Sector updates

US Technology Sector – Let's get cyclical

Research Team

U.S. | Technology

Investment summary

Against a macro backdrop that is more conducive to sectors exposed to the reflationary theme, incremental investments in large tech firms (e.g. FAAMG) are naturally somewhat more complex. Nonetheless, this is within our expectations, as we have argued previously that with the recovery broadening out to more sectors beyond technology across the S&P 500, the narrow market breadth that was previously observed could see market leaders register an underperformance relative to their laggard peers. Since then, the FAAMG names have largely kept pace or significantly underperformed the S&P 500 index.

Still, we believe that there are **selected large cap internet plays that offer investors exposure to the broader cyclical recovery, especially via companies leveraged to the advertising market**. Morningstar estimates that with an economic turnaround, overall ad spending will return to growth in 2021, driven mainly by digital ad spending. The pandemic has clearly driven more time spent online, and it is unsurprising that online users have also increased engagement on social platforms. With the measurable and flexible features that digital platforms provide, we believe marketers will more easily integrate brand and direct-response campaigns. The largest and best-known digital display and audio ad platform providers such as **Google** and **Facebook** should benefit, given their large user bases and their focus on making e-commerce easier for their users and businesses.

While the ability to participate in the recovery in ad demand should serve as a strong tailwind, we believe that the recent concern around the reactions from internet platforms following the riot at the US Capitol is creating a **tactical investment opportunity** for both firms. In Morningstar's view, these internet companies still enjoy Section 230 protection from liability, and their actions against President Trump's accounts should not result in the repeal of or drastic changes to Section 230. In fact, with increasing content moderation, brand advertisers may view Facebook, for instance, as safer to market on.

Apart from internet names, we believe that **Adobe**, within the software space, can also allow investors to potentially ride on the recovery in ad demand, especially with increasing investor attention on its Digital Experience segment, which was affected by weakness from SMB customers throughout the pandemic. In our view, further economic recovery and increased usage of Acrobat, Scan and Sign should help to boost the segment this year, although growth moving forward could be slightly more modest than in previous years.

- Cyclical recovery renders a more complex landscape for Big Tech, though specific companies leveraged to online ads could emerge as the relative beneficiaries
- Decisions by internet platforms against President Trump following the riot at the US Capitol is creating tactical opportunities
- Focus on Facebook, Google and Adobe

Reflationary theme ahead

With the Georgia Senate elections now concluded and a Blue Wave in play, our macro team has raised our 2021 US GDP forecast from 5.0% to 6.0%, and our one-year estimate for 10Y US Treasury yields from 1.20% to 1.50%. Our investment strategy team also expects that a unified government will catalyze a more aggressive path for US fiscal stimulus, and we should expect major spending initiatives on infrastructure, renewable energy, the environment and healthcare in Biden's later part of his first term.

As such, we expect financials, industrials, energy, materials and real estate to be the likely beneficiaries of the reflation theme ahead, while incremental investments in large tech firms (e.g. FAAMG) should now become somewhat more complex. With the recovery broadening out to more sectors beyond technology within the S&P 500, the narrow market breadth that was previously observed could see market leaders register an underperformance relative to their laggard peers. This argument has been highlighted in our Aug 2020 report, and since then, the FAAMG names have largely kept pace or significantly underperformed the S&P 500 index.

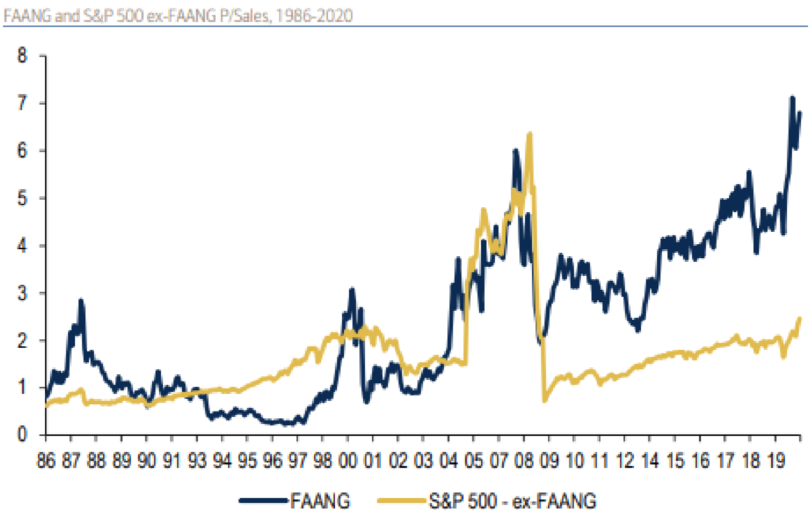
Exhibit 1: S&P 500 index and FAAMG returns since 4 Aug sector report

