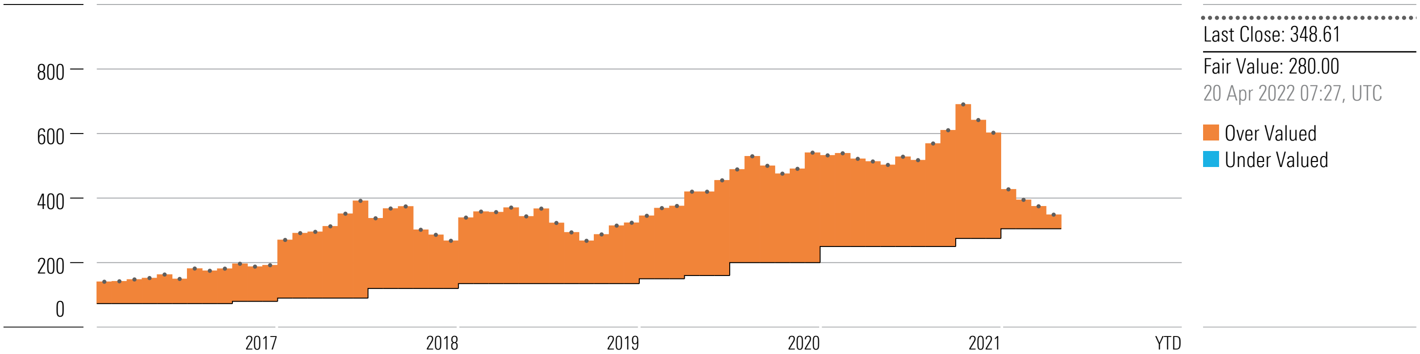
Morningstar Equity Analyst Report | Report as of 20 Apr 2022 07:34, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NASDAQ - ALL MARKETS

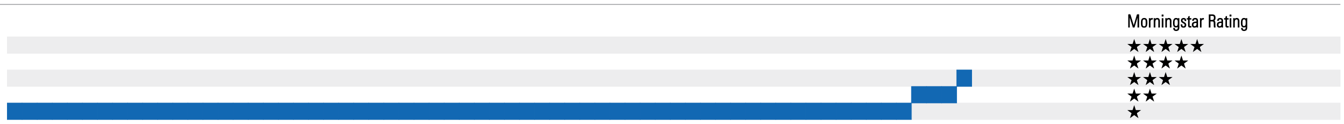
Netflix Inc NFLX ★★★ 20 Apr 2022 07:32, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Moat Trend™	Uncertainty	Capital Allocation	ESG Risk Rating Assessment[1]
348.61 USD 19 Apr 2022	280.00 USD 20 Apr 2022 07:27, UTC	1.25	154.88 USD Bil 19 Apr 2022	Narrow	Stable	Very High	Standard	6 Apr 2022 05:00, UTC

Price vs. Fair Value



	2017	2018	2019	2020	2021	YTD
Price/Fair Value	2.40	2.23	2.40	2.70	2.19	1.25
Total Return %	55.06	39.44	20.89	67.11	11.41	-42.13



Total Return % as of 19 Apr 2022. Last Close as of 19 Apr 2022. Fair Value as of 20 Apr 2022 07:27, UTC.

Contents

Important Disclosure

The conduct of Morningstar's analysts is governed by Code of Ethics/Code of Conduct Policy, Personal Security Trading Policy (or an equivalent of), and Investment Research Policy. For information regarding conflicts of interest, please visit: http://global.morningstar.com/equitydisclosures.

The primary analyst covering this company does not own its stock.

[1]The ESG Risk Rating Assessment is a representation of Sustainalytics' ESG Risk Rating.

Netflix Hits Subscriber Growth Wall; Sharing Crackdown, Ads Likely Not Enough To Jump-Start Growth

Analyst Note Neil Macker, CFA, Senior Equity Analyst, 20 Apr 2022

Netflix's stock continued its tumble as the share price fell by over 25% in after-hours trading on April 19 after its first-quarter 2022 results. The firm posted its first streaming subscriber net loss ever in the quarter due in part to closing operations in Russia, but even when accounting for that loss, net adds of 0.5 million came in well short of the low end of guidance of 2.5 million. Netflix now expects to lose 2 million more subscribers in the second quarter while still maintaining its 20% margin target for the full year. Despite competition and recent price increases undoubtedly playing significant roles in the weak results and guidance, management primarily blamed other factors such as the shortages of connected televisions and password sharing.

Co-CEO Reed Hastings also made a relatively large U-turn on advertising, announcing in the earnings interview that the firm was exploring the introduction of a lower-priced ad-supported tier over the next few years. We don't believe that these plans are likely to show up in the U.S. in the near term, as we think that the lower-priced offering will be first introduced in emerging markets such as India, where Netflix has been trounced by Amazon and Disney. We maintain our narrow moat but lower our fair value estimate to $280 from $305, due to much lower subscriber growth in 2022 and slower margin expansion.

While management outlined plans to monetize the reportedly 100 million plus non-paying households

Morningstar Equity Analyst Report | Report as of 20 Apr 2022 07:34, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NASDAQ - ALL MARKETS

Netflix Inc NFLX ★★★ 20 Apr 2022 07:32, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Moat Trend™	Uncertainty	Capital Allocation	ESG Risk Rating Assessment[1]
348.61 USD 19 Apr 2022	280.00 USD 20 Apr 2022 07:27, UTC	1.25	154.88 USD Bil 19 Apr 2022	Narrow	Stable	Very High	Standard	6 Apr 2022 05:00, UTC

Sector	Industry
Communication Services	Entertainment

Business Description

Netflix's primary business is a streaming video on demand service now available in almost every country worldwide except China. Netflix delivers original and third-party digital video content to PCs, Internet-connected TVs, and consumer electronic devices, including tablets, video game consoles, Apple TV, Roku, and Chromecast. In 2011, Netflix introduced DVD-only plans and separated the combined streaming and DVD plans, making it necessary for subscribers who want both to have separate plans.

that use Netflix by charging a "sharing" fee, we don't believe that this strategy will be the panacea that some investors have outlined over the last few years. Netflix may be able to squeeze a few more dollars out of some of the primary households, but we think that other ones will look at the new sharing fee as another pricing increase and cancel. Also, many of the households that don't pay may not view the service as valuable enough to pay for, particularly in higher price markets like the U.S. and Western Europe.

Business Strategy & Outlook Neil Macker, CFA, Senior Equity Analyst, 23 Sep 2021

From its origins as a DVD rental by mail service, Netflix has morphed into a pioneer in subscription video on demand and the largest online video provider in the U.S. and likely the world. Our economic moat rating of narrow is based on intangibles resulting from the use of Big Data stemming from the firm's massive worldwide subscriber base.

Already the largest provider in the U.S., Netflix expanded rapidly into markets abroad as the service now has more subscribers outside of the U.S. than inside. The firm has used its scale to construct a massive data set that tracks every customer interaction. It then leverages this customer data to better purchase content as well as finance and produce original material such as "Stranger Things." However, the firm has recently ramped up its production using more traditional methods.

We believe that many consumers use, and will continue to use, SVODs like Netflix as a complementary service, especially as SVOD prices increase and pay television bundle prices decrease (due to the shift to over-the-top, or OTT, delivery). Media firms will continue to reap the benefits of both an additional window for existing content and another platform for new content. Larger firms like Disney+ and WarnerMedia have launched their own SVOD platforms to compete against Netflix. We think this usage pattern and increased competition will constrain Netflix's ability to raise prices without inducing greater churn.

We expect that Netflix will expand further into local-language programming to offset the weakness of its skinny offering in many countries. This will likely generate a competitive response from the firm's global and local rivals, which will augment their own first-party content budgets. In turn, we think Netflix's international expansion will continue to hamper margin expansion.

Bulls Say Neil Macker, CFA, Senior Equity Analyst, 20 Apr 2022

- Netflix's internal recommendation software and large subscriber base give the company an edge when deciding which content to acquire in future years.
- Netflix has built a substantial content library that will benefit the firm over the long term.
- International expansion offers attractive markets for adding subscribers.

