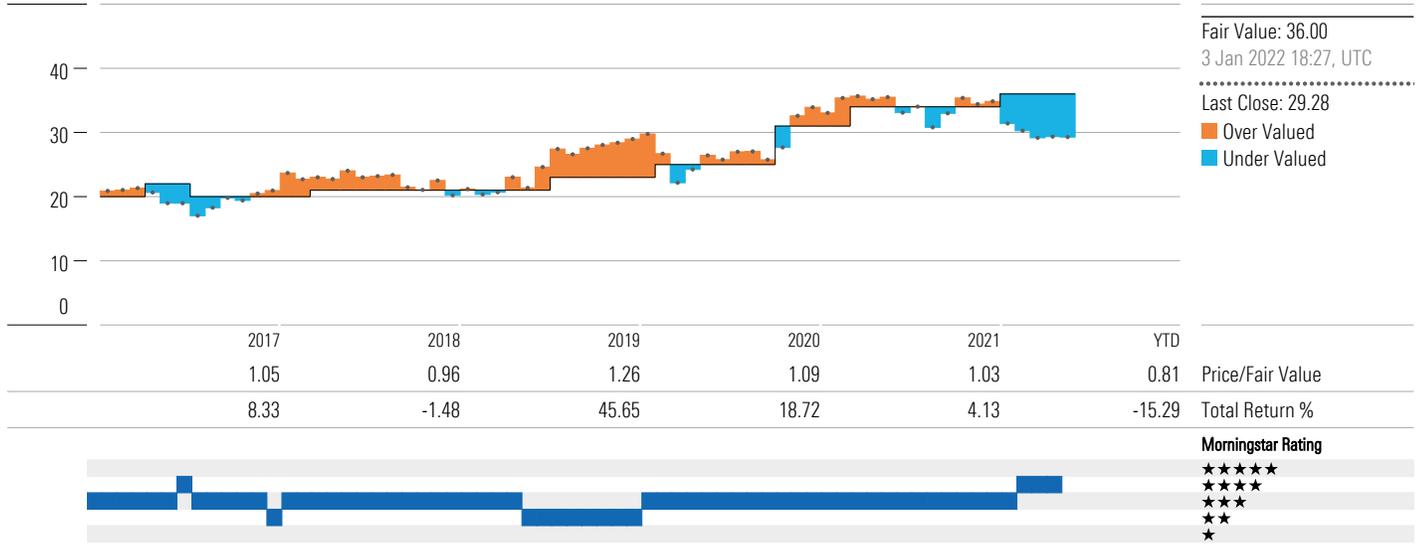


Gentex Corp GNTX ★★★★★ 6 May 2022 21:23, UTC

Last Price 29.28 USD 6 May 2022	Fair Value Estimate 36.00 USD 3 Jan 2022 18:27, UTC	Price/FVE 0.81	Market Cap 6.86 USD Bil 6 May 2022	Economic Moat™ Narrow	Moat Trend™ Stable	Uncertainty High	Capital Allocation Standard	ESG Risk Rating Assessment¹ 4 May 2022 05:00, UTC
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Price vs. Fair Value



Total Return % as of 6 May 2022. Last Close as of 6 May 2022. Fair Value as of 3 Jan 2022 18:27, UTC.

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

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

Gentex's First-Quarter Results Solid Despite Parts Shortages

Analyst Note David Whiston, CFA, CPA, CFE, Sector Strategist, 22 Apr 2022

Gentex's first-quarter results gave us no reason to change our fair value estimate. Management seems to be doing a solid job handling supply chain disruptions. Diluted EPS of \$0.37 beat the Refinitiv consensus of \$0.32 but fell 20% year over year. Mirror unit volume declined 7%, which was better than the 11% industry decline in light-vehicle production across Gentex's primary markets of North America, Europe, and Japan and Korea. Higher freight costs and lower volume were somewhat offset by finding operating efficiencies, but gross margin fell 360 basis points to 34.3%, slightly below full-year guidance of 35%-36% and identical to the fourth-quarter 2021 level. Gentex did not get any help from automakers on passing along cost increases; it said those negotiations are ongoing for the rest of the year and into 2023. These negotiations are often a slow process done automaker by automaker, and the current volatile environment makes it harder to negotiate terms. We agree with management's optimism for the chance of favorable operating leverage after 2022.

Gentex's balance sheet remains a fortress, with no debt and plenty of cash and investments to withstand continued supply chain problems. Last-minute customer production changes were less frequent in the quarter but were more severe than previous ones. Customers asked for more full display mirrors this quarter, and Gentex had to tell them no due to a lack of components. We are encouraged that demand remains strong for a high-tech product. There are fears of a coming U.S. recession in the market, but we think autos have been in a recession for most of the past two years. We think if the chip shortage were gone and a recession came, then recession auto sales volume would be higher than

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Sector	Industry
 Consumer Cyclical	Auto Parts

Business Description

Gentex was founded in 1974 to produce smoke-detection equipment. The company sold its first glare-control interior mirror in 1982 and its first model using electrochromic technology in 1987. Automotive revenue is about 98% of total revenue, and the company is constantly developing new applications for the technology to remain on top. Sales in 2021 totaled about \$1.7 billion with 41.8 million mirrors shipped. The unit mix breaks out as 65% interior and 35% exterior, versus about 32% exterior in 2020. The company is based in Zeeland, Michigan.

recent annualized industry light-vehicle sales. So between that view, the balance sheet, and Gentex innovating in nanosensing, lighting, and camera technology, we see the company as well positioned for the future.

Business Strategy & Outlook David Whiston, CFA, CPA, CFE, Sector Strategist, 24 Feb 2022

Gentex manufactures auto-dimming rear- and side-view mirrors that use electrochromic technology. These mirrors automatically darken to eliminate headlight glare for drivers and have many other applications. With over 2,000 patents worldwide, some valid through 2044, and a dominant 91% market share, up from 77% in 2003, Gentex has a narrow economic moat it should be able to protect for a long time, in our opinion.

The growth prospects for auto-dimming mirrors look strong. We estimate that in 2021, about 36% of all light vehicles produced had interior auto-dimming mirrors, and exterior auto-dimming mirror penetration is far below interior. Demand remains healthy with annual revenue growth often exceeding industry vehicle production growth. Growth will come from increased vehicle penetration as more automakers make the safety benefit of auto-dimming technology available and as Gentex's research leads to new, advanced-feature mirrors that ultimately become standard products.

