
THE DEVIL'S ADVOCATE REPORT

December 22, 2021

Wayfair Inc. (W)

(SELL)

Price:	\$206.00	Ticker:	W
52-Week Range:	\$183.74-\$369.00	Dividend:	Zero
Shares Outstanding:	124.0 million	Yield:	Zero
Market Capitalization:	\$25.5 billion		

Data As of December 22, 2021



*Exclusive Marketers of
The Devil's Advocate Report*

PCS Research Services
100 Wall Street, 20th Floor
New York, NY 10005
research@pcsresearchservices.com
(212) 233-0100
www.pcsresearchservices.com



Research Team

	Murray Stahl		Steven Bregman	
Rich Begun	Thérèse Byars	Ryan Casey	James Davolos	Peter Doyle
Matthew Houk	Utako Kojima	Eric Sites	Fredrik Tjernstrom	Steven Tuen

Horizon Kinetics LLC ("Horizon Kinetics") is the parent holding company to registered investment advisors Horizon Asset Management LLC, Kinetics Asset Management LLC and Kinetics Advisers LLC. PCS Research Services ("PCS") is the exclusive marketer and an authorized distributor of this and other research reports created by Horizon Kinetics. This report is based on information available to the public; no representation is made with regard to its accuracy or completeness. This document is neither an offer nor a solicitation to buy or sell securities. All expressions of opinion reflect judgment as of the date published and are subject to change. Horizon Kinetics, PCS and each of their respective employees and affiliates may have positions in securities of companies mentioned herein. All views expressed in this research report accurately reflect the research analysts' personal views about any and all of the subject matter, securities or issuers. No part of the research analysts' compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by the research analysts in the research report. Reproduction of this report is strictly prohibited. © Horizon Kinetics LLC® 2018.

THE DEVIL'S ADVOCATE REPORT

Investment Thesis

Wayfair Inc. has a \$26 billion market capitalization. The company has been in business for 19 years and generates revenues of around \$14 billion. Yet, it had not made meaningful progress towards profitability before 2020, when a pandemic-induced sales spike helped it reach profitability. While the sales growth and profitability seem to have been temporary, the rapid-growth valuation multiples Wayfair received have been more enduring.

Wayfair was originally recommended as a short at a price of \$82 on December 24, 2018, which, in retrospect, represented the exact trough of a fairly substantial stock market sell-off. Yet, after a brief rally, the shares traded below \$22 in mid-March 2020, which was in the height of the pandemic-related market panic. Subsequently, Wayfair got caught up in the stay-at-home, online-over-physical, pandemic-beneficiaries trade, which boosted the shares as high as \$369 just a year after reaching the aforementioned low—a 17x expansion.

Prior to 2020, some investors had shunned Wayfair because of its relatively narrow gross margin and lack of operating income. There were also concerns that Wayfair might never attain sufficient scale to reach profitability. Once the pandemic hit, though, Wayfair's brick-and-mortar furniture competitors had to close, at least temporarily, and many potential furniture buyers were not comfortable visiting physical furniture stores such as IKEA, even after they reopened, leaving them with no choice but to order furniture online. Wayfair also received a significant macro demographic benefit as people moved out of the cities and into the suburbs, which necessitated a significant increase in the demand for furniture.

Fundamentally, Wayfair appears to have gotten a one-time sales boost in 2020, which was large enough to allow it to turn profitable for the first time in history. Year-to-date in 2021, though, revenues are down slightly, compared to the same period last year, while earnings have declined by half. And the situation is deteriorating. In its most recent quarter, Wayfair reported a 19% year-over-year decline in revenues—a 27% reduction compared to the record quarter in mid-2020. After five consecutive profitable quarters, it reported a \$78 million loss in the third quarter of 2021. Yet, the stock valuation premium received in late-2020/early-2021 remains largely intact. Therefore, since the pandemic-boost seems to have been temporary, the 10-fold increase in share price over the past 21 months and the valuation of more than 100x next year's consensus earnings do not appear to be sustainable.

Based on the trailing twelve months, which include some of the best quarters in the history of the company, Wayfair earned only \$94 million of net income. As a result, it trades at a market value of 271x those earnings. In addition, adjusted EBITDA has declined 10% year-over-year year-to-date, including a 73% y-o-y decline in the most recent quarter. This is mainly because, while revenues declined 19% sequentially in the third quarter, Wayfair's

THE DEVIL'S ADVOCATE REPORT

selling and marketing expenses fell by just 10%, while its other operating expenses¹ actually increased 1%. This resulted in a substantial swing in operating margin from +3.8% to -2.2%. Thus, it appears that Wayfair can only grow revenues by spending ever-increasing amounts on these expense items (which was a prime factor in the original short-sale recommendation) which is why it has not reached a state of steady profitability. Therefore, there are no apparent economies of scale since, for example, operating expenses in the most recent quarter were almost identical (as a percentage of revenue) to the 2015 figure, even though revenues have increased more than 6-fold since then.

Part of the reason for the disappointing profit margins is that Wayfair operates in a highly competitive industry, with antagonists such as Walmart, Target, IKEA and Amazon, among many others, competing mainly on price. While brick and mortar furniture stores such as Restoration Hardware, Ethan Allen and Williams Sonoma realize considerably higher profit margins on higher-priced items, that is not realistic for Wayfair. Its average order is \$264, which means that the average item it sells is in the most price-competitive segment of the market. Few consumers are willing to spend thousands of dollars on sofas, dressers and kitchen tables without seeing them and touching them in real life, as compared to making a purchase based on just a few pictures on Wayfair's website.

Therefore, the higher-priced, higher-margin furniture segment is not so well-suited to the transition to online shopping. If that assessment can be accepted, the online furniture companies are, by definition, competing on price for the lower end of the market – the commoditized segment. In the past four years, Wayfair's average order value has increased a total of just 10%, barely keeping up with inflation, which is an indication that the company is not able to move up into the higher-margin product categories.

Wayfair's shares appreciated 10-fold from the March 2020 lows amid a pandemic-driven demand surge, but now, even though its expansion and profitability have ceased completely, Wayfair continues to trade at a rapid-growth valuation of 113x next year's consensus earnings. For a company experiencing a decline in revenue and almost a 50% YTD reduction in profits compared to last year, that valuation appears unsustainable. Wayfair's management has targeted an 8x increase in revenue by 2030, which equates to an annualized revenue expansion rate of more than 26%, but it appears that it will not expand at all in 2021.