Bears Say Neil Macker, CFA, Senior Equity Analyst, 20 Apr 2022

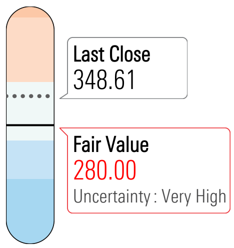
Morningstar Equity Analyst Report | Report as of 20 Apr 2022 07:34, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NASDAQ - ALL MARKETS

Netflix Inc NFLX ★★★ 20 Apr 2022 07:32, UTC

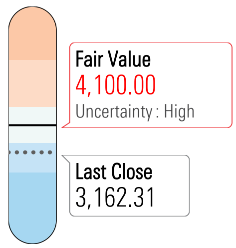
Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Moat Trend™	Uncertainty	Capital Allocation	ESG Risk Rating Assessment[1]
348.61 USD 19 Apr 2022	280.00 USD 20 Apr 2022 07:27, UTC	1.25	154.88 USD Bil 19 Apr 2022	Narrow	Stable	Very High	Standard	6 Apr 2022 05:00, UTC

Competitors

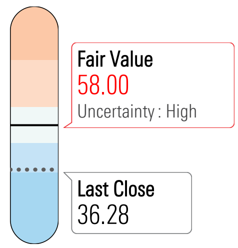
Netflix Inc NFLX



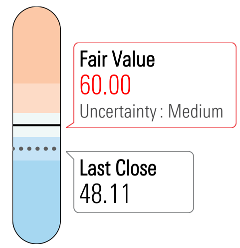
Amazon.com Inc AMZN



Paramount Global Class B PARA



Comcast Corp Class A CMCSA



	Netflix Inc NFLX	Amazon.com Inc AMZN	Paramount Global Class B PARA	Comcast Corp Class A CMCSA
Economic Moat	Narrow	Wide	Narrow	Wide
Moat Trend	Stable	Stable	Negative	Stable
Currency	USD	USD	USD	USD
Fair Value	280.00 20 Apr 2022 07:27, UTC	4,100.00 29 Oct 2021 02:16, UTC	58.00 16 Feb 2022 05:53, UTC	60.00 29 Jul 2021 17:13, UTC
1-Star Price	490.00	6,355.00	89.90	81.00
5-Star Price	140.00	2,460.00	34.80	42.00
Assessment	Fairly Valued 19 Apr 2022	Under Valued 19 Apr 2022	Under Valued 19 Apr 2022	Under Valued 19 Apr 2022
Morningstar Rating	★★★20 Apr 2022 07:32, UTC	★★★★19 Apr 2022 21:17, UTC	★★★★19 Apr 2022 21:17, UTC	★★★★19 Apr 2022 21:17, UTC
Analyst	Neil Macker, Senior Equity Analyst	Dan Romanoff, Senior Equity Analyst	Neil Macker, Senior Equity Analyst	Michael Hodel, Director
Capital Allocation	Standard	Exemplary	Standard	Standard
Price/Fair Value	1.25	0.77	0.63	0.80
Price/Sales	5.35	3.47	0.83	1.92
Price/Book	9.77	11.63	1.05	2.27
Price/Earning	31.02	48.79	5.42	15.83
Dividend Yield	—	—	2.65%	2.12%
Market Cap	154.88 Bil	1,608.16 Bil	23.64 Bil	218.09 Bil
52-Week Range	329.82—700.99	2,671.45—3,773.08	27.25—47.46	44.27—61.80
Investment Style	Large Growth	Large Growth	Mid Value	Large Value

- The firm continues to burn billions of dollars of cash to create its original content with no end in sight.
- The level of competition in the U.S. and internationally is increasing and will continue to do so over the near future. Disney+ launched its own branded SVOD service in the second half of 2019.
- The need for increased content and marketing spend outside of the U.S. will limit the rate of margin expansion for the international segment.

Economic Moat Neil Macker, CFA, Senior Equity Analyst, 23 Sep 2021

We assign Netflix a narrow moat rating. Netflix is the largest SVOD provider in the U.S. and is rapidly expanding internationally. This rapidly growing subscriber base (over 130 million worldwide) creates a humongous data set that Netflix mines in order to better purchase and create content. This new content not only strengthens its relationship with its current customers, but also attracts new customers via word of mouth and the halo effect from critical acclaim and award nominations.

Through the streaming video delivery method, Netflix tracks every customer interaction, from large (total time spent at Netflix) to minute (whether a user pressed fast forward). This data is aggregated in a

Morningstar Equity Analyst Report | Report as of 20 Apr 2022 07:34, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NASDAQ - ALL MARKETS Page 4 of 17

Netflix Inc NFLX ★★★ 20 Apr 2022 07:32, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Moat Trend™	Uncertainty	Capital Allocation	ESG Risk Rating Assessment[1]
348.61 USD 19 Apr 2022	280.00 USD 20 Apr 2022 07:27, UTC	1.25	154.88 USD Bil 19 Apr 2022	Narrow	Stable	Very High	Standard	6 Apr 2022 05:00, UTC

massive cloud database housed across multiple data centers worldwide. Netflix can query this information to better understand network and device performance, customer behavior, and content popularity. While current and future competitors such as Amazon and internet access providers could create similar databases, Netflix's data set is and will remain significantly larger due to the size advantage of its subscriber base and the amount of time spent on the service. According to the 2018 Sandvine Global Internet Phenomena Report, Netflix accounted for 26% of all global video streaming traffic (the largest source), beating out YouTube at 21% and Amazon at 6%. The average Netflix user worldwide now watches more than 90 minutes of video per day.

Netflix leverages this data set across its offerings in multiple ways to derive durable competitive advantages. To improve the customer experience, Netflix analyzes data traffic, video performance, and buffering to better understand where data loss and slowdown occurs and route traffic accordingly. The company also examines specific subscriber actions by type of action and device used to formulate better user interfaces and to tweak device-specific applications. The real-time nature of the data provides Netflix with the ability to iterate more quickly than traditional user group or beta testing methods. The large number of subscribers using different devices across multiple countries generates a large, growing robust data set that current competitors can't match and new entrants can't easily replicate.

Netflix also leverages its cloud database to help with its content creation and acquisition efforts as well as to run its content discovery engine. The company has long employed its usage data to drive content acquisition by understanding subscriber usage beyond simple rating metrics. The content discovery engine provides recommendations based on a subscriber's previous viewing habits in context with subscribers with similar viewing habits. While growing rapidly as a streaming video provider, the company understood the need to create original content to differentiate its offering. Instead of simply competing with the studios and networks for new pilots, the company draws upon its data to understand the types of shows, directors, and actors that would appeal to its subscribers. An often-cited example of this data is "House of Cards," an adaption of a British miniseries starring Kevin Spacey and produced by David Fincher. Netflix noted that Fincher's movies were generally watched from beginning to end, that Spacey's films had performed well, and that the original version was popular with subscribers. The show proved to be a success with audiences and critics while providing Netflix with substantial positive press and nonsubscriber recognition.

Fair Value and Profit Drivers Neil Macker, CFA, Senior Equity Analyst, 20 Apr 2022

Our updated fair value estimate of $280 per share assumes that Netflix's domestic paid streaming subscriber count remains flat at 75 million in 2026. Price elasticity plays a major role in our fair value. In general, we are skeptical of the claim that pricing increases won't harm customer counts globally. Due to the completion of Netflix's global expansion (excluding China) and lower prices in markets like India, we expect the global streaming paid subscriber base to expand to 294 million by 2026 from 221 million in 2021.

Our domestic subscriber and pricing forecast generates 6% average annual revenue growth between 2022 and 2026, as Netflix benefits from price increases every 18 months. However, customers will be more price-sensitive than previously thought and competitors like Disney+ are already undercutting Netflix's prices. We believe these price differentials will cause lower subscriber growth than we had previously expected. We expect that the company will decrease the size of price hikes over the next few years due to the impact from increased competition. We expect that increased revenue from the crackdown on password sharing is offset by increased churn and that the firm will not introduce a lower-priced ad-supported tier in the U.S. in order to not cannibalize its most profitable customers.

On the international side, we expect increased customer penetration will generate average revenue growth of 10% in Europe, 8% in Latin America, and 17% in the Asia-Pacific through 2026. We expect average revenue per member in APAC to decline slightly as the firm adds more subscribers from lower-priced emerging markets, offsetting pricing increases in more mature countries. The firm has already lowered pricing in markets like India and Malaysia. We expect muted ARPU growth in EMEA even as the region will surpass the U.S. in terms of total subscribers by the third quarter of 2022.