Active safety is a very fast-growing field, so more camera products are likely to show up on other vehicle programs and Gentex develops its own cameras. A recent example is the full display mirror, which the driver can toggle between a normal auto-dimming mirror and a display image while driving at high speed. Other growth areas include biometrics in mirrors and nanofiber chemical sensing technology, which we see having application in autonomous ride hailing, dimmable sunroofs, universal toll payments, and a partnership with Simplenight for booking entertainment or e-commerce activities in the vehicle. Gentex also owns HomeLink, which is an in-vehicle connectivity system linking the vehicle to one's residence for garage or Internet of Things applications.

The future beyond autos (98% of revenue) looks bright to us, too. The company supplies auto-dimming passenger windows for the Boeing 787, 777X, and unspecified Airbus planes. Gentex is also exploring healthcare smart lighting applications with the Mayo Clinic, movable lighting in airplane passenger cabins, nanofiber sensing could have security uses outside of the auto industry, and using its camera technology to help the visually impaired.

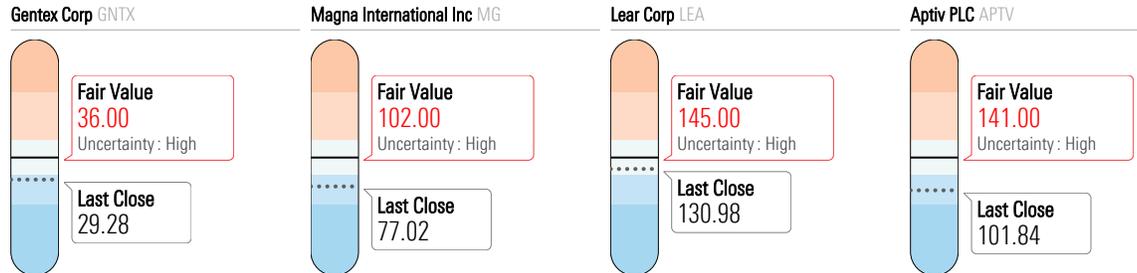
Bulls Say David Whiston, CFA, CPA, CFE, Sector Strategist, 24 Feb 2022

- ▶ Auto-dimming technology has applications to other parts of the car like headlights, as well as outside autos such as airplane windows. Although small now, markets outside the auto industry could prove to be very large businesses down the road.
- ▶ The company's financial health is so strong that we think Gentex can survive any downturn in the U.S.

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Competitors



	Gentex Corp GNTX	Magna International Inc MG	Lear Corp LEA	Aptiv PLC APTV
Economic Moat	Narrow	None	Narrow	Narrow
Moat Trend	Stable	Stable	Stable	Stable
Currency	USD	CAD	USD	USD
Fair Value	36.00 3 Jan 2022 18:27, UTC	102.00 29 Apr 2022 22:02, UTC	145.00 3 May 2022 19:17, UTC	141.00 6 May 2022 02:20, UTC
1-Star Price	55.80	158.10	224.75	218.55
5-Star Price	21.60	61.20	87.00	84.60
Assessment	Under Valued 8 May 2022	Under Valued 8 May 2022	Fairly Valued 8 May 2022	Under Valued 8 May 2022
Morningstar Rating	★★★★★ 6 May 2022 21:23, UTC	★★★★★ 6 May 2022 21:53, UTC	★★★★★ 6 May 2022 21:23, UTC	★★★★★ 6 May 2022 21:23, UTC
Analyst	David Whiston, Sector Strategist	Richard Hilgert, Senior Equity Analyst	Richard Hilgert, Senior Equity Analyst	Richard Hilgert, Senior Equity Analyst
Capital Allocation	Standard	Standard	Standard	Standard
Price/Fair Value	0.81	0.76	0.90	0.72
Price/Sales	4.00	0.51	0.41	1.75
Price/Book	3.56	1.53	1.68	3.29
Price/Earning	20.77	14.43	35.88	86.31
Dividend Yield	1.64%	2.84%	1.75%	0.15%
Market Cap	6.86 Bil	22.72 Bil	7.83 Bil	27.59 Bil
52-Week Range	27.06—37.90	70.16—126.00	123.28—204.91	94.75—180.81
Investment Style	Mid Core	Large Value	Mid Core	Mid Core

easier than other auto suppliers can.

- ▶ Biometrics, surgical room ultraviolet lighting, airplane windows, and electronic toll payments could open up meaningful new revenue streams for the company.

Bears Say David Whiston, CFA, CPA, CFE, Sector Strategist, 24 Feb 2022

- ▶ Cameras could replace Gentex's mirrors, if regulators throughout the world allowed it. We don't think this is a likely threat, at least not anytime in the near future in very large volume.
- ▶ Gentex hoards cash but has made good effort to buy back stock while at times increasing its dividend. A higher dividend would give shareholders--instead of management--more control in allocating excess capital.
- ▶ As auto-dimming mirrors become available on more vehicle models, OEMs may want to lower their own costs by pressuring Gentex to reduce prices, or by supporting emerging competitors.

Economic Moat David Whiston, CFA, CPA, CFE, Sector Strategist, 24 Feb 2022

Gentex Corp GNTX ★★★★★

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Gentex's cost advantage from economies of scale, its customers' switching costs, and intangible assets give the firm a narrow moat. Patents, innovations such as SmartBeam, and a consistent world-class manufacturing process have let the firm increase its auto-dimming mirror share to 91%. We see this as representative of a moat because Gentex does not give any reason for a customer to try another auto-dimming mirror supplier nor leave room for many competitors. The firm's technological leadership increases our confidence that Gentex will hold, if not keep increasing, market share. Given that the company is patient with its engineers in order to encourage innovation, we do not think Gentex will lose its competitive edge. Its research and development spending as a percentage of revenue is one of the highest in our supplier coverage. Gentex was the first to market with electrochromic automatic-dimming mirrors, so the company enjoyed pricing benefits from the early adopters of the technology. Its unique product and its ability to commercialize the technology and continually make patent-protected innovative changes to the automatic-dimming mirror has enabled Gentex to generate returns on invested capital vastly superior to other auto suppliers. The company's market share gain to 91% of auto-dimming mirrors from the low 80s in earlier years shows the superior quality of its product and the reliability of Gentex to deliver on time, suggesting that customers would face switching costs to move over to Magna Mirrors.