Should that lack of growth continue for a few quarters, investors will most likely get impatient and revalue the company in line with slower-growing peers. If it were to trade in line with Overstock.com, (same consensus-projected 11% revenue growth and 22x next-year earnings – still expensive for a retailer) its shares would decline 78%. If valued like eBay (marginal revenue growth next year, and 14x earnings), the shares would trade down more than 80%. Consequently, shares of Wayfair are recommended for sale or short sale.

¹ Selling, Operations, Technology, General and Administrative expenses

THE DEVIL'S ADVOCATE REPORT

Company Overview

Wayfair Inc. is headquartered in Boston, Massachusetts and was founded in 2002. Its co-founders, Steve Conine and Niraj Shah, carefully analyzed Internet search patterns and results, and recognized a market opportunity to sell stereo racks and stands online. Since that time, the business has evolved into a large e-commerce site with over 22 million products from over 16,000 suppliers. Wayfair has had approximately 30 million active customers in the past year. Its customer service locations are staffed with approximately 4,100 sales and service employees located in the U.S. and Europe, or almost 20% of its total number of employees.

From 2002 through 2011, the company was bootstrapped by its co-founders and operated as hundreds of niche websites, such as bedroomfurniture.com and allbarstools.com. In 2006, it launched the brand AllModern and in 2011, Wayfair made the strategic decision to close and permanently redirect over 240 of its niche websites into Wayfair.com to create a one-stop shop for furniture, home furnishings, and interior décor and goods, and to focus on building brand awareness for the main site rather than hundreds of smaller ones. By the following year, Wayfair had exceeded \$600 million in annual revenue and was in the process of becoming a household name offering millions of products across a wide array of styles and price points. Because of its online strategy, Wayfair has a large range of inventory and strives to “have something for everyone,” with its range of brands from the lower-end flagship Wayfair brand to the higher-end Perigold brand. While it did not transpire until the pandemic struck, Wayfair’s increased scale allowed the company to turn profitable for the first time.

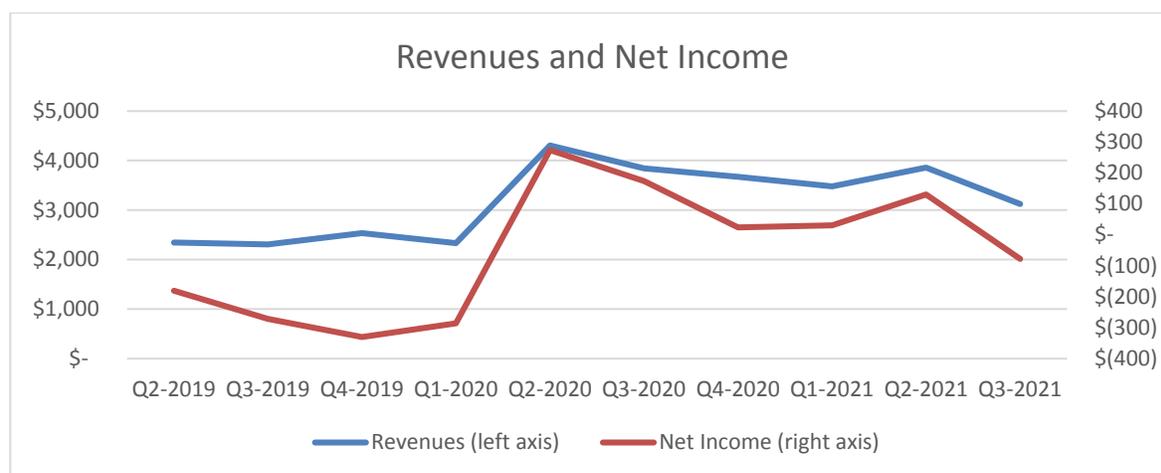
The company has two classes of stock, the Class B shares have ten votes each, and the publicly traded Class A shares have one vote per share. The Class B shares are held primarily by the co-founders and their affiliates. As of October 29th, there were 78.0 million Class A shares outstanding and 26.6 million Class B shares. Therefore, the co-founders and their affiliates own approximately 25% of the economic interest and 77% of the voting power. Niraj Shah is still CEO and Co-Chairman, while Steve Conine is Co-Chairman.

To a degree, consumer buying habits might have shifted as a result of the pandemic, since consumers who had not previously ordered furniture online now had little choice but to do so, since physical furniture stores were closed or consumers were not comfortable shopping in-person. Yet, while some consumers made larger purchases online, sight unseen, than they used to, this was not the norm. Rather, Wayfair’s average order value declined 11% in its most profitable quarter (the second quarter of 2020) to \$227, from \$255 in the same period in 2019. On the other hand, consumers placed twice as many orders, at 18.9 million, compared to the 9.2 million orders placed in the second quarter of 2019. Since then, the average order value has increased again, and surpassed the earlier highs, at \$283 in the most

THE DEVIL'S ADVOCATE REPORT

recent quarter, while the number of orders has subsided to 11.0 million, or less than 20% higher than the pre-pandemic second quarter of 2019.

As mentioned, Wayfair's revenue growth spiked in the second quarter of 2020, but has since moderated, resulting in the return to negative profit margins:



(In millions)

Approximately 30% of Wayfair's items are large and must be delivered by a two-man home delivery service, as opposed to the 70% of its business that can go with the parcel carriers (with an average weight of 30 pounds and 3 cubic feet). Because of the bulky merchandise, Wayfair has invested considerably in its logistics network. This network is comprised of CastleGate and the Wayfair Delivery Network (WDN). The CastleGate facilities enable suppliers to forward-position their inventory in Wayfair's warehouses, allowing the company to offer faster delivery. Through WDN, Wayfair can directly manage large parcel deliveries via consolidation centers, cross docks and last mile delivery facilities, which, alongside CastleGate, enable it to speed up deliveries, reduce damage and decrease its reliance on third parties. While Wayfair has invested substantial sums in logistics and distribution, it is questionable how much a customer values a potential 1-2 day quicker delivery time for a long-lasting item such as furniture, vis-à-vis getting a better price.