We expect management to continue investing in content and marketing, weighing on overall margin expansion. However, we do expect improved leverage on these costs. Overall, we forecast average revenue growth of 9% for Netflix, with the operating margin expanding to 24% in 2026 from 21% in 2021 after dipping to 20% in 2022.

Risk and Uncertainty Neil Macker, CFA, Senior Equity Analyst, 23 Sep 2021

The move to relying on original content has added costs and risks. Netflix now depends heavily on its ability to find and create compelling new original programming with relatively tight schedules on an ongoing basis. If this pipeline falters or fails to create compelling content, subscribers could bolt to competitors.

Netflix's expansion outside the U.S. could continue to drag on margins because of different tastes and lower pricing. While Netflix has experienced some success in using its non-U.S. content in other markets, much of the local language content will likely not travel as well. Additionally, pricing in large emerging markets, such as India, remains considerably below that of the U.S. and Western Europe. With increased competition in this market, Netflix may need to lower pricing.

Increasing the subscription price in mature markets could limit growth and increase churn. While churn spikes have been temporary in the past, Netflix is now one of the most expensive services in markets such as the U.S. and further price hikes could cause subscribers to cancel the service.

An environmental, social, and governance risk for the firm is its presence in over 190 countries. By offering service in almost every major country save China, Netflix is exposed to numerous regulatory regimes around content restrictions, content production, and taxation. The firm has been sued in the past for potential taxation issues, and we expect that more jurisdictions will attempt to tax streaming video providers like Netflix in the future.

Capital Allocation Neil Macker, CFA, Senior Equity Analyst, 23 Sep 2021

We assign Netflix a Standard capital allocation rating. Our rating is driven primarily by the likelihood that Netflix adds value through investments but also takes into account the shape of its balance sheet and its shareholder distribution policies.

The firm ended the second quarter of 2021 with $14.9 billion in long-term debt and $7.8 billion in cash, a decent position. While Netflix has ramped up its long-term debt issuance over the last five years, management has announced that the firm will no longer need to tap the credit market to fund its ongoing content spending in the future.

While Netflix has not focused on returning capital to shareholders via stock repurchases or dividends, the company does have a $5 billion share repurchase plan that it used to repurchase $500 million of shares in the second quarter of 2021. We view Netflix shares as significantly overvalued, thus making any repurchases at the current level value-destructive for shareholders.

Netflix operates in a highly competitive landscape in which many of its traditional media competitors are transitioning to a direct-to-consumer focus or adding a DTC offering like Disney+, Peacock (NBCUniversal), or Discovery+ (Discovery). We expect the firm to continue to invest in both original and third-party programming as its competitors expand across the globe. While we think this use of capital will likely generate the best returns for Netflix over the long run, we expect excess returns to be capped by its single-window strategy and the ongoing increases in content spending across the industry.

On the external investment front, we remain cautious, as the management team has a limited track record. The firm has spent less than $1 billion in total for acquisitions over the last three years. But we are worried, given media and content M&A has been hot over the past few years, driving up prices and increasing the chance that Netflix and its peers will overpay in order to acquire perceived "must-have" assets or prevent rivals from doing the same.

Analyst Notes Archive

Netflix Reports in Line End to 2021; Weak Net Adds Guidance Reflects Increased Competition Neil Macker, CFA, Senior Equity Analyst, 21 Jan 2022

Netflix posted an in line end to 2021 as revenue matched our projection and subscriber additions came in just below our expectations. Shares fell by 20% in after-hours trading as management only expects to

Morningstar Equity Analyst Report | Report as of 20 Apr 2022 07:34, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NASDAQ - ALL MARKETS Page 7 of 17

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Moat Trend™	Uncertainty	Capital Allocation	ESG Risk Rating Assessment[1]
348.61 USD 19 Apr 2022	280.00 USD 20 Apr 2022 07:27, UTC	1.25	154.88 USD Bil 19 Apr 2022	Narrow	Stable	Very High	Standard	6 Apr 2022 05:00, UTC

add 2.5 million customers in the first quarter (versus 4.0 million in 2021), which would be the slowest start to a year since the streaming service was spun out in 2011. We continue to think the lower subscriber guidance reflects not only saturation in its largest markets but strong competition in the regions with the most potential growth, such as India. We maintain our narrow moat and raise our fair value estimate to $305 from $275 to account for slightly stronger margin expansion expectations and faster than previously projected price increases in the U.S.

Netflix added 8.3 million net subscribers during the quarter versus guidance of 8.5 million, ending 2021 with almost 223 million global subscribers, up 4% sequentially and up 9% from a year ago. With 1.2 million net additions in the U.S., growth was ahead of our expectations likely due to the strong content slate, but the firm still only added 1.3 million subscribers in the region during 2021. Latin America also posted anemic growth, with 1.0 million net adds in the quarter and only 2.4 million in 2021, well below the results in 2020 (6.1 million) and 2019 (5.3 million).

Revenue of $7.7 billion, up 16%, was in line with our estimate. U.S. revenue grew by 13% year over year. Average revenue per customer for the region was up 9% versus a year ago to $14.78, implying that most customers are on the standard HD plan with a growing share on the 4K plan. The price increases announced on Jan. 14 make the HD ($15.49 per month) and 4K ($20) plans the two most expensive streaming offers in the U.S., ahead of HBO Max at $15 per month. Our updated model now projects Netflix will raise prices every 18 months in the U.S. to spark top line growth. We think these increases will exacerbate the lackluster customer additions.

Netflix Raises Prices in U.S. Yet Again; Offset for Slow Sub Growth and Lower International Pricing

Neil Macker, CFA, Senior Equity Analyst, 18 Jan 2022

Netflix raised prices across the board in the U.S. and Canada on Jan. 14 as the firm continues to search for methods to grow revenue in the face of slowing subscription growth in its single biggest market. The price of the firm’s standard plan will increase by $1.50 to $14.49 per month, the premium plan by $2 to $20 per month, and the basic plan by $1 to $10 per month. The increase is the sixth for the standard plan that debuted in Nov. 2010 at $8 per month. Netflix waited for three and half years to enact its first price hike on the standard plan but has increased pricing four times since October 2017. The increases should help offset the impact of recently announced lower pricing in India, where Netflix has fallen well behind Amazon and Disney.

We slightly increased our estimate for 2022 monthly average revenue per user in the U.S. region as we previously expected a slightly smaller price hike in 2022, but also lowered our long-term subscriber growth projections. However, we maintain our $275 fair value estimate for Netflix as our long-term pricing assumptions remain intact, based on the multitude of streaming options that have emerged, and as we await further details from management on the Jan. 21 earnings call.

While Netflix did post strong U.S. subscriber growth in the first half of 2020 as the pandemic set in, growth has slowed significantly since then and we estimate that the firm will add less than a million subscribers in 2021. As we have noted before, Netflix has only one real source of revenue (streaming subscriptions) with only two levers to increase revenue: adding subscribers and increasing price. Given the high penetration in the U.S. and high customer awareness, gaining the marginal subscriber is getting tougher, particularly as the streaming competition increases in number and quality. As a result, price increases may be the only real lever left to grow revenue in the U.S. and we expect that further increases will cause churn to spike up sharply.

Netflix Beats Low Subscriber Guidance; Competition Appears to Be Weighing on Net Adds Neil Macker, CFA, Senior Equity Analyst, 20 Oct 2021

Netflix reported decent third-quarter results as subscriber growth beat the low guidance issued a quarter ago. While management expects to add 8.5 million net new customers during the fourth quarter, this mark would only be in line with last year’s fourth quarter and below the previous two years. We think the lower subscriber growth reflects not only saturation in its largest markets but strong competition in the regions with the most potential growth remaining, including Latin America and India. We are maintaining our narrow moat and raising our fair value estimate to $275 from $250 to account for slightly stronger margin expansion expectations due to lower marketing costs.

Netflix posted 4.4 million net subscriber adds during the quarter versus guidance of 3.5 million, ending the quarter with more than 213 million global paid subscribers, up only 2% sequentially and up 9% from 195 million a year ago. Growth was slower in the U.S., with fewer than 100,000 net additions--only the third time below that mark since the start of 2012. Latin America has also seen anemic growth in 2021, with only 330,000 net adds in the quarter and only 1.45 million year to date, which is well below the same periods in 2019 (3.3 million) and 2018 (4.4 million).