Auto suppliers are not chosen purely on price. A firm has to be reliable and get it right every time while also serving an automaker globally. There are not many suppliers that can do that, let alone mirror suppliers that can. Once a supplier has the business, it is extremely rare to lose it, especially during a vehicle program, because automakers then have to remove tooling from the supplier, which can cost millions. An automaker would also have to incur expensive validation testing of a new supplier, all while the production line is not making any vehicles and decimating an automaker's ability to recoup its fixed costs. Gentex also has traditionally kept a debt free balance sheet, partly so its cash hoard ensures it can keep its supply chain moving (such as in the Great Recession or after the Japan tsunami) and thus will never be the reason an automaker has to stop its production line.

This consistent reliability is not something that just anyone who can get a loan to start a mirror company could do easily or quickly. Automakers' move to more global platforms is very good news for Gentex since a supplier must be able to service the OEM consistently all over the world. A regional player cannot do this, and we think a small firm would be hesitant to borrow lots of money to add new facilities and overhead all over the world without any guarantee of winning new business. Automakers want the same supplier on a program all over the world due to scale benefits for them and reliability with a vendor that knows the vehicle program.

Gentex grows its share and keeps competitors at bay by bringing many, often patented, offerings (SmartBeam, HomeLink, FDM, telematics, and so on) into the electrochromic mirror, which, along with Gentex's consistent quality (both in the mirror and in the ease of integration of the mirror into the

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vehicle's other systems), makes it hard to beat in a proposal. These add-on features make the automaker money too because they are typically bundled with other non-Gentex features in an expensive tech or safety package on a vehicle. This allows the automaker to offer a variety of trims without having to redesign a vehicle's interior at great expense. Gentex has also told us the customer (the automaker) makes more money on Gentex products than Gentex does, which helps the switching cost moat source because a customer has little reason to switch on something it is buying for say \$40-\$45 and selling as one part of a multi-thousand dollar option package. Also, with growth potential in vision systems (FDM, camera monitoring systems), the connected car via HomeLink and the integrated tolling module service, and large area dimmable surfaces (sunroofs, airplane windows), we don't think AVs automatically mean doom for Gentex.

However, the company is probably not a wide-moat candidate, in our opinion. Even Gentex faces customer demands for annual price reductions of about 2%-3%. Gentex's gross margins declined to 32.6% in the recession years of 2008 and 2009, from 43.2% in 1999. Suppliers are at the mercy of the automakers' production schedules and relentless annual demands for price concessions. Each automaker's volume makes the supplier very dependent on this large source of revenue. Furthermore, the auto industry is so cyclical that in bad times even the best parts suppliers cannot avoid large declines in return on invested capital and profit. In Gentex's case, ROIC was more than 40% in the late 1990s but fell to about 15% in 2009, before rebounding to about 25% in subsequent years. Cost-cutting helps ease the pain, but it does not restore all lost profit. We model ROIC in the mid-20s to 30% range for most of our five-year forecast period.

Fair Value and Profit Drivers David Whiston, CFA, CPA, CFE, Sector Strategist, 24 Feb 2022

We are maintaining our Gentex fair value estimate to \$36 per share. We model revenue to increase about 10.5% on a five-year compound annual basis, with double-digit growth in each of the first three years of our forecast period. We model operating margin to average about 26.5% during our five-year explicit forecast period and a midcycle level approaching 27%. We project revenue based on a global vehicle production forecast, global auto-dimming mirror penetration, Gentex's market share, and average selling price. We assume a continued increase in penetration for our entire forecast period due to attractive growth prospects from current low penetration globally and Gentex's history. We believe additional margin expansion will remain difficult but not impossible, since automakers always seek price concessions.

The full display mirror, which the company refers to as FDM, is an innovation we like. We have driven several vehicles with this mirror and think that the full display mirror is far safer than a conventional auto-dimming mirror. Gentex grew FDM shipments 6.6% in 2021 from 2020 to 1.12 million. We think it has potential to be in every vehicle in the developed world due to its superior function over a normal mirror. Gentex has FDM contracts with 11 automakers as of fall 2021, including GM and Toyota,

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covering 60 models. We think the firm's manufacturing efficiency, product expertise, and high-tech products will keep gross margins in the upper 30% range but continued research and development, annual price reductions, supply chain disruptions such as the chip shortage, and overhead spending will prevent major operating margin expansion. We project average annual capital expenditures averaging about 6% of revenue over our forecast period due to higher than normal 2022 spending for a new plant. We model capital spending at about 5% of revenue in the outer years of our forecast and R&D expenses at about 7% of revenue on average. Our weighted average cost of capital is 9%.

We model Gentex's auto-dimming mirror market share going to 94% over our five-year explicit forecast period because we see no major threat from other firms. Gentex's quality and reliability are very hard to beat, and customers do not source mirrors solely based on price, which reduces the threat from low-cost Asian suppliers.

Risk and Uncertainty David Whiston, CFA, CPA, CFE, Sector Strategist, 24 Feb 2022

Gentex's only large competitor is Magna Mirrors. Magna has much deeper pockets than Gentex and could invest substantially in its auto-dimming mirror group to try to beat Gentex's technology advantage. Also, there is always the possibility that a new and superior technology will be invented and take over the auto-dimming mirror market, but we consider this risk remote. Some products such as high-beam assist are increasingly going into bundled packages in higher-trim vehicles, which means more competition for Gentex's SmartBeam product. Competition for engineering talent is fierce, and Gentex may have difficulty attracting good talent to Western Michigan.

It is possible that Gentex could be put out of the automotive supply chain if governments start allowing camera technology to replace all types of mirrors in a vehicle, as Europe and Japan now do under UN-ECE Regulation 46. Although we think cameras replacing mirrors in large volume is more than a decade away if it even happens at all, our fair value estimate may be severely reduced if such legislation causes consumers to prefer cameras over mirrors in large volume or fully autonomous cars lead to no mirrors in a vehicle. The company's expertise in camera systems, however, may make this legislative risk far less problematic than Gentex's critics fear. Furthermore, currently display-only systems require retooling of the vehicle and cost more than a mirror. Uncertainty as to image quality in poor weather or from other obstructions needs to be considered by regulators as well. A dual camera/mirror system provides a redundancy for safety in case a camera's lens is blocked by weather or debris on the lens. In light of this regulatory risk, the fact that Gentex's stock price is not immune to the cycle whims of the auto industry, more active safety content possibly being placed outside the mirror, and ESG issues for supply chain disruptions beyond Gentex's control, our fair value uncertainty rating is set at high.