Index/Company	Ticker	Price Change	Total Return
S&P 500 Index	SPX Index	14.4%	15.3%
Apple Inc	AAPL US	16.7%	17.1%
Alphabet Inc	GOOGL US	16.5%	16.5%
Facebook Inc	FB US	-0.2%	-0.2%
Amazon.com Inc	AMZN US	-0.3%	-0.3%
Microsoft Corp	MSFT US	-1.8%	-1.3%

Source: Bloomberg, Internal estimates; as at 3 August 2020 close prices

Additional complexity also stems from the observation that ultra-low rates have provided much support to valuations for longer duration growth plays previously, and the higher rate environment could pose valuation questions, even though 10Y real yields are not elevated by historical standards.

Exhibit 2: Ultra-low rates have ballooned valuations for secular growth stocks since the financial crisis



Source: BofA US Equity & Quant Strategy, FactSet, Internal estimates

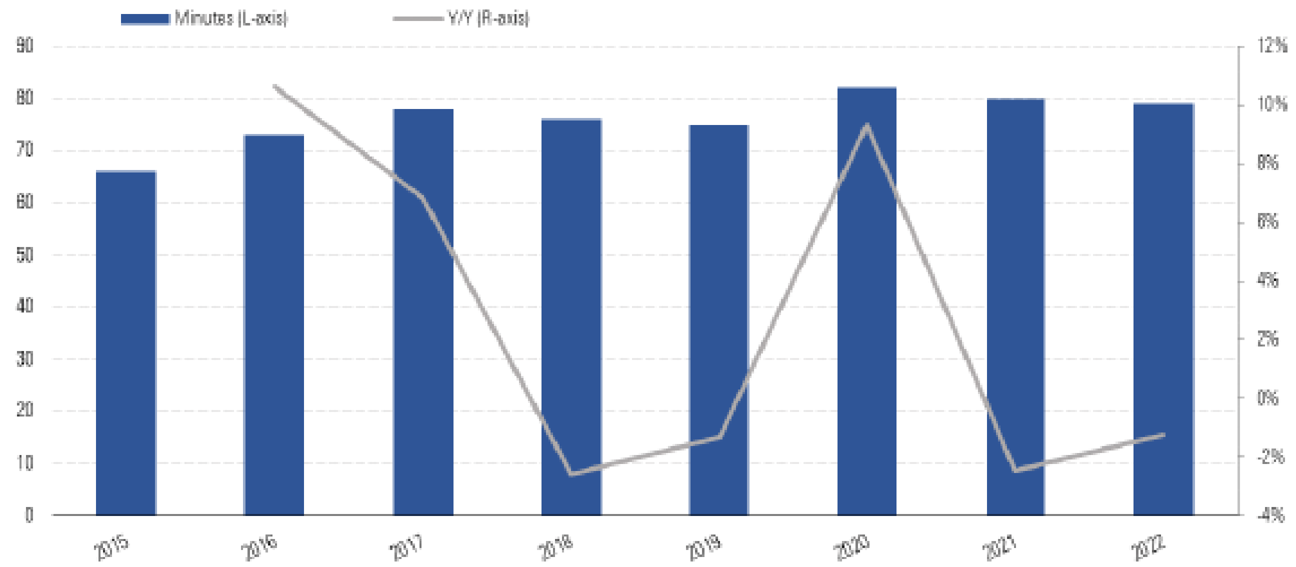
Gaining exposure to the online ad acceleration

While the above concerns are indeed valid, we believe that selected large cap internet plays do offer the ability to gain exposure to the broader cyclical recovery, especially via companies leveraged to the advertising market.