Wayfair has noted that transportation costs account for approximately 20% of revenue (i.e., transporting a product from country of origin – primarily China – to the customer). Thus, freight capacity from China is a substantial expense. As well, this may be subject to tariffs as well as increasing shipping rates, which is currently a problem given the well-publicized logistics/supply-chain issues between China and the US. To what extent these issues will have an impact on Wayfair's profitability remains to be seen, since the company does not import anything directly. Thus, it will be up to its suppliers to determine how they want to handle the transportation costs—pass it through to the consumer, pass some of it through, or

THE DEVIL'S ADVOCATE REPORT

absorb it all. Whatever the supplier decides, the prices Wayfair charges will be altered accordingly.

Of course, to the extent that the products it sells become more expensive, presumably the law of supply and demand would indicate that Wayfair would sell less furniture. Alternatively, should the price to the consumer remain the same but suppliers increase their prices, Wayfair's gross profit would decline. The company has noted that it is slowly passing on the rising costs of supply chain and logistics woes to its customers, and that so far customers seem to be absorbing slight price hikes without any major downside reactions. Nevertheless, given the decline in revenues in the third quarter, it is possible that this might be changing.

Wayfair has five distinct brands, which the company describes as follows:

- Wayfair - an online destination for all things home
- Joss & Main - where beautiful furniture and finds meet irresistible savings
- AllModern - your home for affordable modern design
- Birch Lane - a collection of classic furnishings and timeless home décor
- Perigold - unparalleled access to the finest home décor and furnishing

The Wayfair brand represents a significant majority of the company's revenue and is the only one of its sites that also operates internationally, as Wayfair.ca in Canada, Wayfair.co.uk in the United Kingdom and Wayfair.de in Germany. In fact, Canada represents approximately 60% of Wayfair's international sales, and has a penetration rate similar to that of the US. International revenues account for about 16% of the company's total, and these operations have been consistently unprofitable:

	Q1-3 2018	Q1-3-2019	Q1-3-2020	Q1-3-2021
US Sales	\$4,086,173	\$5,624,870	\$8,901,559	\$8,513,807
International Sales	\$678,997	\$968,697	\$1,572,746	\$1,942,420
Total	\$4,765,170	\$6,593,567	\$10,474,305	\$10,456,227
US Adjusted EBITDA	\$(26,774)	\$(91,002)	\$766,486	\$716,887
Int'l Adjusted EBITDA	\$(134,400)	\$(225,383)	\$(82,838)	\$(99,229)
Total	\$(161,174)	\$(316,385)	\$683,648	\$617,658
Net Loss	\$(360,235)	\$(337,977)	\$161,178	\$70,641
US EBITDA Margin	-0.7%	-1.6%	8.6%	8.4%
Int'l EBITDA Margin	-19.8%	-23.3%	-5.3%	-5.1%

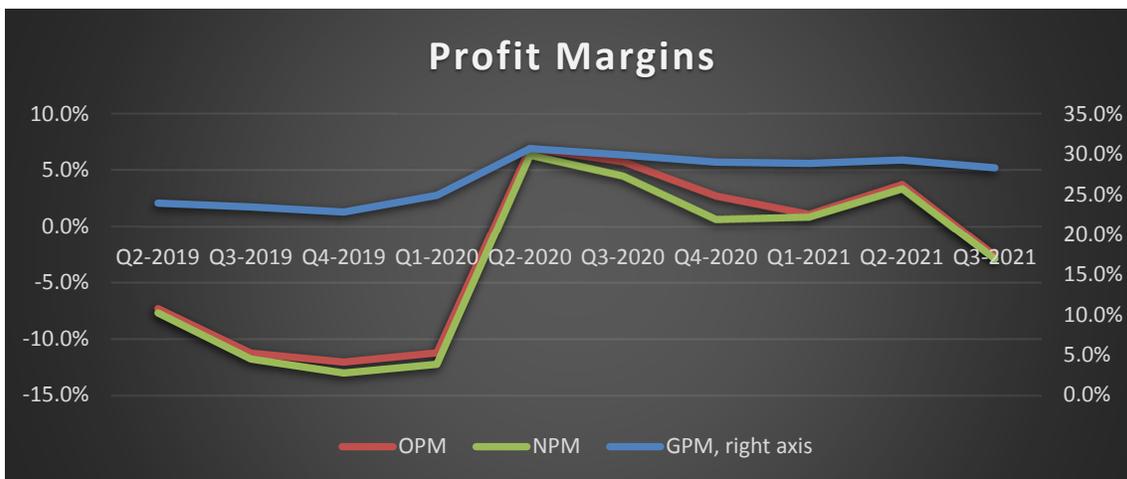
(In thousands)

In the third quarter of 2021, both adjusted EBITDA margins deteriorated further: to 6.4% for the US segment, and -12.6% for the international segment.

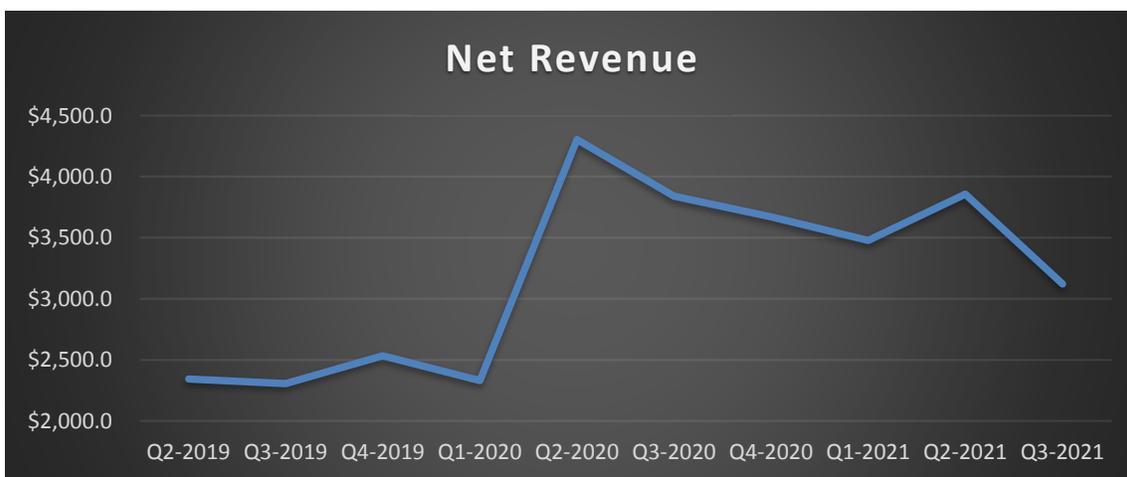
THE DEVIL'S ADVOCATE REPORT

Financial Performance & Outlook

The chart below outlines Wayfair's profit margins over the past 10 quarters:



Its gross margin, operating margin and net profit margin all peaked in the second quarter of 2020, which was the result of an 84% sequential increase in revenue, since much of the competition was shut down as a result of the government's response to the pandemic. Since that time, the quarterly revenues have declined more than 27%:



(In millions)

Thus, the fluctuations in revenue appear to be driving the changes in profit margins. For example, in the second quarter of 2020, cost of goods sold as well as operating expenses each improved by around 7% (as a percentage of revenue) compared to the same period in

THE DEVIL'S ADVOCATE REPORT

2019, which was sufficient to flip the operating margin from -7% to +7%. This was partly because of Wayfair's increased pricing power, given that its competition was greatly reduced, and partly because the 84% sequential spike in revenue occurred so fast that the increases in items such as R&D and SG&A did not keep up with the now much greater scale of the operations. Obviously, it takes a certain amount of time to make the management determination to hire more workers or fund a greater level of R&D, then additional time to interview and qualify new employees, even if additional office space does not have to be secured.

Since the second quarter of 2020, gross margin has narrowed 2.4% while operating expenses, as a percentage of revenue, have deteriorated 6.8%. In fact, operating expenses, at 30.5% of revenues in the most recent quarter, have almost returned to the level of the second quarter of 2019 (31.2%). Since revenues are still 33% higher over this nine-quarter period, this is yet another indication that there is no meaningful economies-of-scale effect.

Longer-term, Wayfair's management has provided the following table, outlining recent performance and future targets:

	2020	2021YTD	Long-Term Target
Net Revenue	100%	100%	100%
Gross Margin	29.1%	28.8%	25-27%
Customer Service & Merchant Fees	7.5%	6.4%	4.0%
Advertising	20.8%	15.2%	6-8%
Selling, Operations, Technology, General & Admin.	12.9%	13.7%	5-7%
Total Operating Expenses	26.5%	27.7%	15-19%
Adjusted EBITDA	6.7%	5.9%	8-10%

Assuming this all comes to pass, despite most of these financial measures moving in the wrong direction recently, a 26% gross margin and operating expenses at 17% of revenues, using the mid-points, would result in an operating margin of 9%. Deducting interest expense from that 9% operating margin (about one-third of one percent of total revenues, perhaps more, if additional debt financing will become necessary) and taxes (using a 25% average tax rate), then the company's long-term targets, if achieved, would equate to approximately a 6.5% net profit margin.

However, the company is far from that level, with a net profit margin of 1.3% in the record-breaking year 2020 and just 0.7% in the still strong 2021 (YTD). The main problem, relative to the long-term target, is the operating expenses, which, at 27.7%, are running more than 10% above the mid-point of the target range. As indicated above, there does not appear to be any meaningful scale economies benefit on this measure, since it has been largely unchanged since 2015, despite a more than 6-fold increase in revenues.

THE DEVIL'S ADVOCATE REPORT

Wayfair has cited gains in logistics efficiencies and economies of scale as the key drivers to support a gross margin boost, while over time the company expects to also be able to drive down advertising/sales and marketing costs as a percentage of overall revenue. To date, there is no progress in that regard, as advertising expenses, as a percentage of revenue, are higher in 2021 (YTD) than in any year from 2013 to 2018. Similarly, selling, operations, technology, general and administrative expenses, at 14% of revenue YTD, are higher than in the years 2013, 2015, 2017 and 2020.

Even though Wayfair's operating expenses have never accounted for less than 26% of revenue, relative to its long-term target of 17%, even if it somehow manages to reach the target, and achieve a 6.5% net profit margin, that would result in \$1.0 billion in earnings based on the consensus revenue estimate of \$15.5 billion for 2022. Thus, the company is already valued at 24x this long-term target figure, which, if judgment must be made, would be the most optimistic of expectations. Given the YTD net profit margin of a 0.7%, it is difficult to reasonably imagine the basis for a 10-fold widening of the net profit margin to 6.5%. It should be noted that, while Wayfair did record a 6.4% net profit margin in the record-breaking second quarter of 2020, this was accomplished with a provision for income taxes of just 0.1% due to tax-loss carryforwards.

Competition

The market for online home goods and furniture is highly competitive and Wayfair is attempting to take market share from traditional furniture companies by offering better prices, a better online experience and deeper selection. Of course, the traditional furniture companies, such as Restoration Hardware, La-Z-Boy, IKEA and Bob's Discount Furniture, are improving their websites, too, attempting to sell more via the Internet. As well, Wayfair is also competing not only against other dedicated online retailers, including the likes of Amazon.com (AMZN) and Overstock.com, but also larger brick-and-mortar retailers such as Target and Walmart, which have become increasingly competitive in the online realm. Further competition includes other big box retailers, department stores, specialty retailers and online retailers and marketplaces in the U.S., Canada, the United Kingdom and Germany. Examples of competitors from various categories are provided below:

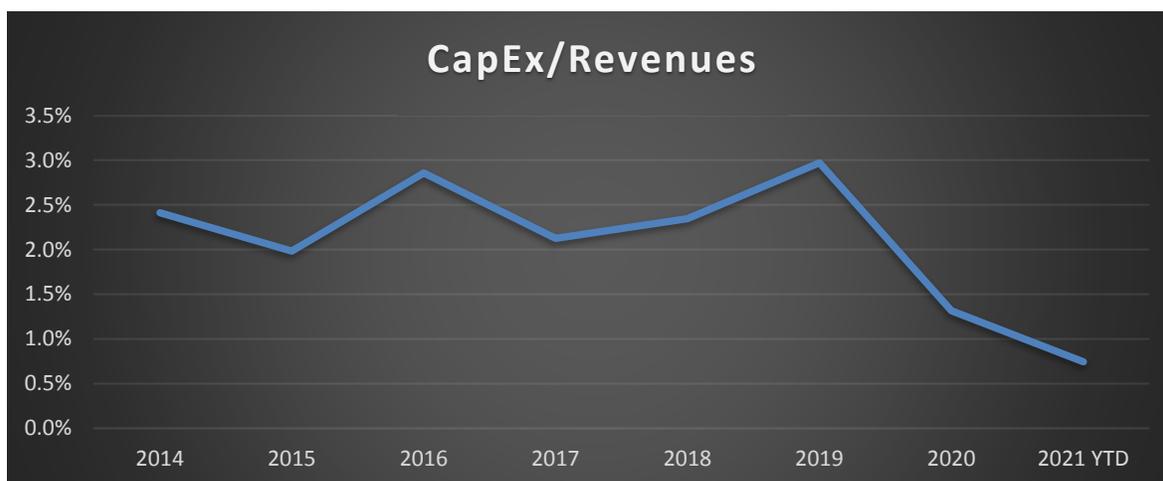
- **Furniture Stores:** Ashley Furniture, Bob's Discount Furniture, Havertys, Raymour & Flanigan, Rooms To Go;
- **Big Box Retailers:** Bed Bath & Beyond, Home Depot, IKEA, Lowe's, Target and Walmart;
- **Department Stores:** JCPenney and Macy's

THE DEVIL'S ADVOCATE REPORT

- **Specialty Retailers:** Crate and Barrel, Ethan Allen, TJX, At Home, Williams Sonoma, Restoration Hardware, Arhaus, Horchow, Room & Board, Mitchell Gold + Bob Williams;
- **Online Retailers and Marketplaces:** Amazon, Overstock.com, Houzz and eBay; and
- **International:** Leon's, Canadian Tire, John Lewis, Argos, Otto and Home24

While many factors influence a potential customer, such as selection, visually inspiring browsing, compelling merchandising, ease of product discovery, convenience, reliability, speed of fulfillment and customer service, the most important factor to customers is most likely price – particularly in the price range in which Wayfair mainly competes: an average order size of \$264 YTD.

To keep up with these competitors and possibly lure some brick-and-mortar customers to shop online instead, Wayfair must invest significant amounts in research and development. Other web-based companies do. Also, larger retailers, such as Amazon, Walmart, and Target, continue to build out large-parcel distribution centers, which puts them in a better position to compete with Wayfair. Or, alternatively, Wayfair would have to increase its capital expenditures to mitigate the situation. However, this has not been the case, so far, since capital expenditures have declined to just 0.7% of revenues year-to-date, from 3.0% as recently as 2019:



Even in absolute terms, the amount spent on capital expenditures year-to-date is just 42% of what it spent in the same period two years ago, and is approximately on par with the 2016-2017 amounts.

Wayfair does not disclose amounts invested in R&D, but, rather, includes it in the Selling, Operations, Technology, General and Administrative (SOTG&A) line on its income statement. How much of the total is earmarked for Technology is unknown, but the entire

THE DEVIL'S ADVOCATE REPORT

expense line accounted for 15.9% of revenues in the most recent quarter, which was an increase from 11.5% in the year-ago quarter and 13.9% on average from 2013-2015. Hence, this operating expense item has not moderated as a percentage of revenues, even with 15-fold revenue growth over the past 8 years.

The Move to Online

In theory, Wayfair should be able to convince a substantial proportion of consumers that buying furniture online is easier and the selection considerably greater compared to what they might find in a brick-and-mortar furniture store, and that the prices are generally lower as well. With around \$14 billion in revenues and approximately 29 million customers, Wayfair is clearly proof of the popularity of online furniture shopping.

Wayfair estimates that the brick-and-mortar market will expand very slowly over the next decade, since essentially all of the overall growth in the furniture shopping industry should be captured by the online providers. By 2030, the total addressable market should have expanded to \$1.2 trillion, from \$840 billion in 2020, according to Wayfair, which is an improvement of \$360 billion. While this represents only a 3.6% annualized growth rate, Wayfair's management believes that the company can capture a large (28%) share of this incremental \$360 billion, since they expect Wayfair to expand its revenues 8-fold in this time period, which would result in 2030 revenues of more than \$113 billion. That is, of the expected \$360 billion increase in its total addressable online furniture sales market, Wayfair estimates that it will capture almost \$100 billion of that amount. Given the breadth and capabilities of its competition, this appears highly unlikely.

Strong, well-funded competitors such as Walmart, IKEA, Target, Amazon and will also be attracted to this trend, and existing (primarily) brick-and-mortar retailers are unlikely to stand idly by while all their sales migrate online. To believe that Wayfair will capture 28% of all the sales moving online, which would be necessary to meet its goals, while all of its competitors will fight over the remaining 72%, seems optimistic to say the least. Particularly since brand loyalty is miniscule and Wayfair is not well reviewed, and consumers appear to be shopping mainly for the best deals. Perhaps for those reasons, rather than expanding its revenues by 26% per year, which is necessary over the next nine years to reach \$112 billion in revenue in 2030, the actual revenue growth rate year-to-date is negative compared to the same period last year.

Furthermore, Wayfair is not competing in all market segments, but mainly in the "affordable" segment, in which pricing is even more competitive. A significant percentage of potential buyers need to touch and feel furniture before making a purchase, which is why the average unit sale indicates that accessories and inexpensive items (such as kids'

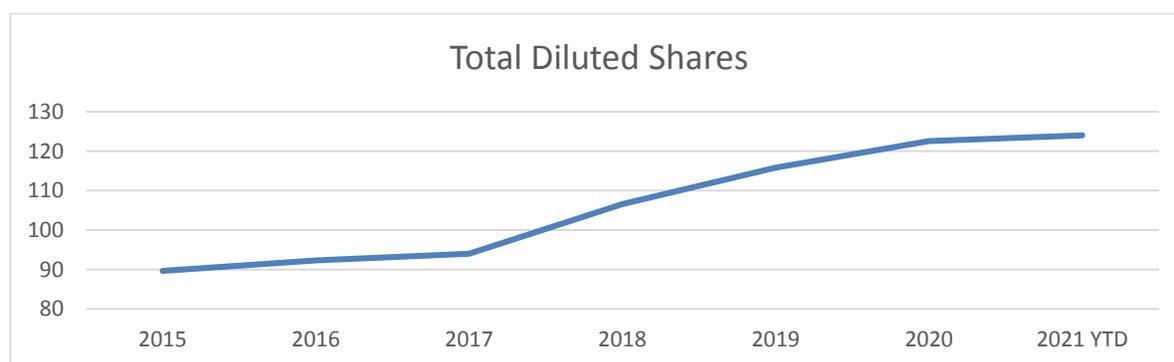
THE DEVIL'S ADVOCATE REPORT

furniture) account for most of Wayfair's orders. With an average order value of approximately \$264², the company competes in the most cost-competitive segment of the market and several vendors can compete on price with Wayfair and have the requisite budget for substantive ad campaigns. Some vendors, such as Overstock.com, are specifically focused on this low-end market segment and 100% focused on the online channel.