Revenue of $7.5 billion, up 16%, was in line with our estimate. U.S. revenue improved by 11% year over year, largely due to the price hike in 2020 as the subscriber base only increased 1% versus last year. Average revenue per customer for the region was up 10% versus a year ago to $14.68, implying that most customers are on the standard HD plan at $14 with a growing share on the 4K plan at $18. The 4K plan remains the most expensive streaming option in the U.S. marketplace right now, potentially capping Netflix’s ability to continually raise prices as subscriber growth dwindles.

Netflix Posts Slowing Subscriber Growth; Video Game Efforts Appear To Be a Distraction Neil Macker, CFA, Senior Equity Analyst, 21 Jul 2021

Netflix reported a mixed second quarter as subscriber growth remains anemic due to the pull forward in demand during the first half of 2020. Subscriber additions were well ahead of guidance, but revenue was in line with our projections for the quarter. While management expects adds to accelerate to 3.5

million next quarter, this mark is well behind our previous expectation of 6.9 million. We think the firm is experiencing not only saturation in its largest markets but also strong competition in the regions with the most potential growth, as we previously expected, and continue to expect. As a result, we keep our narrow moat and $250 FVE.

Netflix posted subscriber growth (1.5 million net adds, with a net loss of 430,000 in the U.S., versus guidance of 1.0 million). It slowly increased its streaming base, ending the quarter with more than 209 million global paid subscribers, up 8% from 193 million a year ago. Customer net adds posted their lowest quarter since the second quarter of 2013 when the firm only had 35 million paid subscribers globally. Growth in the quarter was slower across the four regions with the U.S. losing subscribers for only the second time since the start of 2012. Europe also experienced a very stark slowdown with only 0.19 million net adds, the first time it has added fewer than 0.75 million since the start of 2018 when Netflix began releasing regional breakdowns.

On the call, management outlined its strategy for entering the video game industry as Netflix recently hired Mike Verdu, a video game executive at Facebook and EA previously. Netflix will offer mobile games as part of its subscriptions starting 2022. We see the effort as a distraction at best from the core business. Much larger firms have struggled to make an impact in the space with very large budgets and their own platforms. Additionally, most major gaming franchises are based on original IP or sports licenses, as the days of movies launching with game tie-ins have largely died off.

Netflix Whiffs Versus Q1 Subscriber Guidance; Weak Q2 Guidance Implies Competition Gaining Share Neil Macker, CFA, Senior Equity Analyst, 21 Apr 2021

Netflix started 2021 with weak first quarter subscriber growth, below our estimate and the relatively conservative guidance issued in January. The subscriber pull forward in the first half of 2020 and the global increase in competition appear to have stunted net additions. Second quarter subscriber guidance is also very weak: 1 million net adds would be one of the lowest quarters ever for Netflix. We continue to think that the expansion of Disney+, HBO Max, and other services will increase churn and pressure gross adds for Netflix over the near future. We maintain our narrow moat and fair value estimate of $250.

Netflix posted 4.0 million net adds during the quarter, with 0.5 million in the U.S. and Canada, or UCAN, versus guidance of 6.0 million. The company no longer provides guidance for both domestic and international net adds. Netflix's streaming base continues to expand, ending the quarter at 209 million global paid subscribers, up 14% from 183 million a year ago. First quarter net adds were driven by Europe, Middle East and Africa, or EMEA, which added 1.8 million, and the Asia-Pacific (1.4 million).

Revenue of $7.2 billion was up 24% versus a year ago, with three of the four regions seeing significant increases in revenue per customer. UCAN revenue improved 17% year over year as the firm benefited from the price hike in 2020 and a larger subscriber base. ARPU was up 9% versus a year ago to $14.25, implying that the majority of the customer base is on the standard HD plan at $14 with a growing share on the 4K plan at $18. As we have previously noted, Netflix has only one source of revenue (streaming subscriptions) with two levers to increase revenue: subscribers and price. Given the high penetration in the U.S., increased competition, and high customer awareness, gaining marginal subscribers is getting tougher. Price increases may be the only real lever left to grow U.S. revenue and we expect that further increases may cause churn to spike up sharply.

Netflix Beats Fourth-Quarter Subscriber Guidance; EMEA Driving Growth for Now Neil Macker, CFA, Senior Equity Analyst, 20 Jan 2021

Netflix ended an impressive 2020 with strong subscriber growth, beating our estimate and relatively conservative management guidance provided a quarter ago. Despite the subscriber beat, revenue was in line with our projections for the quarter. We still believe that the global rollout of Disney+ and the launches of Peacock and HBO Max will increase churn and pressure gross adds for Netflix over the near future. However, Netflix is tracking ahead of our previous expectations on free cash burn and margin expansion. As a result, we are raising our fair value estimate to $250 from $200. We continue to believe Netflix's share price assumes unrealistic long-term growth and profitability.

Netflix posted stronger-than-expected subscriber growth (8.5 million net additions, with 0.9 million in the U.S. and Canada, or UCAN, versus guidance of 6.0 million). The company no longer provides guidance for domestic and international net additions. Netflix ended the quarter with more than 203 million global paid subscribers, up 22% from 167 million a year ago. Europe, Middle East and Africa, or EMEA, was the strongest segment, accounting for over half of the net additions for the quarter and over 40% of net additions for the year.

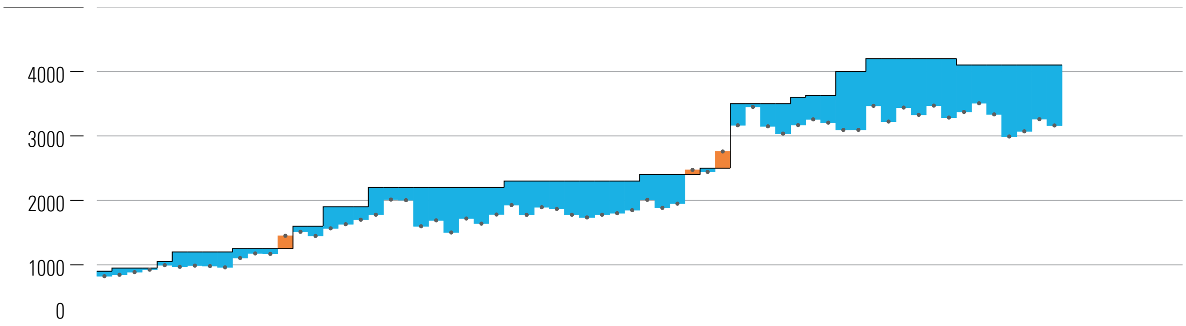
Revenue increased 22% versus a year ago to $6.6 billion during the quarter. UCAN revenue improved by 12% year over year as the firm benefited from the price hike in 2019 and a larger subscriber base. ARPU was up 2% versus a year ago to $13.51, which implies the majority of customers are on the standard HD plan ($13 during most of the quarter), with a growing share on the 4K plan (at $16). Netflix announced a price hike in November 2020 with most subscribers likely seeing the $1 increase on the HD plan or a $2 increase on the 4K plan on their December bills.

Morningstar Equity Analyst Report | Report as of 20 Apr 2022 07:34, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NASDAQ - ALL MARKETS

Netflix Inc NFLX ★★★ 20 Apr 2022 07:32, UTC

Competitors Price vs. Fair Value

Amazon.com Inc AMZN



Fair Value: 4,100.00
29 Oct 2021 02:16, UTC

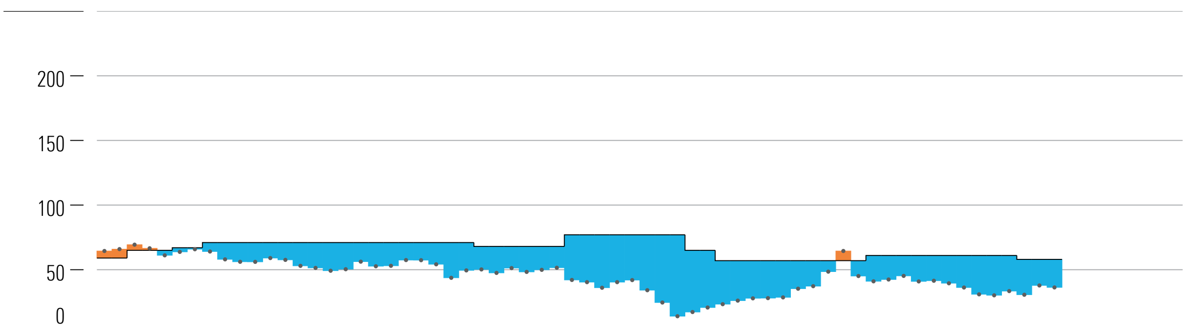
Last Close: 3,162.31
Over Valued
Under Valued

	2017	2018	2019	2020	2021	YTD
Price/Fair Value	0.94	0.68	0.80	0.90	0.81	0.77
Total Return %	55.96	28.43	23.03	76.26	2.38	-5.16

Morningstar Rating

Total Return % as of 19 Apr 2022. Last Close as of 19 Apr 2022. Fair Value as of 29 Oct 2021 02:16, UTC.