The pandemic has clearly driven more time spent online, and it is unsurprising that online users have also increased engagement on social platforms such as Facebook, Instagram, Twitter, Snap, and TikTok. EMarketer estimates engagement - time spent on platforms per day - in the U.S. is likely to have gone up 9% YoY in 2020. While those minutes are expected to decline slightly in 2021 and 2022 following the pandemic-driven growth acceleration in 2020, eMarketer believes they will remain above 2019 levels.

Exhibit 3: With more time at home, minutes interacting on social platforms inch up

Minutes spent on social platforms per person per day.



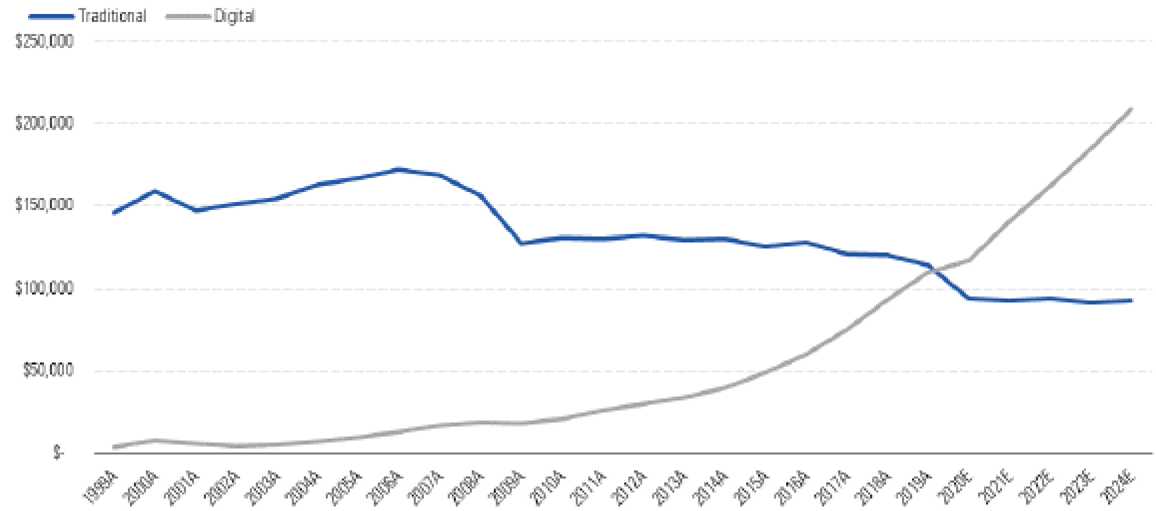
Source: eMarketer, Morningstar, Internal estimates (Data as of June 2020)

The increase in time spent online has increased ad inventory, while lower demand has resulted in a drop in prices during the economic downturn. However, given that time spent online likely will not decline significantly during the return of economic expansion, which will increase demand, strong growth in ad spending in 2021 and beyond is expected.

As consumer behavior has shifted faster toward digital, advertisers have followed in tandem. Morningstar believes that this shift will continue, resulting in faster growth in digital ad spending than in traditional areas like television, print, and radio, through at least 2024. Digital ad dollars initially overtook TV ad spending in 2017 and will likely surpass total traditional ad spending in 2020.

Exhibit 4: Digital ad spending overtaking traditional in the US

USD in millions.