Capital Allocation David Whiston, CFA, CPA, CFE, Sector Strategist, 24 Feb 2022

We award Gentex a Standard rating under our capital allocation methodology that focuses on balance

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sheet health, investments, and shareholder distributions. We've long considered Gentex's balance sheet a cash rich, and often debt free, fortress. There is no debt outstanding as of year-end 2021, which is usually the case unless Gentex makes a large acquisition such as HomeLink. Gentex borrowed \$75 million on its \$150 million credit line at the onset of the pandemic in 2020, but we think it did this because it just wanted to remind the bank it was still there rather than because it needed the money. The draw was repaid in the third and fourth quarters that year. Gentex did not need any debt during the Great Recession. We've long heard a criticism from Gentex investors on being debt free due to cost of capital and shareholder return, and management did become more generous on buybacks in recent years since Steve Downing took over as CEO. The cost of capital argument is valid, but we are fine with Gentex remaining debt free as we feel a strong balance sheet is an underrated asset in the auto industry. In times of crisis, Gentex can keep receiving inventory because its vendors know Gentex will pay them, or buying back stock after a large sell-off. Plus, this liquidity, in our view, means financial distress for Gentex is not something shareholders need to worry about.

Management has achieved returns on invested capital far exceeding the cost of capital for many years, which we expect to continue. The company generates so much free cash flow (typically about 15% to 25% of sales) that until the HomeLink acquisition in September 2013, it had amassed cash and an investment portfolio, mostly consisting of stocks and government bonds, amounting to more than half of assets. Rather than piling up investments, we prefer to see an even higher dividend or more share repurchases when the stock is trading well below our fair value estimate. At a minimum, we'd like to see management repurchase shares to offset dilution from stock-based compensation, which management has more than compensated for with buybacks in recent years.

The cash and investment hoard of \$475.4 million at the end of 2021 gives the company plenty of funds to reinvest in the business as well as make acquisitions in emerging fields such as nanotechnology and fund camera sensing technology for autonomous vehicles or nonautomotive lighting and dimming products for aerospace and healthcare. CEO Steve Downing has said many times Gentex has to make its products obsolete or someone else will, so we think management is prudently thinking and investing for the future. In 2018, Downing lowered the company's cash and investment target to \$525 million. There remains plenty of funds for a dividend increase if management wants to go that route, but it may not due to needing the flexibility to use the cash for reinvesting in the business, which as a technology focused firm we think should remain the top capital allocation priority.

After founder Fred Bauer retired, new leadership under Downing became more aggressive with share buybacks. The diluted share count at year-end 2021 is down by about 20% since the end of 2015. We calculate that management bought back shares in 2021 at an average price per share of \$33.83 and cumulative buybacks for 2003-21 at \$2.49 billion were at an average of \$16.90. Management's comments to us indicate it is willing to repurchase stock even in the midst of a recession, which we

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agree with but it's rare as most firms prefer to hoard cash in the depths of a crisis. During the coronavirus pandemic, Gentex did not buy back stock in second quarter 2020 but did in the second half of 2020, so we think management's actions match its words on buybacks. 2021 buybacks occurred in all but two months of the year, October and November. The buyback plan does not expire and has 24.8 million shares of remaining authorization at the end of 2021 following a 25 million share authorization increase announced in August 2021.

We think management recognizes when its shares are cheap enough to buy back but, in the past under prior leadership, we wished it would have acted on that knowledge sooner. The leadership team put in place several years ago is far more willing to buy back shares than we've seen under the prior regime; we just want Gentex to do it only when the stock is trading well below our fair value estimate. We think Bauer's capital-allocation preference was share repurchases because of his dislike of the double taxation of dividends. The company only started paying a dividend after tax cuts in 2003 under President George W. Bush. We don't expect a major change in capital allocation under Downing, but a small amount of debt being a permanent part of the capital structure could occur with Bauer retired. So far, Downing's preference seems to be remaining debt free when possible.

Analyst Notes Archive

Chip Shortage's Adverse Impact on Gentex Accelerated in Fourth Quarter David Whiston, CFA, CPA, CFE, Sector Strategist, 28 Jan 2022

Gentex's fourth-quarter 2021 saw the chip shortage finally directly prevent the company from making all the units it should, especially on more advanced feature mirrors such as the full display mirror. For most of 2021, Gentex's production suffered because customers shut their lines down for other supplier shortages but in a rarity, Gentex could not keep its lines moving in the fourth quarter. The shortage led to Gentex's mirror volume falling 18.1% year over year for the quarter versus a 20% light vehicle production decline in the firm's key markets of North America, Europe, Japan, and Korea. We are not changing our fair value estimate, but we will reassess all valuation inputs when we roll our model forward a year after the 10-K is filed.

We feel Gentex still had a decent quarter, just one with softer results than normal. The burden of an auto supplier with excellent margins and cash flow generation versus other auto suppliers is that a lukewarm quarter seems bad to the market, and the stock fell 6% the morning of Jan. 28. Gentex's diluted EPS of \$0.35 fell 39.7% year over year but still beat the Refinitiv consensus of \$0.34, and the company remained free cash flow positive in a difficult quarter. The adverse product mix caused gross margin to fall by 100 basis points to 34.3% versus third-quarter 2021 and by 660 basis points year over year, however, fourth-quarter 2020's gross margin was the highest quarterly level in about 16 years.

We agree with management that headwinds like labor shortages (Gentex currently on a daily basis has

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several hundred COVID-19-related absences), inflation, and the chip shortage causing last minute customer production changes, will continue for at least the first half of 2022. We consider Gentex to have the smallest downside risk in our auto coverage for investors due to its cash-rich, debt-free balance sheet and over 90% market share in auto dimming mirrors. Cash and investments at Dec. 31 totaled about \$475.4 million.

Supply Chain Problems Worsen in Gentex's Third Quarter

David Whiston, CFA, CPA, CFE, Sector Strategist, 22 Oct 2021

We see no reason to change our fair value estimate for Gentex, despite the chip shortage hurting third-quarter results, as we believe the company's long-term growth prospects remain in good shape. We also think its cash-rich, debt-free balance sheet enables Gentex to keep making acquisitions or buy back more stock. Third-quarter buybacks totaled \$90.6 million at \$32 per share. Diluted EPS of \$0.32 missed the Refinitiv consensus of \$0.38, and revenue fell nearly 16% year over year to \$399.6 million, missing consensus of \$434.5 million. Management said the supply chain shortages cost Gentex about 2.5 million-3 million units of production, which is about \$125 million in sales. Electronics supply shortages got significantly worse in the third quarter; CEO Steve Downing on the earnings call said that this will continue for several more quarters and that shortages have not bottomed out yet. Downing did tell us that things should improve in the latter part of 2022, which we find reasonable.