Paramount Global Class B PARA

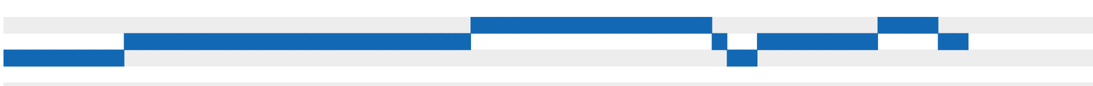


Fair Value: 58.00
16 Feb 2022 05:53, UTC

Last Close: 36.28
Over Valued
Under Valued

	2017	2018	2019	2020	2021	YTD
Price/Fair Value	0.83	0.62	0.55	0.65	0.49	0.63
Total Return %	-6.13	-24.68	-2.22	-8.93	-16.43	21.01

Morningstar Rating

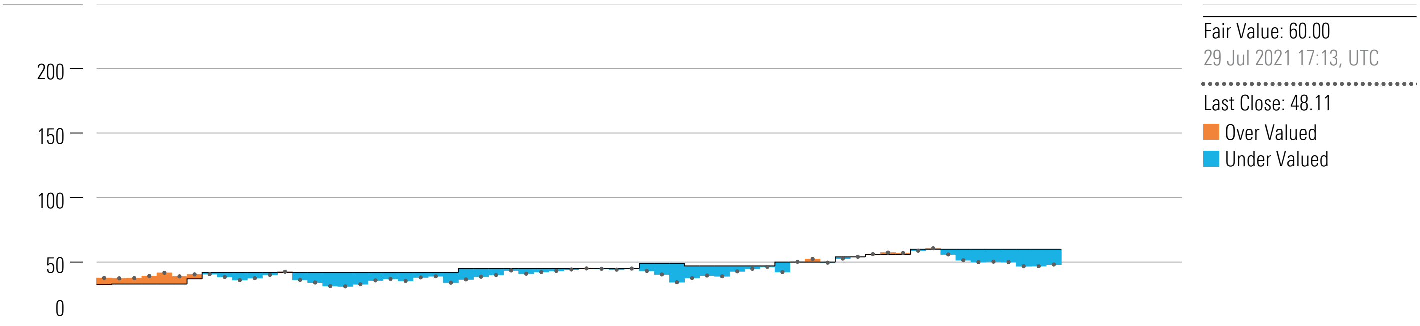


Total Return % as of 19 Apr 2022. Last Close as of 19 Apr 2022. Fair Value as of 16 Feb 2022 05:53, UTC.

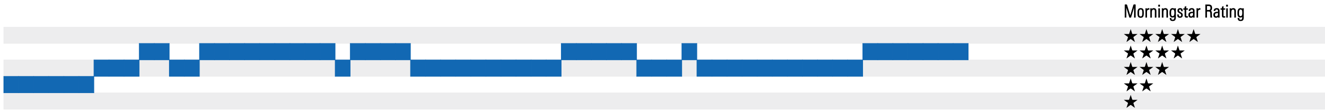
Morningstar Equity Analyst Report | Report as of 20 Apr 2022 07:34, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NASDAQ - ALL MARKETS

Netflix Inc NFLX ★★★ 20 Apr 2022 07:32, UTC

Comcast Corp Class A CMCSA



	2017	2018	2019	2020	2021	YTD	
	0.95	0.81	1.00	1.05	0.84	0.80	Price/Fair Value
	17.37	-12.69	33.92	18.52	-2.08	-3.38	Total Return %



Total Return % as of 19 Apr 2022. Last Close as of 19 Apr 2022. Fair Value as of 29 Jul 2021 17:13, UTC.

Morningstar Equity Analyst Report | Report as of 20 Apr 2022 07:34, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NASDAQ - ALL MARKETS

Netflix Inc NFLX ★★★ 20 Apr 2022 07:32, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Moat Trend™	Uncertainty	Capital Allocation	ESG Risk Rating Assessment[1]
348.61 USD 19 Apr 2022	280.00 USD 20 Apr 2022 07:27, UTC	1.25	154.88 USD Bil 19 Apr 2022	Narrow	Stable	Very High	Standard	6 Apr 2022 05:00, UTC

Morningstar Historical Summary

Financials as of 31 Dec 2021

Fiscal Year, ends 31 Dec	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	YTD	TTM
Revenue (USD Bil)	3.61	4.37	5.50	6.78	8.83	11.69	15.79	20.16	25.00	29.70	29.70	29.70
Revenue Growth %	12.6	21.2	25.8	23.2	30.3	32.4	35.1	27.6	24.0	18.8	18.8	18.8
EBITDA (USD Bil)	1.75	2.44	3.18	3.85	5.34	7.11	9.26	12.01	15.51	19.04	19.04	19.04
EBITDA Margin %	48.6	55.9	57.9	56.8	60.4	60.8	58.6	59.6	62.0	64.1	64.1	64.1
Operating Income (USD Mil)	50	228	403	306	380	839	1,605	2,604	4,585	6,195	6,195	6,195
Operating Margin %	1.4	5.2	7.3	4.5	4.3	7.2	10.2	12.9	18.3	20.9	20.9	20.9
Net Income (USD Mil)	17	112	267	123	187	559	1,211	1,867	2,761	5,116	5,116	5,116
Net Margin %	0.5	2.6	4.9	1.8	2.1	4.8	7.7	9.3	11.1	17.2	17.2	17.2
Diluted Shares Outstanding (Mil)	412	425	432	436	439	447	451	452	454	455	455	455
Diluted Earnings Per Share (USD)	0.04	0.26	0.62	0.28	0.43	1.25	2.68	4.13	6.08	11.24	11.24	11.24
Dividends Per Share (USD)	—	—	—	—	—	—	—	—	—	—	—	—

Valuation as of 31 Mar 2022

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Recent Qtr	TTM
Price/Sales	1.5	5.4	4.0	7.7	6.6	7.8	8.1	7.7	10.3	9.6	5.7	5.7
Price/Earnings	322.6	312.5	90.9	303.0	333.3	192.3	95.2	104.2	87.7	54.3	33.3	33.3
Price/Cash Flow	238.1	500.0	217.4	-91.7	-46.7	-46.1	-62.5	-54.9	222.2	416.7	434.8	434.8
Dividend Yield %	—	—	—	—	—	—	—	—	—	—	—	—
Price/Book	6.9	18.2	12.0	22.6	21.1	25.0	23.3	20.7	23.2	17.4	10.5	10.5
EV/EBITDA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Operating Performance / Profitability as of 31 Dec 2021

Fiscal Year, ends 31 Dec	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	YTD	TTM
ROA %	0.5	2.4	4.3	1.4	1.6	3.4	5.4	6.2	7.5	12.2	12.2	12.2
ROE %	2.5	10.8	16.7	6.0	7.6	17.8	27.5	29.1	29.6	38.0	38.0	38.0
ROIC %	2.7	9.0	13.4	7.2	5.1	9.6	12.4	12.4	15.8	18.5	18.5	18.5
Asset Turnover	1.0	0.9	0.9	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7

Financial Leverage

Fiscal Year, ends 31 Dec	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Recent Qtr	TTM
Debt/Capital %	34.9	27.3	32.3	51.6	55.7	64.5	66.4	66.1	58.8	48.1	48.1	—
Equity/Assets %	18.8	24.6	26.4	21.8	19.7	18.8	20.2	22.3	28.2	35.5	35.5	—
Total Debt/EBITDA	0.2	0.2	0.3	0.6	0.6	0.9	1.1	1.2	1.1	0.8	0.8	—
EBITDA/Interest Expense	87.6	76.0	59.8	23.5	35.5	20.1	22.0	19.2	11.2	24.9	24.9	24.9