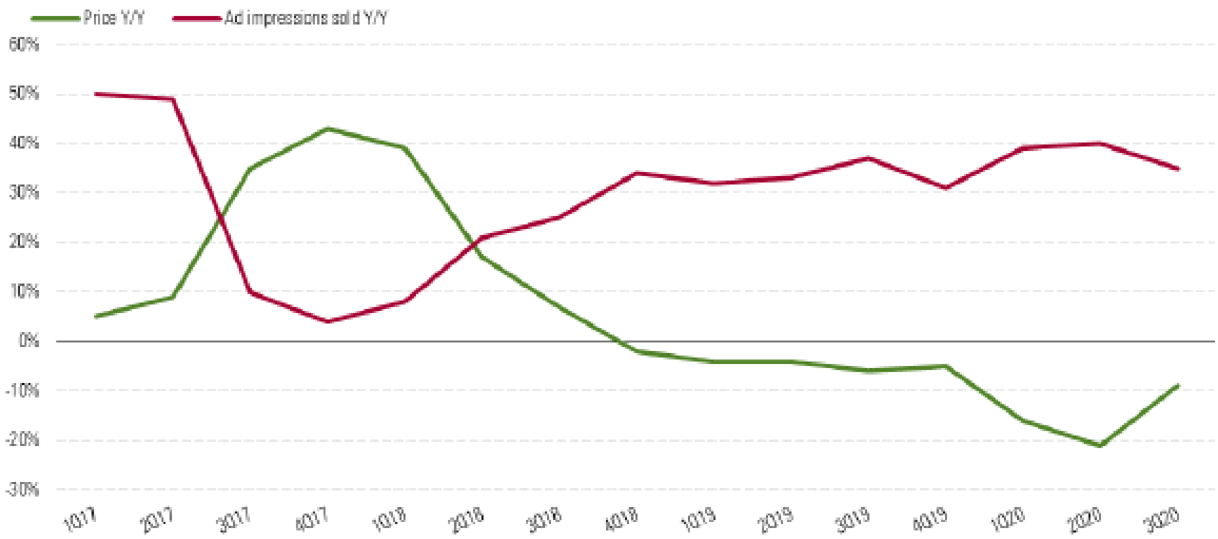


Source: GroupM, Morningstar estimates, Internal estimates (Data as of Oct 2020)

In line with the observations made above, as advertisers reacted quickly to the pandemic in 2020 and slashed ad budgets, digital spending initially took a hit, causing a significant deceleration in revenue growth at Google, Facebook, Snap, Pinterest, and Twitter during the second quarter. In the North American market, the large advertising agency holding firms also saw organic growth evaporate. Digital ads became less expensive as a result of lower demand and higher supply.

The silver lining, however, is that lower prices allowed some smaller and previously less aggressive advertisers to step in and purchase inventory. For instance, in the second quarter, Facebook's ad volume sold went up 40% while prices declined 21%. As seen in Exhibit 5, the first and second quarters of 2020 marked the first time Facebook registered double-digit declines in ad pricing. With slightly better demand among larger advertisers and continued strong demand among these smaller ad buyers, prices declined at a far slower rate during the third quarter, far below the increase in ad volume sold.

Exhibit 5: More users and time spent on Facebook created more inventory; price recovered slightly in Q3