Consumers desirous of higher-end products might readily go to West Elm, Ethan Allen, Restoration Hardware, or even other online outlets such as Etsy.com (ETSY) or 1stdibs.com (private company), which represent the higher-end segment of the furniture market in which Wayfair does not compete. Therefore, the speed at which the higher end of the furniture/furniture goods market will move online, and whether this segment will move online at all, remains to be seen. If it does not move online, then the projections of a \$1.2 trillion addressable market in 2030 is doubtful.

The Dilutive Effects of Increasing Share Count

Wayfair came public in October 2014, and on December 31st of that year it had a fully diluted share count of approximately 88 million. Since then, this measure has expanded 41% to 124 million. That amounts to a 5.0% annualized dilution of earnings per share, all else equal.



(In millions)

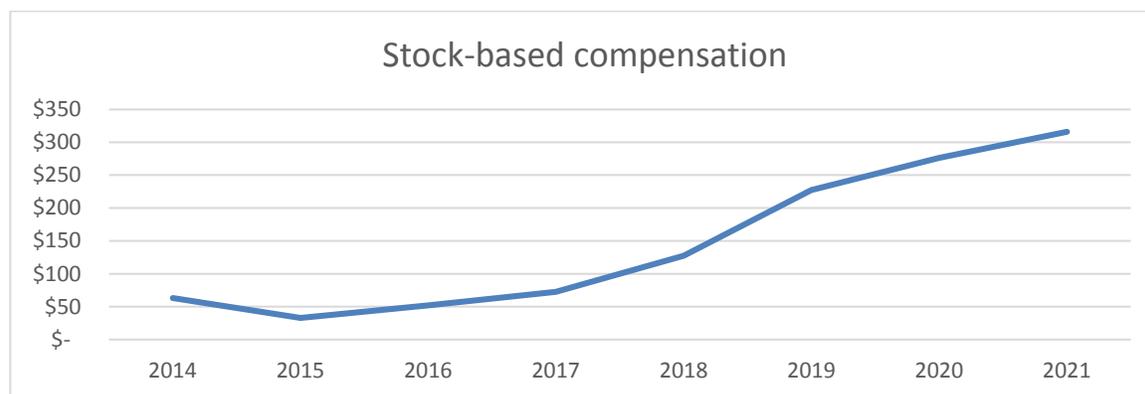
The chart above includes all so-called anti-dilutive securities. For example, Wayfair had 20.0 million shares that were excluded from its diluted share count as of September 30, 2021 simply because the company recorded a GAAP loss. Therefore, including these securities would have resulted in a lower per-share loss and, therefore, the shares were considered anti-dilutive and excluded from the share count. However, when the company returns to profitability, it would have to include these shares in its dilutive share count. Three-quarters

² YTD average

THE DEVIL'S ADVOCATE REPORT

of these shares are related to its convertible debt³ with the remainder being unvested restricted stock units.

The amount of stock-based compensation has increased steadily since 2015:



(In millions)

Stock-based compensation has increased 20% YTD even though revenues, net profitability and free cash flow have diminished. Since 2015, the stock-based compensation as a percentage of revenue has increased steadily from 1.5% to 2.3% YTD.

The Cost of Acquiring Customers

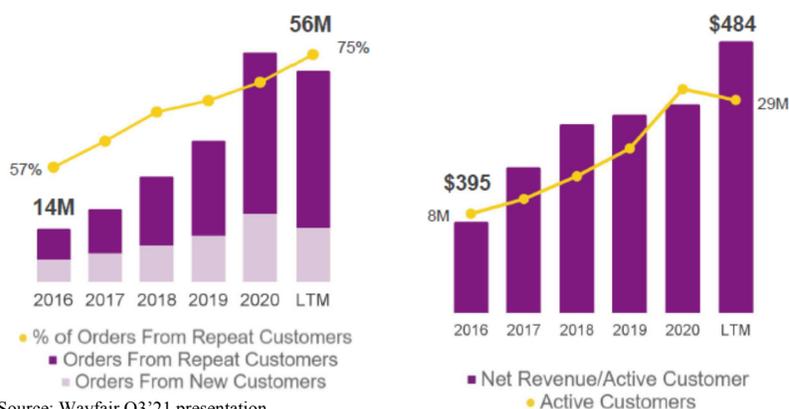
Wayfair pays substantial customer acquisition expenses (advertising and marketing) to find new customers who make infrequent purchases (the average customer places 1.9 orders per year) in a highly competitive market. A substantial part of the advertising expenses is actually used to induce existing customers to return, rather than just attracting new ones. Wayfair needs to re-acquire customers, which is to say consumers are not loyal but shop around for the best deals. Only around 9% of Wayfair's traffic comes from consumers searching for the brand, according to L2 Inc.⁴ By contrast, Restoration Hardware (RH) and Williams-Sonoma (WSM) get 60% to 70% of their traffic from brand-modified searches.