Morningstar Analyst Historical/Forecast Summary as of 19 Apr 2022

Financials

Fiscal Year, ends 31 Dec	2020	2021	Estimates 2022	2023	2024
Revenue (USD Bil)	25	30	33	36	39
Revenue Growth %	24.0	18.8	10.1	10.4	8.9
EBITDA (USD Mil)	5,231	7,015	7,666	8,743	9,872
EBITDA Margin %	20.9	23.6	23.5	24.2	25.1
Operating Income (USD Mil)	4,585	6,195	6,531	7,791	8,940
Operating Margin %	18.3	20.9	20.0	21.6	22.8
Net Income (USD Mil)	2,761	5,116	5,038	5,774	6,711
Net Margin %	11.1	17.2	15.4	16.0	17.1
Diluted Shares Outstanding (Mil)	454	454	455	453	452
Diluted Earnings Per Share(USD)	6.08	11.26	11.08	12.74	14.85
Dividends Per Share(USD)	0.00	0.00	0.00	0.00	0.00

Forward Valuation

	2020	2021	Estimates 2022	2023	2024
Price/Sales	9.6	9.0	4.7	4.3	3.9
Price/Earnings	88.9	53.5	31.5	27.4	23.5
Price/Cash Flow	124.1	-2,022.4	-292.3	-435.9	-850.0
Dividend Yield %	—	—	—	—	—
Price/Book	—	—	—	—	—
EV/EBITDA	47.2	39.3	21.4	18.8	16.6

Research Methodology for Valuing Companies

Overview

At the heart of our valuation system is a detailed projection of a company's future cash flows, resulting from our analysts' research. Analysts create custom industry and company assumptions to feed income statement, balance sheet, and capital investment assumptions into our globally standardized, proprietary discounted cash flow, or DCF, modeling templates. We use scenario analysis, indepth competitive advantage analysis, and a variety of other analytical tools to augment this process. Moreover, we think analyzing valuation through discounted cash flows presents a better lens for viewing cyclical companies, high-growth firms, businesses with finite lives (e.g., mines), or companies expected to generate negative earnings over the next few years. That said, we don't dismiss multiples altogether but rather use them as supporting cross-checks for our DCF-based fair value estimates. We also acknowledge that DCF models offer their own challenges (including a potential proliferation of estimated inputs and the possibility that the method may miss shortterm market-price movements), but we believe these negatives are mitigated by deep analysis and our longterm approach.

Morningstar's equity research group ("we," "our") believes that a company's intrinsic worth results from the future cash flows it can generate. The Morningstar Rating for stocks identifies stocks trading at a discount or premium to their intrinsic worth—or fair value estimate, in Morningstar terminology. Five-star stocks sell for the biggest risk adjusted discount to their fair values, whereas 1-star stocks trade at premiums to their intrinsic worth.

Four key components drive the Morningstar rating: (1) our assessment of the firm's economic moat, (2) our estimate of the stock's fair value, (3) our uncertainty around that fair value estimate and (4) the current market price. This process ultimately culminates in our singlepoint star rating.

1. Economic Moat

The concept of an economic moat plays a vital role not only in our qualitative assessment of a firm's long-term investment potential, but also in the actual calculation of our fair value estimates. An economic moat is a structural feature that allows a firm to sustain excess profits over a long period of time. We define economic profits as returns on invested capital (or ROIC) over and above our estimate of a firm's cost of capital, or weighted average cost of capital (or WACC). Without a moat, profits are more susceptible to competition. We have identified five sources of economic moats: intangible assets, switching costs, network effect, cost advantage, and efficient scale.

Companies with a narrow moat are those we believe are more likely than not to achieve normalized excess returns for at least the next 10 years. Wide-moat companies are those in which we have very high confidence that excess returns will remain for 10 years, with excess returns more likely than not to remain for at least 20 years. The longer a firm generates economic profits, the higher its intrinsic value. We believe low-quality, no-moat companies will see their normalized returns gravitate toward the firm's cost of capital more quickly than companies with moats.

When considering a company's moat, we also assess whether there is a substantial threat of value destruction, stemming from risks related to ESG, industry disruption, financial health, or other idiosyncratic issues. In this context, a risk is considered potentially value destructive if its occurrence would eliminate a firm's economic profit on a cumulative or midcycle basis. If we deem the probability of occurrence sufficiently high, we would not characterize the company as possessing an economic moat.

To assess the sustainability of excess profits, analysts perform ongoing assessments of the moat trend. A firm's moat trend is positive in cases where we think its sources of competitive advantage are growing stronger; stable where we don't anticipate changes to competitive advantages over the next several years; or negative when we see signs of deterioration.

2. Estimated Fair Value

Combining our analysts' financial forecasts with the firm's economic moat helps us assess how long returns on invested capital are likely to exceed the firm's cost of capital. Returns of firms with a wide economic moat rating are assumed to fade to the perpetuity period over a longer period of time than the returns of narrow-moat firms, and both will fade slower than no-moat firms, increasing our estimate of their intrinsic value.

Our model is divided into three distinct stages:

Stage I: Explicit Forecast

In this stage, which can last five to 10 years, analysts make full financial statement forecasts, including items such as revenue, profit margins, tax rates, changes in workingcapital accounts, and capital spending. Based on these projections, we calculate earnings before interest, after taxes (EBI) and the net new investment (NNI) to derive our annual free cash flow forecast.

Stage II: Fade

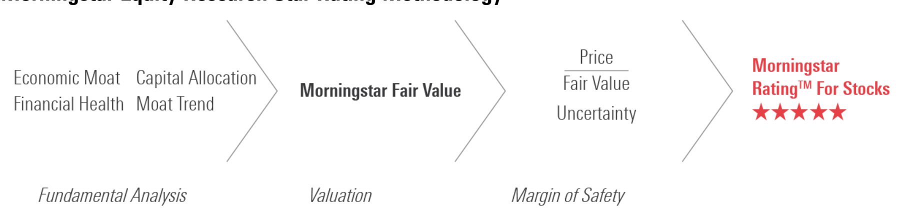
The second stage of our model is the period it will take the company's return on new invested capital—the return on capital of the next dollar invested ("RONIC")—to decline (or rise) to its cost of capital. During the Stage II period, we use a formula to approximate cash flows in lieu of explicitly modeling the income statement, balance sheet, and cash flow statement as we do in Stage I. The length of the second stage depends on the strength of the company's economic moat. We forecast this period to last anywhere from one year (for companies with no economic moat) to 10–15 years or more (for wide-moat companies). During this period, cash flows are forecast using four assumptions: an average growth rate for EBI over the period, a normalized investment rate, average return on new invested capital (RONIC), and the number of years until perpetuity, when excess returns cease. The investment rate and return on new invested capital decline until a perpetuity value is calculated. In the case of firms that do not earn their cost of capital, we assume marginal ROICs rise to the firm's cost of capital (usually attributable to less reinvestment), and we may truncate the second stage.

Stage III: Perpetuity

Once a company's marginal ROIC hits its cost of capital, we calculate a continuing value, using a standard perpetuity formula. At perpetuity, we assume that any growth or decline or investment in the business neither creates nor destroys value and that any new investment provides a return in line with estimated WACC.

Because a dollar earned today is worth more than a dollar earned tomorrow, we discount our projections of cash flows in stages I, II, and III to arrive at a total present value of expected future cash flows. Because we are modeling free cash flow to the firm—representing cash available to provide a return to all capital providers—we discount future cash flows using the WACC, which is a weighted average of the costs of equity, debt, and preferred stock (and any other funding sources), using expected future proportionate long-term, market-value weights.

Morningstar Equity Research Star Rating Methodology



3. Uncertainty Around That Fair Value Estimate

Morningstar's Uncertainty Rating captures a range of likely potential intrinsic values for a company and uses it to assign the margin of safety required before investing, which in turn explicitly drives our stock star rating system. The Uncertainty Rating represents the analysts' ability to

Morningstar Equity Analyst Report | Report as of 20 Apr 2022 07:34, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NASDAQ - ALL MARKETS

Research Methodology for Valuing Companies

bound the estimated value of the shares in a company around the Fair Value Estimate, based on the characteristics of the business underlying the stock, including operating and financial leverage, sales sensitivity to the overall economy, product concentration, pricing power, exposure to material ESG risks, and other company-specific factors.