The worst shortfalls in supply came from North America and Europe, which saw industry light-vehicle production down by a combined approximate 27%, but overall Gentex revenue did fall less than the 23% industry production decrease across Europe, North America, China, Japan, and Korea. Still, some higher-content mirror business was lost, and management cut its second-half 2021 guidance, so full-year revenue guidance is now \$1.68 billion-\$1.75 billion from \$1.88 billion-\$1.98 billion. This revenue loss and loss of advanced-feature units also led to a 250-basis-point reduction in gross margin guidance for the second half of 2021, with guidance now at 35%-36% from 37.5%-38.5%. Third-quarter gross margin fell 440 basis points to 35.3%. We think that the worse the chip shortage is now, the sharper the recovery will be later, so should Gentex's stock fall below \$29, we'd consider that a good buying opportunity.

Parts Shortages Hurt Gentex's Second Quarter Despite Large Year-Over-Year Improvement

David Whiston, CFA, CPA, CFE, Sector Strategist, 23 Jul 2021

Gentex's second-quarter results saw significant headwinds from lost production due to parts shortages impacting the auto industry, but we see no reason to change our fair value estimate. Revenue increased by 86% year over year thanks to a soft comparable with the pandemic in 2020, but sales fell by nearly 9% versus second-quarter 2019. Gentex shipped about 2 million less units than it expected at the start of the quarter, which caused diluted EPS of \$0.36 to miss the Refinitiv consensus of \$0.45.

Gentex Corp GNTX ★★★★★

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The industry's supply chains are in turmoil due to the semiconductor shortage impacting chip availability, but other disruptions unrelated to Gentex, such as foam shortages following Texas winter storms, caused automakers to change production at the last minute or refuse shipment of mirrors because other non-Gentex parts never arrived at the automakers' assembly plants. This supply problem in our view will improve throughout 2021, and the worst of it is occurring in second quarter and early third quarter. We do not expect the chip shortage to be fully resolved, however, until at least well into 2022. The lost production caused management to issue second-half 2021 guidance that implies lower full-year guidance than given in April. Revenue guidance is now \$1.88 billion to \$1.98 billion, instead of \$1.94 billion to \$2.02 billion, and we believe that second-half gross margin guidance of 37.5%-38.5% means April's full-year guidance of gross margin between 39%-40% is not possible. We agree with management's optimism around 2022 revenue growth being 10%-15%.

Gentex's cash-loaded and debt free balance sheet make times like this easier to get through and we are not worried about the company's long term prospects, as products such as the full display mirror continue to do well with 14 automakers committing to the product, with (we suspect) more wins coming. For now, management seems to be willing to continue share repurchases and spent \$115.9 million on that in the second quarter.

Gentex Takes Small Hit From Semiconductor Shortage but Raises 2022 Outlook David Whiston, CFA, CPA, CFE, Sector Strategist, 23 Apr 2021

Gentex's first-quarter diluted EPS of \$0.46 rose 28% year over year but still missed the Refinitiv consensus of \$0.49, as did the company's 7% revenue growth. We are leaving our fair value estimate in place as we consider the earnings miss to be the result of \$45 million in lost revenue from the global semiconductor shortage rather than a problem with Gentex's execution or products. We are encouraged to see management leave 2021 guidance in place but also raise 2022 revenue guidance to 8%-13% growth from 2021's guided \$1.94 billion-\$2.02 billion. Previous 2022 guidance was for a 4%-8% increase from 2021. We think this guidance change is reasonable as Gentex's revenue growth typically outperforms market production growth. In the first quarter, Gentex's 7% revenue growth easily outperformed a 2% fall in vehicle production across North America, Europe, Japan, and Korea. Furthermore, we think low interest rates and two years of supply chain problems combined with strong consumer demand for new vehicles suggests 2022 could be a strong year.

CEO and president Steve Downing said on the call that he expects the semiconductor shortage to last into 2022, but he expects improvement going forward on the shortages experienced in the first quarter and lower premium freight charges. We are not worried about Gentex's health, given its cash-rich and debt-free balance sheet, and Downing told us that this strong balance sheet did help the company secure inventory in the quarter. We agree that improvement will be gradual because it takes a lot of time for chip capacity to be added upstream from Gentex. We are encouraged by the April 15 earnings

Gentex Corp GNTX ★★★★★

6 May 2022 21:23, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Moat Trend™	Uncertainty	Capital Allocation	ESG Risk Rating Assessment ¹
29.28 USD 6 May 2022	36.00 USD 3 Jan 2022 18:27, UTC	0.81	6.86 USD Bil 6 May 2022	 Narrow	Stable	High	Standard	 4 May 2022 05:00, UTC

call comments from Taiwan Semiconductor Manufacturing CEO C.C. Wei, who said he expects the shortage to be greatly reduced for his company's automotive business by third quarter. We expect shortages to continue into 2022, but we think the first half of 2021 will be the worst of it.

Gentex Ends 2020 With Record Quarter

David Whiston, CFA, CPA, CFE, Sector Strategist, 29 Jan 2021
Gentex reported an excellent fourth quarter to end 2020 with diluted EPS up 48.7% year over year to \$0.58, besting the Refinitiv consensus of \$0.50 and setting an all-time Gentex record. Roughly low- to mid-teens unit percentage growth in all mirror segments (versus only a 3% rise in global light vehicle production), and robust demand for advanced feature products such as the full-display mirror, enabled Gentex's revenue to rise 19.4% to a quarterly record \$529.9 million, well above Refinitiv consensus of \$482.97 million. This mix shift, favorable operating leverage, and Gentex achieving purchasing cost reductions upstream enabled an impressive 440-basis-point gross margin improvement to 40.9%, the best level since second-quarter 2004. We are not changing our fair value estimate, but we will reassess all valuation inputs after the 10-K is filed.