For Wayfair, repeat customers represented 75% of total orders in the third quarter of 2021, which was an increase from 57% in 2016. Of course, since Wayfair's active customer base has increased from 8.2 million in 2016 to 29.2 million now, the increase in repeat orders from existing customers is logical. As well, revenue per active customer has increased year-to-date, even though the number of active customers has declined slightly:

³ With the vast majority having a conversion price well below the current share price

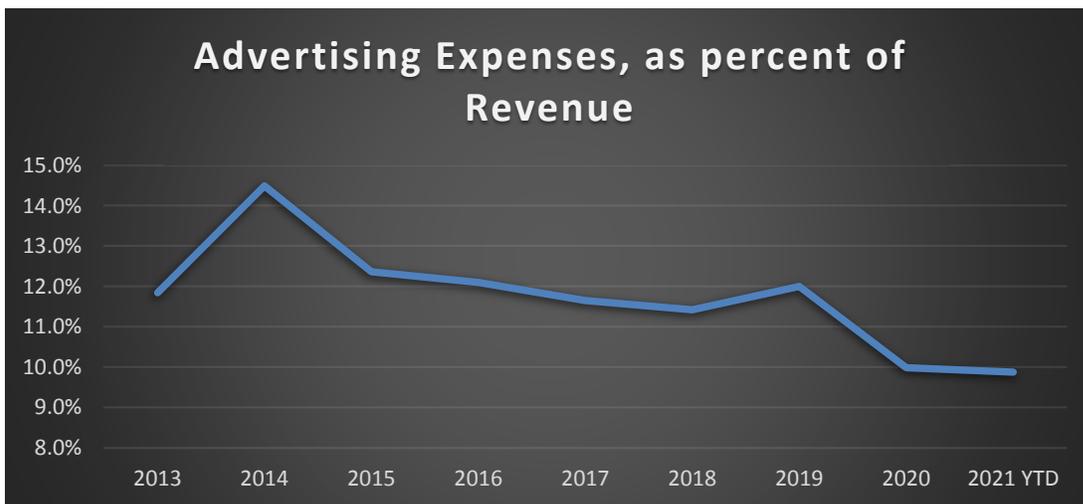
⁴ L2 is a research and business intelligence firm

THE DEVIL'S ADVOCATE REPORT



Over the past five years, the average customer has increased the amount spent at Wayfair from \$395 to \$484, which represents a 4.1% annualized increase, which is perhaps mostly a measure of inflation.

While it could be reasonable to expect the advertising spend as a percentage of revenue to decline when revenues are expanding significantly, that has only happened to a limited degree over the past 8 years:

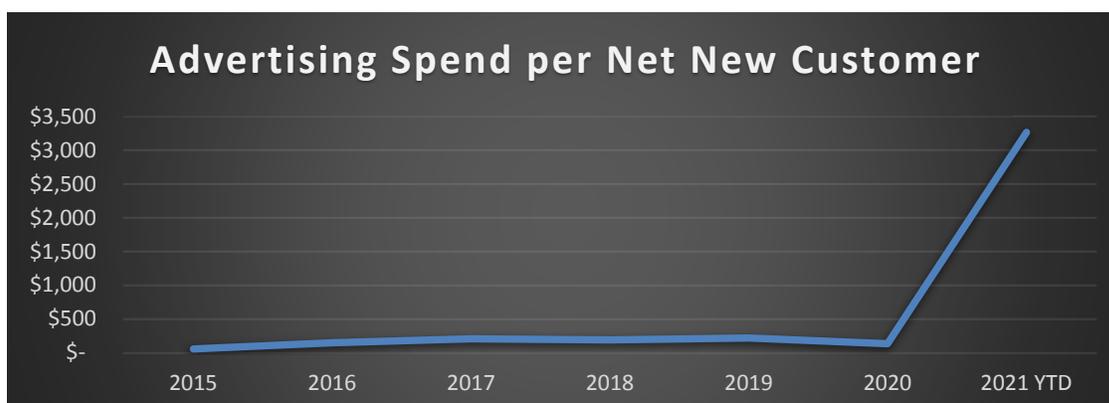


There has only been a slight decline—from 11.8% to 10.0%—even though revenues have expanded 15-fold since 2013. Alternatively, one could expect revenue growth to be even higher given the substantial amounts of advertising spending.

In the third quarter of 2021, the company had 29.21 million active customers, which were just 430,000 more than a year ago. Thus, since the company spent \$1.4 billion on advertising

THE DEVIL'S ADVOCATE REPORT

in the past year, each new net customer has cost \$3,273. That was an enormous spike compared to the \$220 average per net new customer recorded in the 2017-2019 period:



Viewed alternatively, despite spending \$1.4 billion on advertising, the number of active customers was largely unchanged (up just 1.5%), which indicates that the advertising expenses are required just to retain its customer base and are, therefore, unlikely to recede meaningfully.

Perhaps counterintuitively, Wayfair, the online furniture store, has much worse profit margins than its mainly brick-and-mortar competitors:

Company	Symbol	Gross Margin	Operating Margin	Net Margin
Restoration Hardware	RH	50.2%	27.1%	18.3%
Williams Sonoma	WSM	43.7%	16.1%	12.2%
Ethan Allen	ETD	59.9%	15.1%	11.1%
Wayfair	W	28.3%	-2.2%	-2.5%

(Margins represent the most recent quarter)

This comparison highlights that Wayfair's 28% gross margin is not sufficient to ship furniture, deal with complaints and returns, and buy advertisements. Gross margins for the (primarily) brick-and-mortar retail furniture companies in the table above average over 50%, and that is enough for an average 14% net profit margin. That indicates that Wayfair would need a considerable improvement, mainly in gross margin, in order to reach the profitability levels of these competitors. Yet, these competitors, despite double-digit revenue growth this year, trade at a forward P/E of less than 13x.