Analysts consider at least two scenarios in addition to their base case: a bull case and a bear case. Assumptions are chosen such that the analyst believes there is a 25% probability that the company will perform better than the bull case, and a 25% probability that the company will perform worse than the bear case. The distance between the bull and bear cases is an important indicator of the uncertainty underlying the fair value estimate. In cases where there is less than a 25% probability of an event, but where the event could result in a material decline in value, analysts may adjust the uncertainty rating to reflect the increased risk. Analysts may also make a fair value adjustment to reflect the impact of this event.

Our recommended margin of safety widens as our uncertainty of the estimated value of the equity increases. The more uncertain we are about the estimated value of the equity, the greater the discount we require relative to our estimate of the value of the firm before we would recommend the purchase of the shares. In addition, the uncertainty rating provides guidance in portfolio construction based on risk tolerance.

Our uncertainty ratings for our qualitative analysis are low, medium, high, very high, and extreme.

	Margin of Safety	
Qualitative Analysis Uncertainty Ratings	★★★★★Rating	★Rating
Low	20% Discount	25% Premium
Medium	30% Discount	35% Premium
High	40% Discount	55% Premium
Very High	50% Discount	75% Premium
Extreme	75% Discount	300% Premium

4. Market Price

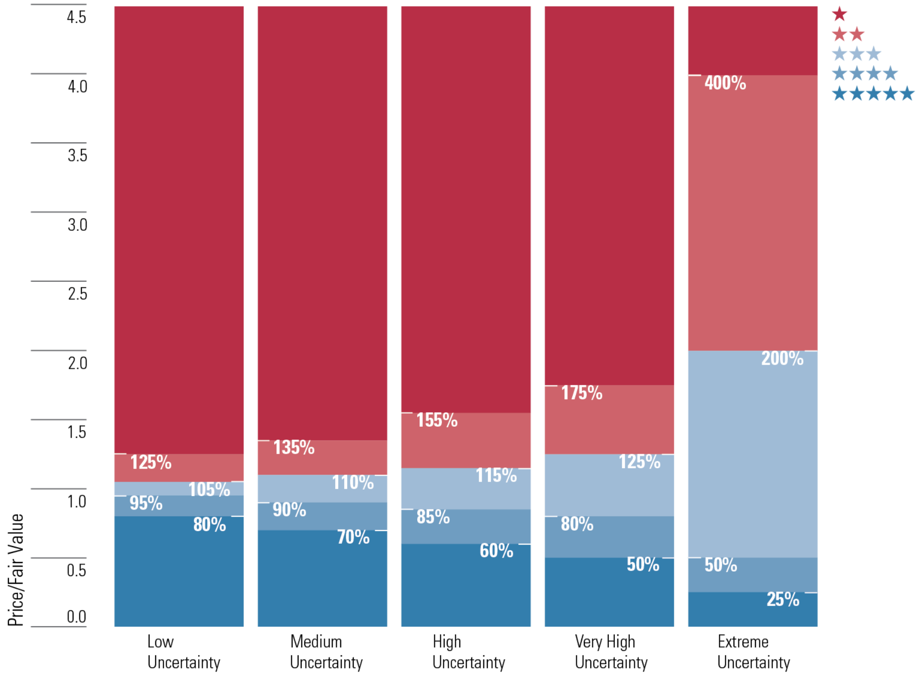
The market prices used in this analysis and noted in the report come from exchange on which the stock is listed which we believe is a reliable source.

For more details about our methodology, please go to https://shareholders.morningstar.com.

Morningstar Star Rating for Stocks

Once we determine the fair value estimate of a stock, we compare it with the stock's current market price on a daily basis, and the star rating is automatically re-calculated at the market close on every day the market on which the stock is listed is open. Our analysts keep close tabs on the companies they follow, and, based on thorough and ongoing analysis, raise or lower their fair value estimates as warranted.

Morningstar Equity Research Star Rating Methodology



Please note, there is no predefined distribution of stars. That is, the percentage of stocks that earn 5 stars can fluctuate daily, so the star ratings, in the aggregate, can serve as a gauge of the broader market's valuation. When there are many 5-star stocks, the stock market as a whole is more undervalued, in our opinion, than when very few companies garner our highest rating.

We expect that if our base-case assumptions are true the market price will converge on our fair value estimate over time generally within three years (although it is impossible to predict the exact time frame in which market prices may adjust).

Our star ratings are guideposts to a broad audience and individuals must consider their own specific investment goals, risk tolerance, tax situation, time horizon, income needs, and complete investment portfolio, among other factors.

The Morningstar Star Ratings for stocks are defined below:

★★★★★ We believe appreciation beyond a fair risk adjusted return is highly likely over a multiyear time frame. Scenario analysis developed by our analysts indicates that the current market price represents an excessively pessimistic outlook, limiting downside risk and maximizing upside potential.

★★★★ We believe appreciation beyond a fair risk-adjusted return is likely.

★★★ Indicates our belief that investors are likely to receive a fair risk-adjusted return (approximately cost of equity).

★★ We believe investors are likely to receive a less than fair risk-adjusted return.

★ Indicates a high probability of undesirable risk-adjusted returns from the current market price over a multiyear time frame, based on our analysis. Scenario analysis by our analysts indicates that the market is pricing in an excessively optimistic outlook, limiting upside potential and leaving the investor exposed to Capital loss.

Other Definitions

Last Price: Price of the stock as of the close of the market of the last trading day before date of the report.

Capital Allocation Rating: Our Capital Allocation (or Stewardship) Rating represents our assessment of the quality of management's capital allocation, with particular emphasis on the firm's balance sheet, investments, and shareholder distributions. Analysts consider companies' investment strategy and valuation, balance sheet management, and dividend and share buyback policies. Corporate governance factors are only considered if they are likely to materially impact shareholder value, though either the balance sheet, investment, or shareholder distributions. Analysts assign one of three ratings: "Exem-

Research Methodology for Valuing Companies

plary", "Standard", or "Poor". Analysts judge Capital Allocation from an equity holder's perspective. Ratings are determined on a forward looking and absolute basis. The Standard rating is most common as most managers will exhibit neither exceptionally strong nor poor capital allocation.

Capital Allocation (or Stewardship) analysis published prior to Dec. 9, 2020, was determined using a different process. Beyond investment strategy, financial leverage, and dividend and share buyback policies, analysts also considered execution, compensation, related party transactions, and accounting practices in the rating.

Capital Allocation Rating: Our Capital Allocation (or Stewardship) Rating represents our assessment of the quality of management's capital allocation, with particular emphasis on the firm's balance sheet, investments, and shareholder distributions. Analysts consider companies' investment strategy and valuation, balance sheet management, and dividend and share buyback policies. Corporate governance factors are only considered if they are likely to materially impact shareholder value, though either the balance sheet, investment, or shareholder distributions. Analysts assign one of three ratings: "Exemplary", "Standard", or "Poor". Analysts judge Capital Allocation from an equity holder's perspective. Ratings are determined on a forward looking and absolute basis. The Standard rating is most common as most managers will exhibit neither exceptionally strong nor poor capital allocation.

Capital Allocation (or Stewardship) analysis published prior to Dec. 9, 2020, was determined using a different process. Beyond investment strategy, financial leverage, and dividend and share buyback policies, analysts also considered execution, compensation, related party transactions, and accounting practices in the rating.

Sustainalytics ESG Risk Rating Assessment: The ESG Risk Rating Assessment is provided by Sustainalytics; a Morningstar company.

Sustainalytics' ESG Risk Ratings measure the degree to which company's economic value at risk is driven by environment, social and governance (ESG) factors.

Sustainalytics analyzes over 1,300 data points to assess a company's exposure to and management of ESG risks. In other words, ESG Risk Ratings measures a company's unmanaged ESG Risks represented as a quantitative score. Unmanaged Risk is measured on an open-ended scale starting at zero (no risk) with lower scores representing less unmanaged risk and, for 95% of cases, the unmanaged ESG Risk score is below 50.

Based on their quantitative scores, companies are grouped into one of five Risk Categories (negligible, low, medium, high, severe). These risk categories are absolute, meaning that a 'high risk' assessment reflects a comparable degree of unmanaged ESG risk across all subindustries covered.