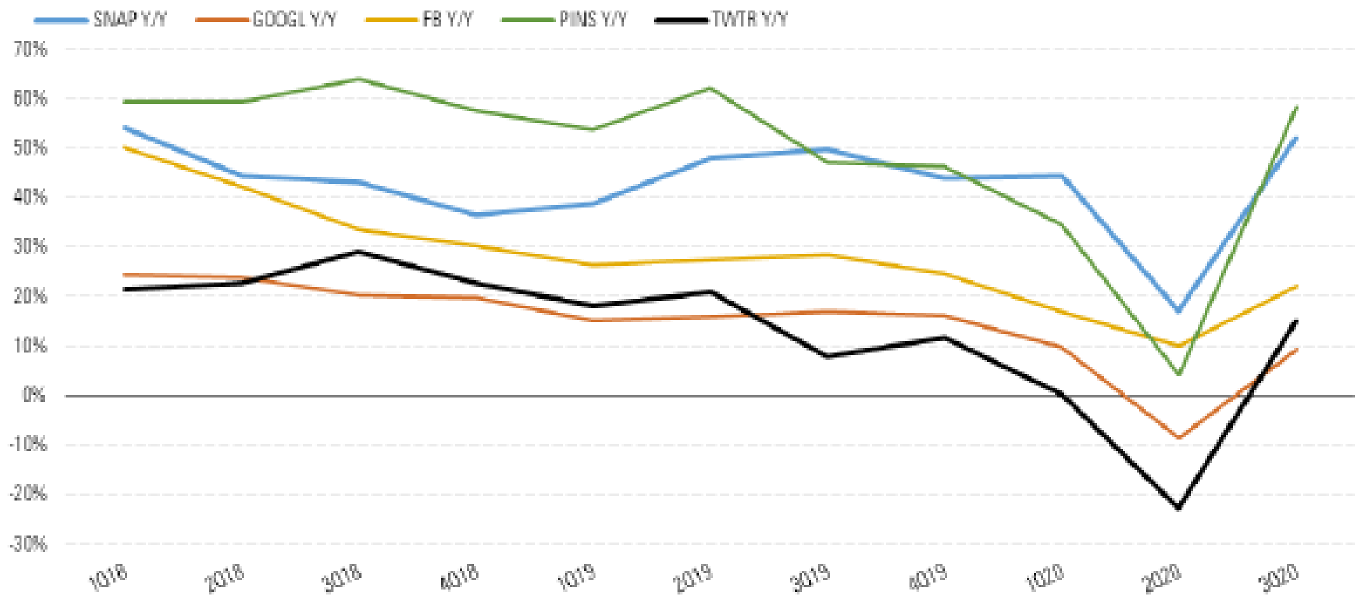


Source: Company reports. Data as of October 2020; Morningstar, Internal estimates

This dynamic was also observed across a number of players, as we saw some recovery in revenue growth across the major digital advertising companies during the third quarter, as reflected in Exhibit 6.

Exhibit 6: With uncertainty, advertisers initially did not target online, but many returned in Q3

Year-over-year percentage change in advertising revenue.



Source: Company reports. Data as of October 2020; Morningstar, Internal estimates

Digital Direct-Response Ads Provide a Safe Haven for Firms Large and Small

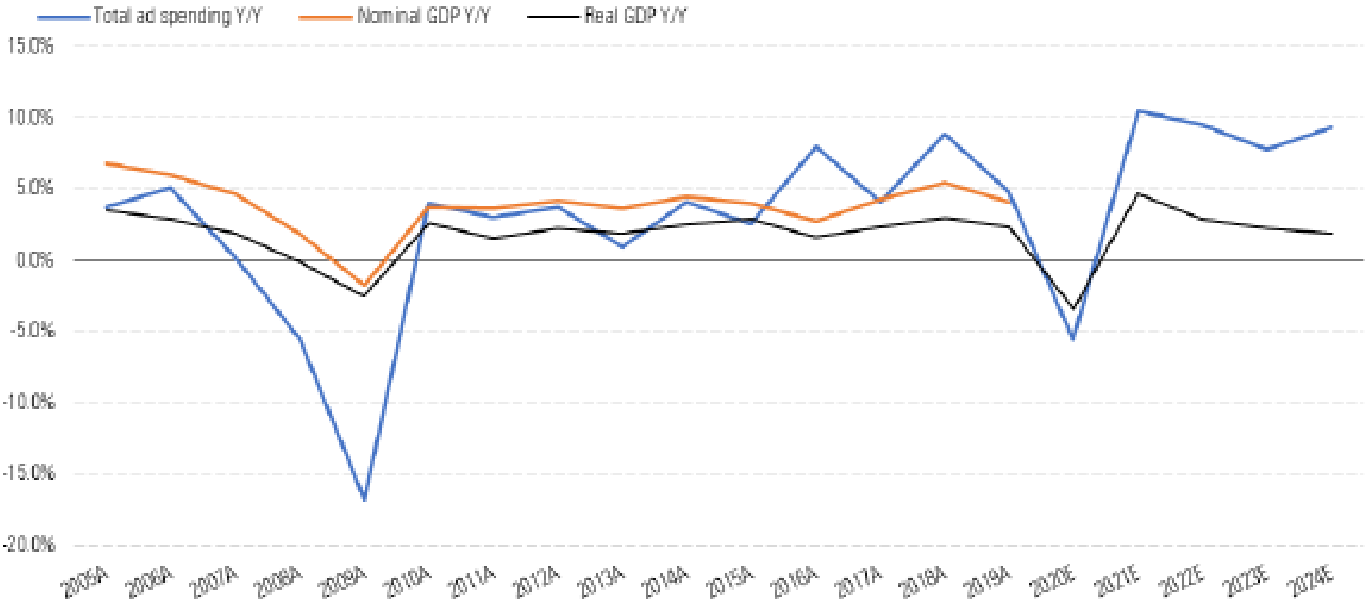
With much uncertainty stemming from the duration of the pandemic and shifts in consumer behavior, companies have put brand marketing aside and focused more on direct-response, or bottom-of-the-funnel, ad campaigns.