We continue to see Gentex in a dominant position for supplying autodimming mirrors and see upside to its new product offerings such as the integrated toll module, airplane windows, and in the long-term healthcare applications such as lighting for operating rooms and iris identification and smoking detection for the interior of autonomous vehicle fleets. The company's fortress balance sheet is now once again debt free, and its cash hoard of \$612.6 million suggests Gentex will have no problem investing for future innovation while also funding present operations. Management also continues to repurchase Gentex stock, with 4% of shares bought back in full-year 2020 via \$288.5 million in spending at an average price of \$27.10 notably below current levels, so the money was not wasted in our view. Authorization for 9.4 million shares remains, and we'd expect the board to approve more buybacks when necessary.

We Believe Gentex's Third Quarter Shows the Chance for a Strong 2021

David Whiston, CFA, CPA, CFE, Sector Strategist, 23 Oct 2020
Gentex reported a 9.1% year-over-year increase in third quarter diluted EPS with the \$0.48 posted beating Refinitiv's consensus of \$0.41. Revenue fell 0.7% but was the second-highest total ever recorded other than third-quarter 2019, so the good quarter faced a tough comparable. In light of 2020 trending better than modeled as a recovery from the pandemic is happening faster than expected in the spring, Gentex introducing 2021 revenue guidance of 15%-20% growth from 2020, cost reductions from second quarter in our view enabling the chance of gross margins next year of nearly 40%, and the time value of money, we are increasing our fair value estimate to \$31 from \$25.

We expect for at least through 2021, provided there is not another pandemic-induced shutdown, that the \$35 million in savings realized from salaried headcount reductions in second quarter, combined with

Gentex Corp GNTX ★★★★★ 6 May 2022 21:23, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Moat Trend™	Uncertainty	Capital Allocation	ESG Risk Rating Assessment¹
29.28 USD 6 May 2022	36.00 USD 3 Jan 2022 18:27, UTC	0.81	6.86 USD Bil 6 May 2022	 Narrow	Stable	High	Standard	 4 May 2022 05:00, UTC

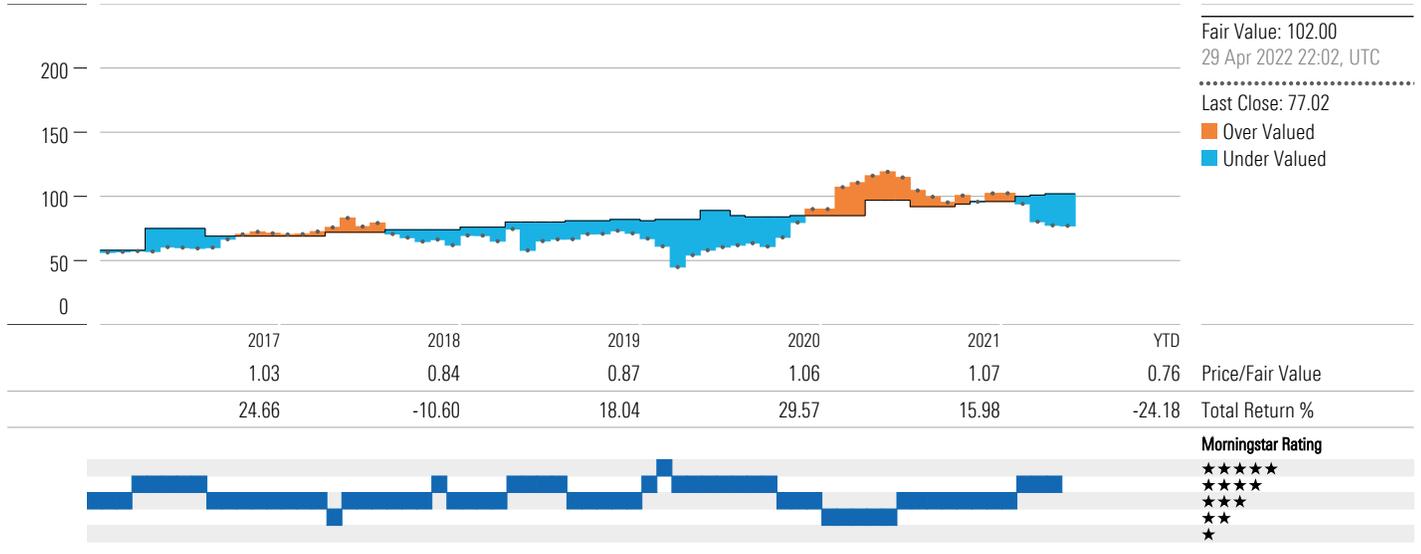
continued volume recovery from the coronavirus, should enable strong quarters for Gentex. Management is also willing to frequently repurchase its shares, and the company should be debt free by the end of 2020 with only \$25 million in borrowings outstanding on the credit line. The balance sheet is a fortress in our opinion, with \$612.1 million of cash and investments, and continued rollout of new high tech products, such as the full display mirror and the integrated toll module, should lead to strong earnings growth for a while. Upside also exists should aircraft production rebound because the autodimming windows product currently on the Boeing 787 will eventually get new business from the Boeing 777X and yet to be named Airbus planes per prior Gentex announcements.

The share buyback program has 11.9 million shares of authorization left, and the company repurchased 1.2 million in third quarter at an average price per share of \$26.93. We expect the board will not hesitate to authorize more buybacks over time. ■■