The ESG Risk Rating Assessment is a visual representation of Sustainalytics ESG Risk Categories on a 1 to 5 scale. Companies with Negligible Risk = 5 Globes, Low Risk = 4, Medium Risk = 3 Globes, High Risk = 2 Globes, Severe Risk = 1 Globe. For more information, please visit sustainalytics.com/esg-ratings/

Ratings should not be used as the sole basis in evaluating a company or security. Ratings involve unknown risks and uncertainties which may cause our expectations not to occur or to differ significantly from what was expected and should not be considered an offer or solicitation to buy or sell a security.

Risk Warning

Please note that investments in securities are subject to market and other risks and there is no assurance or guarantee that the intended investment objectives will be achieved. Past performance of a security may or may not be sustained in future and is no indication of future performance. A security investment return and an investor's principal value will fluctuate so that, when redeemed, an investor's shares may be worth more or less than their original cost. A security's current investment performance may be lower or higher than the investment performance noted within the report. Morningstar's Uncertainty Rating serves as a useful data point with respect to sensitivity analysis of the assumptions used in our determining a fair value price.

General Disclosure

Unless otherwise provided in a separate agreement, recipients accessing this report may only use it in the country in which the Morningstar distributor is based. Unless stated otherwise, the original distributor of the report is Morningstar Research Services LLC, a U.S.A. domiciled financial institution.

This report is for informational purposes only and has no regard to the specific investment objectives, financial situation or particular needs of any specific recipient. This publication is intended to provide information to assist institutional investors in making their own investment decisions, not to provide investment advice to any specific investor. Therefore, investments discussed and recommendations made herein may not be suitable for all investors: recipients must exercise their own independent judgment as to the suitability of such investments and recommendations in the light of their own investment objectives, experience, taxation status and financial position.

The information, data, analyses and opinions presented herein are not warranted to be accurate, correct, complete or timely. Unless otherwise provided in a separate agreement, neither Morningstar, Inc. or the Equity Research Group represents that the report contents meet all of the presentation and/or disclosure standards applicable in the jurisdiction the recipient is located.

Except as otherwise required by law or provided for in a separate agreement, the analyst, Morningstar, Inc. and the Equity Research Group and their officers, directors and employees shall not be responsible or liable for any trading decisions, damages or other losses resulting from, or related to, the information, data, analyses or opinions within the report. The Equity Research Group encourages recipients recipients of this report to read all relevant issue documents (e.g., prospectus) pertaining to the security concerned, including without limitation, information relevant to its investment objectives, risks, and costs before making an in vestment decision and when deemed necessary, to seek the advice of a legal, tax, and/or accounting professional.

The Report and its contents are not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject Morningstar, Inc. or its affiliates to any registration or licensing requirements in such jurisdiction.

Where this report is made available in a language other than English and in the case of inconsistencies between the English and translated versions of the report, the English version will control and supersede any ambiguities associated with any part or section of a report that has been issued in a foreign language. Neither the analyst, Morningstar, Inc., or the Equity Research Group guarantees the accuracy of the translations.

This report may be distributed in certain localities, countries and/or jurisdictions ("Territories") by independent third parties or independent intermediaries and/or distributors ("Distributors"). Such Distributors are not acting as agents or representatives of the analyst, Morningstar, Inc. or the Equity Research Group. In Territories where a Distributor distributes our report, the Distributor is solely responsible for complying with all applicable regulations, laws, rules, circulars, codes and guidelines established by local and/or regional regulatory bodies, including laws in connection with the distribution third-party research reports.

Conflicts of Interest

- No interests are held by the analyst with respect to the security subject of this investment research report.

Research Methodology for Valuing Companies

- Morningstar, Inc. may hold a long position in the security subject of this investment research report that exceeds 0.5% of the total issued share capital of the security. To determine if such is the case, please click http://msi.morningstar.com and http://mdi.morningstar.com.
- Analysts' compensation is derived from Morningstar, Inc.'s overall earnings and consists of salary, bonus and in some cases restricted stock.
- Neither Morningstar, Inc. or the Equity Research Group receives commissions for providing research nor do they charge companies to be rated.
- Neither Morningstar, Inc. or the Equity Research Group is a market maker or a liquidity provider of the security noted within this report.
- Neither Morningstar, Inc. or the Equity Research Group has been a lead manager or co-lead manager over the previous 12-months of any publicly disclosed offer of financial instruments of the issuer.
- Morningstar, Inc.'s investment management group does have arrangements with financial institutions to provide portfolio management/investment advice some of which an analyst may issue investment research reports on. However, analysts do not have authority over Morningstar's investment management group's business arrangements nor allow employees from the investment management group to participate or influence the analysis or opinion prepared by them.
- Morningstar, Inc. is a publicly traded company (Ticker Symbol: MORN) and thus a financial institution the security of which is the subject of this report may own more than 5% of Morningstar, Inc.'s total outstanding shares. Please access Morningstar, Inc.'s proxy statement, "Security Ownership of Certain Beneficial Owners and Management" section https://shareholders.morningstar.com/investor-relations/financials/sec-filings/default.aspx
- Morningstar, Inc. may provide the product issuer or its related entities with services or products for a fee and on an arms' length basis including software products and licenses, research and consulting services, data services, licenses to republish our ratings and research in their promotional material, event sponsorship and website advertising.

Further information on Morningstar, Inc.'s conflict of interest policies is available from https://shareholders.morningstar.com. Also, please note analysts are subject to the CFA Institute's Code of Ethics and Standards of Professional Conduct.

For a list of securities which the Equity Research Group currently covers and provides written analysis on please contact your local Morningstar office. In addition, for historical analysis of securities covered, including their fair value estimate, please contact your local office.

For Recipients in Australia: This Report has been issued and distributed in Australia by Morningstar Australasia Pty Ltd (ABN: 95 090 665 544; ASFL: 240892). Morningstar Australasia Pty Ltd is the provider of the general advice ('the Service') and takes responsibility for the production of this report. The Service is provided through the research of investment products.

To the extent the Report contains general advice it has been prepared without reference to an investor's objectives, financial situation or needs. Investors should consider the advice in light of these matters and, if applicable, the relevant Product Disclosure Statement before making any decision to invest. Refer to our Financial Services Guide (FSG) for more information at http://www.morningstar.com.au/fsg.pdf.

For Recipients in Hong Kong: The Report is distributed by Morningstar Investment Management Asia Limited, which is regulated by the Hong Kong Securities and Futures Commission to provide services to professional investors only. Neither Morningstar Investment Management Asia Limited, nor its representatives, are acting or will be deemed to be acting as an investment professional to any recipients of this information unless expressly agreed to by Morningstar Investment Management Asia Limited. For enquiries regarding this research, please contact a Morningstar Investment Management Asia Limited Licensed Representative at https://shareholders.morningstar.com.

For recipients in India: This Investment Research is issued by Morningstar Investment Adviser India Private Limited. Morningstar Investment Adviser India Private Limited is registered with the Securities and Exchange Board of India (Registration number INA000001357) and provides investment advice and research. Morningstar Investment Adviser India Private Limited has not been the subject of any disciplinary action by SEBI or any other legal/regulatory body. Morningstar Investment Adviser India Private Limited is a wholly owned subsidiary of Morningstar Investment Management LLC. In India, Morningstar Investment Adviser India Private Limited has one associate, Morningstar India Private Limited, which provides data related services, financial data analysis and software development. The Research Analyst has not served as an officer, director or employee of the fund company within the last 12 months, nor has it or its associates engaged in market making activity for the fund company.

*The Conflicts of Interest disclosure above also applies to relatives and associates of Manager Research Analysts in India # The Conflicts of Interest disclosure above also applies to associates of Manager Research Analysts in India. The terms and conditions on which Morningstar Investment Adviser India Private Limited offers Investment Research to clients, varies from client to client, and are detailed in the respective client agreement.

For recipients in Japan: The Report is distributed by Ibbotson Associates Japan, Inc., which is regulated by Financial Services Agency. Neither Ibbotson Associates Japan, Inc., nor its representatives, are acting or will be deemed to be acting as an investment professional to any recipients of this information.

For recipients in Singapore: For Institutional Investor audiences only. Recipients of this report should contact their financial professional in Singapore in relation to this report. Morningstar, Inc., and its affiliates, relies on certain exemptions (Financial Advisers Regulations, Section 32B and 32C) to provide its investment research to recipients in Singapore.