity cost with the need to keep up with AI developments, or they may risk falling behind.

Macroeconomic Risk: Weak Consumerism

A lower aggregate demand for goods and services results in decreased spending, directly impacting the revenue streams of companies within the sector. To combat this revenue loss, many businesses may decide to cut spending on digital advertising, leaving media companies like Meta and Alphabet extremely vulnerable. The sector is highly dependent on consumer spending and engagement. With a reduction in revenue, companies may scale back on research and development, hindering the innovation that drives growth.

Political Risk

2024 has overseen elections in the UK, France, and the European Parliament and is closely awaiting the result of the upcoming U.S. election. These new governments could propose new regulations which may have negative effects on the sector. This is particularly relevant for the telecommunications subsector, where governments seek to ensure that consumers are met with fair prices in a market that is dominated by a few major players. For example, the conditional approval of the Vodafone UK and Three UK merger was based on UK competition policies, and more recently, new regulations in Germany have led to a huge loss in Vodafone's consumer base.

Outlook for the Year Ahead

In our view, the events of the past month are a great indication of what may lie ahead in the coming year. Generative AI has the potential to bring about technological advancement at a level we have not seen since the Industrial Revolution and generate enormous returns for its earliest adopters. With this in mind, companies in the sector like Alphabet, have poured significant resources into acquiring advanced AI chips and funding extensive research and development. This is in the hope that if they invest heavily now, they will reap the rewards in the future. In the year ahead we will ensure to maintain exposure to these tech-heavy stocks in the sector.

On the other hand, while it is likely that they will eventually see a reward for all of their investment, as time goes by and CapEx continues to rise, investors have become more cautious. On top of this, monetary tightening is squeezing the consumer and fears of a recession are rising. This has led to somewhat of a rotation out of Tech and into sectors that had been previously less favoured, including telecommunications. August reminded us of the lofty expectations surrounding tech stocks, and what may happen when these high expectations aren't met.

Our strategy for the year ahead focuses on balancing the high-growth potential of AI and other tech innovations with the defensive stability offered by sectors like telecommunications, specifically operators that have already made infrastructure investments and are increasing their presence in higher-margin 5G applications. While it's essential to maintain exposure to the tech sector to capitalise on AI's transformative capabilities, it's equally important to mitigate risks by diversifying into more stable, income-generating stocks. This approach will allow us to participate in the tech-driven upside while ensuring that we are well-positioned to weather any economic uncertainty that may arise.

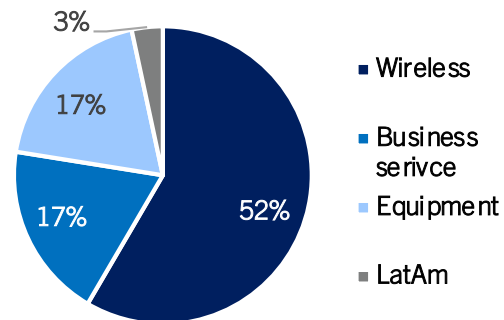
Case Study

AT&T (NYSE:T) – BUY

AT&T is a leading American telecommunications company, providing a broad range of services, including wireless communication and broadband internet. As one of the largest telecom operators in the United States, AT&T has a substantial customer base across its wireless and wireline segments. The company is heavily investing in expanding its 5G network and fibre-optic infrastructure to enhance connectivity and drive future growth. In recent years AT&T has unwound its unsuccessful venture into entertainment by spinning off Warner Media. The company is now deleveraging and is refocused on its core operations.

Share price: \$19.90
Performance YTD: +15.3%
Dividend Yield: 5.58%
EV/EBITDA: 6.59x

Figure 7: Revenue by Segment



Buy Thesis

Market Leader in Fiber

AT&T is reinforcing its position as a leader in fibre broadband, achieving over 200,000 net additions in its fibre segment for 18 consecutive quarters (14). This growth reflects the company’s strategic focus on expanding high-speed internet services to meet the rising demand for reliable, high-bandwidth connectivity.

Lowest Churn in the Industry

AT&T recorded a remarkably low post-paid phone churn rate of 0.7% in Q2 2024, the lowest in the industry (14). This success is due to AT&T’s focus on customer retention through targeted incentives and bundled service offerings, enhancing customer satisfaction and ensuring stable revenue streams.

Favourable Macro Conditions

With 5G capital expenditures past their peak, AT&T’s investments in fibre and wireless are starting to pay off. This shift is evident in the \$4.6 billion in free cash flow generated for the year ending Q2 2024 (14).

Risks To Thesis

Environmental challenges/fines due to legacy lead cables, high CapEx requirements, competition, and regulation.

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Graphs

Figures 1,2,4: MSCI (2024) MSCI World Communications Index Factsheet [MSCI World Communication Services Index](#)

Figure 3: Yahoo Finance (2024) Historical Data [Yahoo Finance - Stock Market Live, Quotes, Business & Finance News](#)

Figure 5: Alphabet (2023) Alphabet 10-K Report [Form 10-K for Alphabet INC filed 02/03/2023 \(abc.xyz\)](#)

Figure 6: Vodafone (2024) Vodafone Group plc Annual Report [Vodafone Group plc Annual Report 2024](#)

Figure 7: AT&T (2024) AT&T 10-K Report [0000732717-24-000009 \(investis.com\)](#)