Gentex Corp GNTX ★★★★★ 6 May 2022 21:23, UTC

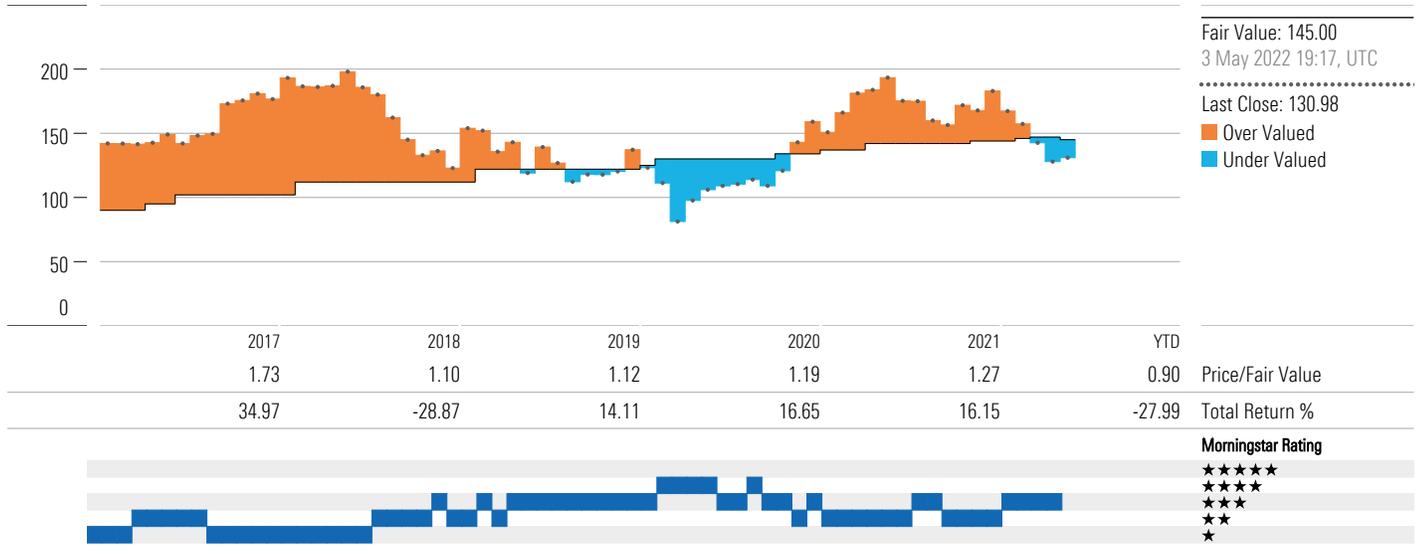
Competitors Price vs. Fair Value

Magna International Inc MG



Total Return % as of 6 May 2022. Last Close as of 6 May 2022. Fair Value as of 29 Apr 2022 22:02, UTC.

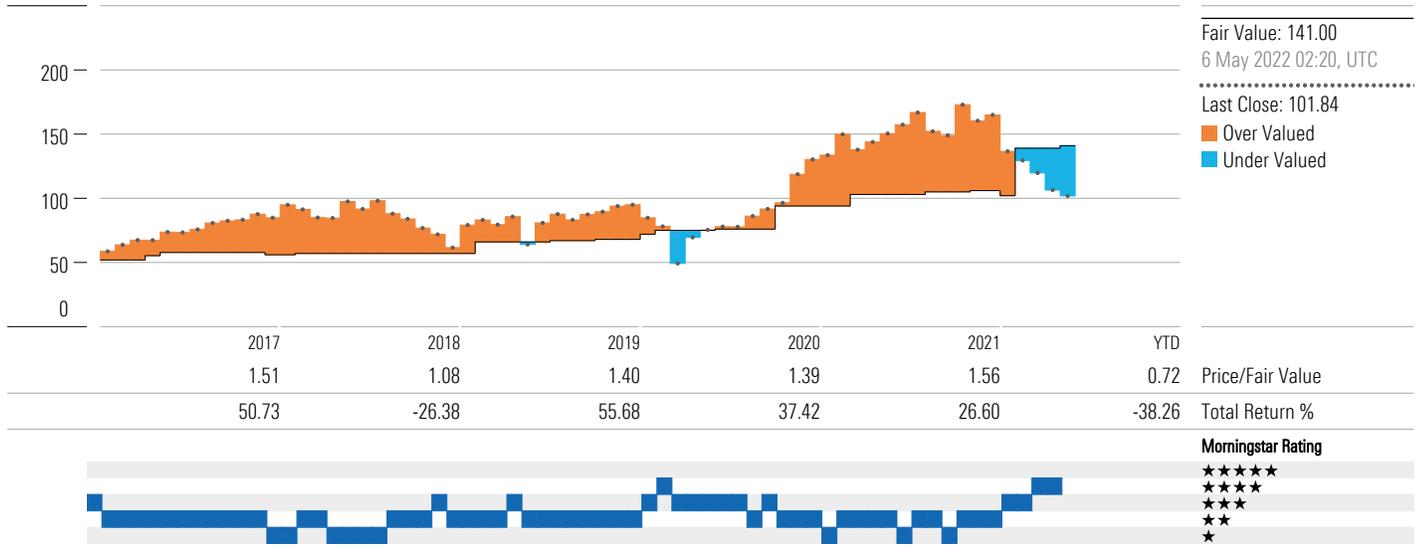
Lear Corp LEA



Total Return % as of 6 May 2022. Last Close as of 6 May 2022. Fair Value as of 3 May 2022 19:17, UTC.

Gentex Corp GNTX ★★★★★ 6 May 2022 21:23, UTC

Aptiv PLC APTV



Total Return % as of 6 May 2022. Last Close as of 6 May 2022. Fair Value as of 6 May 2022 02:20, UTC.

Gentex Corp GNTX ★★★★★

6 May 2022 21:23, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Moat Trend™	Uncertainty	Capital Allocation	ESG Risk Rating Assessment ¹
29.28 USD	36.00 USD	0.81	6.86 USD Bil	Narrow	Stable	High	Standard	4 May 2022 05:00, UTC
6 May 2022	3 Jan 2022 18:27, UTC		6 May 2022					

Morningstar Historical Summary

Financials as of 31 Mar 2022

Fiscal Year, ends 31 Dec	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	YTD	TTM
Revenue (USD Mil)	1,100	1,172	1,376	1,544	1,679	1,795	1,834	1,859	1,688	1,731	468	1,716
Revenue Growth %	7.4	6.6	17.4	12.2	8.8	6.9	2.2	1.4	-9.2	2.6	-3.2	-0.1
EBITDA (USD Mil)	290	368	476	539	600	623	610	593	504	509	128	478
EBITDA Margin %	26.3	31.4	34.6	34.9	35.8	34.7	33.3	31.9	29.9	29.4	27.3	27.8
Operating Income (USD Mil)	239	305	399	459	512	523	508	489	400	410	103	379
Operating Margin %	21.8	26.0	29.0	29.7	30.5	29.2	27.7	26.3	23.7	23.7	22.1	22.1
Net Income (USD Mil)	169	223	289	318	348	407	438	425	348	361	88	335
Net Margin %	15.3	19.0	21.0	20.6	20.7	22.7	23.9	22.6	20.3	20.5	18.4	19.2
Diluted Shares Outstanding (Mil)	288	289	294	296	291	288	270	253	244	237	233	234
Diluted Earnings Per Share (USD)	0.59	0.77	0.98	1.08	1.19	1.41	1.62	1.66	1.41	1.50	0.37	1.41
Dividends Per Share (USD)	0.26	0.28	0.31	0.34	0.36	0.39	0.33	0.46	0.48	0.60	0.12	0.60