While the pandemic has forced businesses to prioritize direct-response over brand marketing, we believe the two are intertwined during normal economic times. Without brand marketing, the conversion of direct-response ads may become less likely. In addition, brand marketing improves customer retention and frequency, increasing the lifetime value of each customer. However, without effective direct-response marketing, those long-term ROIs on brand marketing decline. The two help cover the entire funnel—from top-of-the-funnel marketing, which creates awareness and helps attract potential consumers, to bottom-of-the-funnel marketing, which attempts to convert them into customers.

While not all changes in consumer behavior will be permanent, increased overall time spent online and the accelerated growth of e-commerce should boost all forms of digital advertising. Morningstar estimates that with an economic turnaround, overall ad spending will return to growth in 2021, driven mainly by digital ad spending. With the measurable and flexible features that digital platforms provide, we believe marketers will more easily integrate brand and direct-response campaigns. The largest and best-known digital display and audio ad platform providers such as Google, Facebook, Pinterest, Snap, Twitter, and Spotify should benefit.

As shown in Exhibit 7, during economic downturns (e.g. 2007-09 GFC), advertising spending tends to decline much more than GDP, but it also recovers quickly as the economy begins on its expansion path again.

Exhibit 7: U.S. GDP and ad spending appear to go hand-in-hand



Source: U.S. Bureau of Economic Analysis, GroupM, Morningstar estimates. Data as of October 2020; Internal estimates

Among online advertising businesses, we think social media platforms Facebook, Pinterest, Snap, and Twitter will benefit the most during the economic turnaround that drives ad spending higher, given their large user bases and their focus on making e-commerce easier for their users and businesses. Morningstar expects Google's search ad revenue to return to solid growth in 2021-24, although it will face increasing competition from Amazon. In addition, Spotify is well positioned to benefit from growth in podcast and overall digital radio advertising.

All considered, we believe Facebook and Google in particular are well-positioned to ride the cyclical recovery.

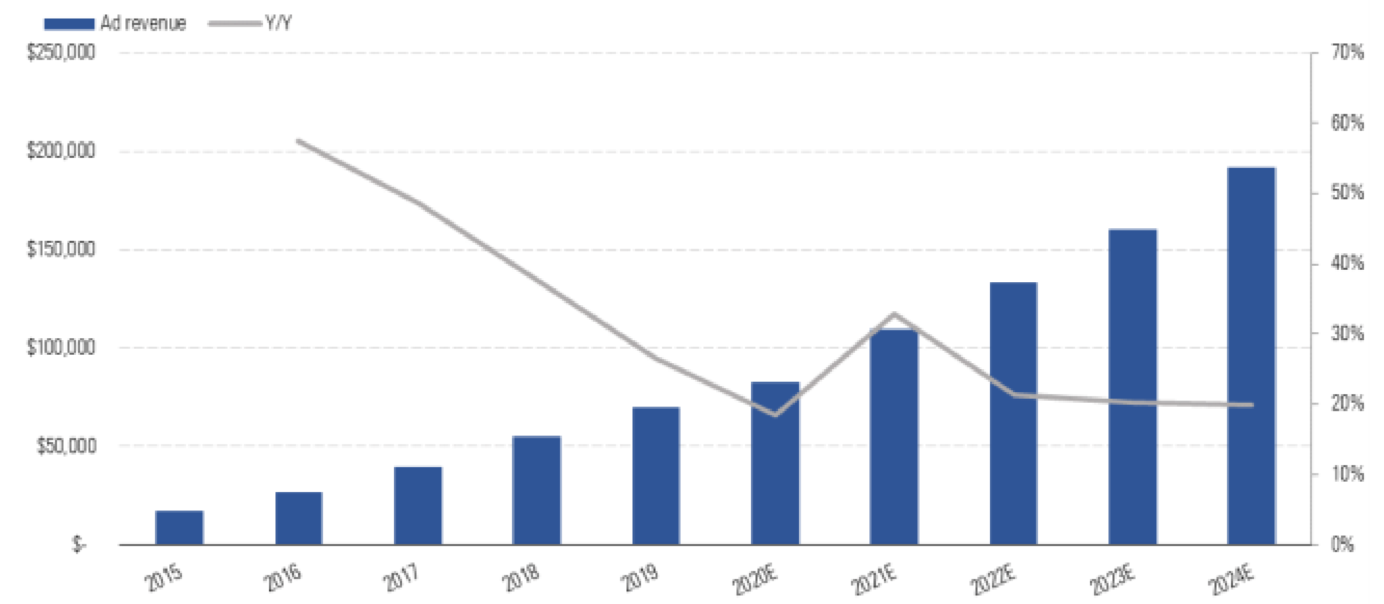
For Facebook – Morningstar believes that Facebook (including Instagram) will remain the main beneficiary of higher digital and direct-response ad spending and the accelerated shift toward e-commerce. Morningstar also believes that the return of brand advertising will further increase demand for Facebook and Instagram story ads and overall video ads. Facebook remains the platform on which ads purchased generate more-attractive ROIs, as shown by continuing growth in demand by small and large businesses. Morningstar believes that Facebook's simple-to-use self-serve dashboard for advertisers, along with the largest user base, continues to differentiate the platform from its peers. After a slowdown in advertising revenue growth in 2020, Morningstar projects a bounceback at Facebook in 2021, followed by further strong double-digit growth through 2024.