Valuation as of 29 Apr 2022

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Recent Qtr	TTM
Price/Sales	2.5	4.3	3.9	3.2	3.5	3.5	3.0	4.0	5.2	4.5	4.0	4.0
Price/Earnings	16.1	24.6	18.2	15.8	16.4	16.6	12.1	17.5	27.8	20.2	19.5	20.8
Price/Cash Flow	10.5	15.5	16.4	12.4	13.6	13.0	10.2	13.8	18.5	19.1	19.0	19.1
Dividend Yield %	2.71	1.67	1.66	2.06	1.78	1.81	2.13	1.57	1.4	1.38	1.65	1.64
Price/Book	2.4	3.8	3.6	2.8	3.1	2.9	2.8	3.8	4.4	4.4	3.5	3.6
EV/EBITDA	7.7	13.2	10.8	8.0	8.6	8.3	7.9	11.5	15.6	15.3	0.0	0.0

Operating Performance / Profitability as of 31 Mar 2022

Fiscal Year, ends 31 Dec	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	YTD	TTM
ROA %	13.8	14.7	15.2	15.3	15.6	17.5	19.7	19.7	15.7	16.4	4.0	14.9
ROE %	15.7	18.2	19.9	19.3	19.1	20.5	22.4	22.1	17.6	18.2	4.5	17.0
ROIC %	15.7	14.9	16.8	16.8	17.2	20.1	22.4	22.1	17.6	18.2	4.5	17.0
Asset Turnover	0.9	0.8	0.7	0.7	0.8	0.8	0.8	0.9	0.8	0.8	0.2	0.8

Financial Leverage

Fiscal Year, ends 31 Dec	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Recent Qtr	TTM
Debt/Capital %	—	16.7	14.1	11.6	8.5	—	—	—	—	—	—	—
Equity/Assets %	88.6	75.3	77.7	80.2	82.7	87.1	89.3	89.4	89.4	90.9	88.5	—
Total Debt/EBITDA	—	0.7	0.6	0.4	0.3	0.1	—	—	—	—	—	—
EBITDA/Interest Expense	—	—	—	—	—	—	—	—	—	—	—	—

Morningstar Analyst Historical/Forecast Summary as of 22 Apr 2022

Financials	Estimates					Forward Valuation	Estimates					
	2020	2021	2022	2023	2024		2020	2021	2022	2023	2024	
Fiscal Year, ends 31 Dec												
Revenue (USD Mil)	1,688	1,731	1,912	2,245	2,492	Price/Sales	4.9	4.8	3.6	3.1	2.8	
Revenue Growth %	-9.2	2.6	10.4	17.5	11.0	Price/Earnings	24.1	23.2	17.6	13.2	10.7	
EBITDA (USD Mil)	504	509	539	696	821	Price/Cash Flow	20.0	28.1	18.1	14.6	12.2	
EBITDA Margin %	29.9	29.4	28.2	31.0	33.0	Dividend Yield %	1.41	1.38	1.71	1.84	1.98	
Operating Income (USD Mil)	400	410	434	584	697	Price/Book	—	—	—	—	—	
Operating Margin %	23.7	23.7	22.7	26.0	28.0	EV/EBITDA	15.5	15.4	12.0	9.3	7.9	
Net Income (USD Mil)	345	355	372	480	572							
Net Margin %	20.4	20.5	19.5	21.4	23.0							
Diluted Shares Outstanding (Mil)	244	237	225	216	208							
Diluted Earnings Per Share(USD)	1.41	1.50	1.66	2.22	2.74							
Dividends Per Share(USD)	0.48	0.48	0.50	0.54	0.58							

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, in-depth 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 short-term market-price movements), but we believe these negatives are mitigated by deep analysis and our long-term 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 single-point 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 es-

timate 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 mid-cycle 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 working capital 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.

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 Research Star Rating Methodology



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	★★★★★ Rating	★ Rating
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

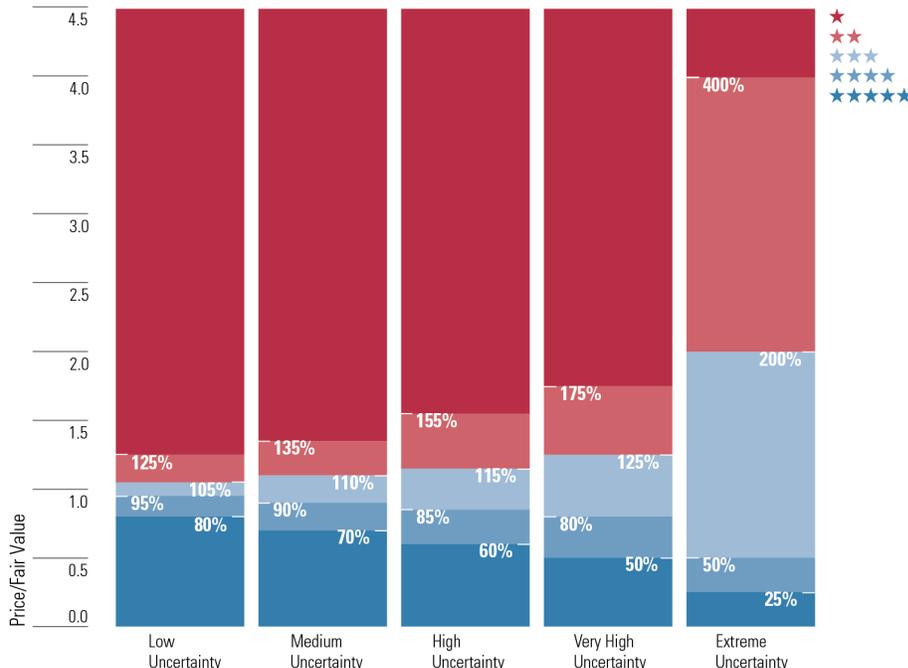
The market prices used in this analysis and noted in the report come from exchange on which the stock is listed which we believe is a reliable source.

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 recalculated at the market close on every day the market on which the stock is listed is open. Our analysts keep close

Morningstar Equity Research Star Rating Methodology



tabs on the companies they follow, and, based on thorough and ongoing analysis, raise or lower their fair value estimates as warranted.

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.

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