Morningstar expects small and medium-size businesses will remain heavily dependent on Facebook for marketing. The Facebook and Instagram user base, which continues to grow and strengthen the firm's network effect moat source, will keep attracting advertisers. Morningstar thinks other players such as Pinterest and Snap are still in the process of proving effectiveness to advertisers as the network effects of those platforms are not as strong as that of Facebook (or Instagram). User engagement (measured by the percentage of monthly users who are online daily), which attracts advertisers, remains above 65% on Facebook, while Pinterest and Snap remain below 50%. For these reasons, Morningstar expects advertisers to continue to allocate more ad dollars toward the Facebook and Instagram platforms than peers.

In addition, Facebook Shops, which allows businesses to set up online storefronts and make them accessible by consumers through Facebook and Instagram, will not only help the many SMBs currently advertising on the platform, but will also attract new ones when the economy turns around. In terms of e-commerce ad offerings, the firm's shopping features (on Facebook and Instagram) such as tagging shoppable products on posts and the checkout feature have made purchasing right on the app much easier for users. Recently, Facebook added Instagram's shopping features to IGTV, where different products in videos can be purchased on the app. This capability may also be added to Reels (Instagram's version of TikTok). In addition, Facebook Marketplace has quietly stolen share from eBay and other online marketplaces, attracting both buyers and sellers. Facebook Marketplace now boasts nearly 1 billion monthly users (compared with eBay's 183 million), making it an incredibly rich channel for small merchants.

Exhibit 8: Brand, direct response, e-commerce, and billions of users are on Facebook for many advertisers

USD in millions.



Source: Company reports, Morningstar estimates. Data as of October 2020; Internal estimates

For Google – Morningstar expects Google to benefit from an economic recovery in 2021, which should result in higher demand for paid search and brand campaigns. We see YouTube as the main contributor to stronger ad revenue growth in 2021, as it not only will attract top-of-the-funnel brand campaigns but also benefit from a continuing surge in direct-response and e-commerce demand. YouTube has been adding more offerings for advertisers. According to Bloomberg, YouTube has begun working with Shopify to tag shoppable products in video content and make these products available for purchase right on YouTube. While this project is in its early stages, we think it represents an attractive upside to YouTube revenue given the platform's global reach, large library of user and professionally generated how-to videos, and more than 2 billion monthly viewers.

In addition to global reach, we think advertisers are pleased that YouTube content continues to migrate to better resolutions viewed on larger screens (televisions connected to the Internet). According to eMarketer, U.S. connected TV users are likely to grow at a 3% CAGR through 2024. This growth builds on strong demand in 2020 due to the pandemic.

In the future, we think YouTube can apply this ad-supported video-on-demand, or AVOD, model to more premium content. While there are many players in that space (Hulu, Peacock, Pluto TV, Tubi, IMDb, and more), YouTube's much larger viewer base will attract ad dollars. Plus, premium content likely warrants higher ad prices than advertisers are currently paying on YouTube. In addition, Alphabet has more than enough capital on hand to invest in and curate premium content. We also think that because of what many up-front television ad buyers experienced during the pandemic, some may demand more flexibility. This may further push advertisers to work more closely with AVOD platforms.

On the search front, while the growth of e-commerce has created growth opportunities for YouTube, it has also strengthened Google's main search competitor, Amazon. Amazon had more than 50% market share of product search (as of 2018, according to Jumpshot), and we believe increased online shopping has likely pushed its share even higher. Google continues to attempt to strengthen its position in product search by making browsing through product search results easier. Other online retailers may also be favoring Google, given Amazon's dominance in e-commerce. However, Amazon's market share demonstrates that users still favor Amazon for product search and easy integration with retail purchasing. In addition, we think a slow recovery in travel and hospitality marketing (which we estimate represents around 10% of search revenue) may limit growth in Google's search revenue.

Idiosyncratic event presents opportunity

Apart from the projected recovery in ad demand, we believe the recent concern around the reactions from internet firms following the riot at the US Capitol is creating a tactical investment opportunity for Facebook and Google.

Major social media platforms by now have taken to suspend President Trump's accounts. We note that Facebook has taken the decision to ban Trump 'indefinitely and for at least the next two weeks'. YouTube has also suspended Trump from uploading new videos to his official account for at least a week.

This also brings back concerns of the DoJ's proposal back in June to rollback some Section 230 protections, which specifics that Internet companies are generally not held liable for the actions of their users, which we have written on previously. For now, even with the more aggressive moderation of content and accounts, including the personal account of Trump, the firms are still viewed as distributors and not publishers, which means they still have the Section 230 protection from liability. Morningstar also does not believe these decisions will result in the repeal of or drastic changes to Section 230. In fact, Morningstar is of the view that with increasing content moderation, brand advertisers may view Facebook, for instance, as safer to market on.

Getting exposure to advertising within software

Apart from internet names, we believe that Adobe, within the software space, can allow investors to potentially ride on the recovery in ad demand. With stability in Creative Cloud, we believe that investors are increasingly more paying attention to Adobe's Digital Experience segment, which was affected by weakness from SMB customers throughout the pandemic. In our view, further economic recovery and increased usage of Acrobat, Scan and Sign should help to boost the segment this year, although growth moving forward could be slightly more modest than in previous years.

IDC expects that the Digital Experience industry should see a slowdown over the next few years, growing at a CAGR of 10.1% through 2024, vs. a CAGR of 15.6% from 2015 to 2019. Within this industry, Advertising Applications are expected to lead the growth through 2024, growing at a CAGR of 13.0%. These figures were produced in June 2020, and hence we believe that there could be room for upside as we are more constructive on the latter part of 2020, as well as the digital acceleration brought about by Covid-19. In our view, as a market leader, Adobe's Digital Experience segment could outpace the broader industry, especially on the back of SMB recovery.

Exhibit 9: Focus list

Company name	Ticker	Market Cap (US$ bln)	Crncy	Last Close Price	Fair Value	Rating	Potential Upside, %
Facebook Inc	FB US	715.9	USD	251.36	306	**Buy**	21.7
Adobe Inc	ADBE US	219.3	USD	458.08	576	**Buy**	25.7
Alphabet Inc	GOOGL US	1,171.6	USD	1727.62	1980	**Hold**	14.6
Alphabet Inc	GOOG US	1,171.6	USD	1736.19	1980	**Hold**	14.0

Source: Bloomberg, Internal estimates; as at 19 January 2021

ANALYST DECLARATION:

For analysts' shareholding disclosure on individual companies, please refer to the latest reports of these companies.

DISCLAIMER FOR RESEARCH REPORT

RATINGS AND RECOMMENDATIONS:

- OIR's technical comments and recommendations are short-term and trading oriented.
- OIR's fundamental views and ratings (Buy, Hold, Sell) are medium-term calls within a 12-month investment horizon.
- As a guide, OIR's BUY rating indicates a total expected returns (excluding dividends) in excess of 10% based on the current price; a HOLD rating indicates total expected returns (excluding dividends) within +10% and -5%; a SELL rating indicates total expected returns (excluding dividends) less than -5%. For REITs and Business Trusts, total expected returns including dividends apply.
- For companies with market capitalisation of S$150m and below, OIR's BUY rating indicates a total expected returns (excluding dividends) in excess of 30%; a HOLD rating indicates total expected returns (excluding dividends) within a +/-30% range; a SELL rating indicates total expected returns (excluding dividends) less than -30%. For REITs and Business Trusts, total expected returns including dividends apply.

Co.Reg.no.: 198301152E
Published by OCBC Investment Research Private Limited