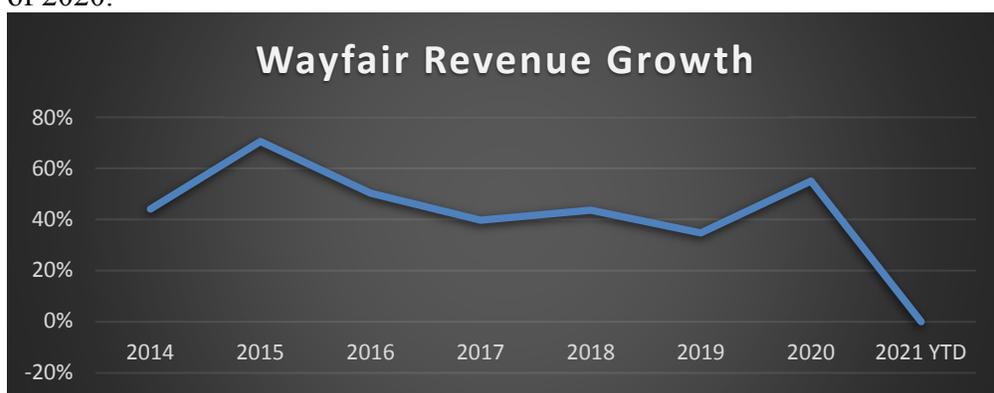
Valuation

Wayfair is superficially difficult to value because it is not currently profitable on a GAAP-basis. It has been in business for 19 years, so it can hardly be considered a start-up. Rather,

THE DEVIL'S ADVOCATE REPORT

it has matured, and expanded revenues 15-fold over the past 8 years. Yet, except for the five quarters immediately following the onset of the pandemic, the company has never been profitable; and as of the most recently reported quarter, it has returned to generating losses. The uncertainty of future profitability is reflected by the fact that 26 Wall Street analysts, on average, estimate that the company will generate 2022 EPS of \$1.82, but the range is incredibly wide, from a negative \$2.03 to a positive \$4.89. However, while it is often said that Wall Street hates uncertainty, that sentiment is not reflected in Wayfair's valuation of more than 100x the consensus 2022 consensus EPS estimate.

Wayfair is clearly experiencing a normalization in its growth rates after the exogenous event of 2020:



With an enterprise value of around \$26 billion, Wayfair trades at 27.5x last year's adjusted EBITDA, 31.5x annualized YTD adjusted EBITDA and 64.3x the most recent quarter's (annualized) adjusted EBITDA. Since the company did not generate positive adjusted EBITDA prior to 2020, historical comparisons are not possible, but on an absolute basis, 31-62x EBITDA for a company that has negative revenue- and EBITDA growth appears excessive (unless future profits are implicitly anticipated through the scale benefits of continued expansion, yet Wayfair has decidedly shown no margin expansion at all, despite now operating at 15x the revenue base that it did 8 years ago.)

Usually, when fast-growing companies exit their rapid-growth phase, their valuation multiples collapse. Visibility on Wayfair's future expansion potential is limited, but it appears that the stock market has given the company the benefit of the doubt. Wall Street's 2022 revenue projections indicate a growth rate range of -2% to +25%, with an average of 12%. Still, that average could be compared to the actual 48% CAGR generated between 2013 and 2020. That rate of expansion was relatively even, as the chart above indicates, with the lowest year-over-year growth being 35%. Thus, the consensus revenue improvement in 2022, if it comes to fruition, would be approximately one-third of the previous low, or one-quarter of the average in the 2013-2020 period.

THE DEVIL'S ADVOCATE REPORT

Between 2013 and 2018, the company traded at 1.2x revenues, on average, even though its growth rates were much higher in that period. Currently, it trades at 1.8x the consensus 2021 revenue forecast. A normalization to 1.2x would indicate a share price of \$133.

Compared to Online Companies

Other fast-growing online retailing companies trade at considerably greater EV/Sales multiples than Wayfair:

Company	Symbol	Price	EV/Sales	2021 P/E	EV/EVITDA	Rev. Gr.	Market Cap.
eBay	EBAY	\$67.00	4.5x	16.9x	13.5x	1.46%	\$42.0B
Etsy, Inc.	ETSY	\$225.00	13.1x	74.0x	79.1x	32.95%	\$28.6B
Pinterest	PINS	\$37.00	8.1x	33.6x	37.6x	51.48%	\$22.6B
			8.6x	41.5x	46.3x	28.6%	
Wayfair	W	\$206.00	1.9x	78.1x	44.3x	-2.49%	\$25.6B

(Revenue growth represents consensus 2021 over 2020. EBITDA based on unadjusted TTM EBITDA.)

Since Wayfair is the largest online-only furniture seller, there are no suitable comparisons in this niche. Etsy and Pinterest are similar, but their 2021 growth rates are at a completely different (positive) level than Wayfair, and they are profitable, as well. Their operating margins were 15.7% and 15.6%, respectively, in the third quarter of 2021, compared to a negative -2.2% for Wayfair, which is what justifies their much higher EV/Sales ratios. Still, on a P/E-basis, Wayfair trades higher, despite the fact that its revenue is projected to contract in 2021, compared to +33% and +51% for Etsy and Pinterest, respectively⁵.

Alternatively, Overstock.com, which sells many products but focuses on online furniture sales, is solidly profitable and has expanded its revenues at a 13% CAGR over the past four years, is trading at considerably lower multiples than Wayfair:

Company	Symbol	Price	EV/Sales	2022 P/E	EV/EVITDA	Rev. Growth	Market Cap.
Wayfair	W	\$206.00	1.9x	98.6x	44.5x	-2.49%	\$25.6B
Overstock	OSTK	\$63.30	0.9x	21.7x	34.9x	10.98%	\$2.9B

(Revenue growth represents consensus 2021 over 2020. EBITDA based on unadjusted TTM EBITDA.)

Overstock is projected to expand its revenues by 11.3% in 2022, a measure that is almost identical to Wayfair's consensus forecast, although the variability among analysts is considerably lower, with a range of \$3.08 billion to \$3.25 billion. As such, Overstock's growth in 2022 seems universally agreed upon by Wall Street analysts, as opposed to

⁵ Based on Wall Street's consensus forecasts

THE DEVIL'S ADVOCATE REPORT

absence of agreement on Wayfair. Still, Wayfair has the higher valuation by a wide margin. At Overstock's P/E valuation, Wayfair's shares would trade at \$48.

Given the financial performance year to date, perhaps a more proper comparison is eBay, which is projected to expand revenues just 1.4% this year and 5.6% next year, as compared to expected -2.5% and +12.4% for Wayfair. Unlike eBay, though, Wayfair is expected to report considerably lower earnings in 2022—\$1.82 per share, or a decline of 31% compared to 2021. eBay is projected to expand its EPS by 13.6% in 2022. Even so, eBay trades at 14x its consensus 2022 EPS while Wayfair trades at more than 100x its 2022 EPS forecast. Clearly, the market is considerably more optimistic about Wayfair's prospects than eBay's.

Even if Wayfair were to reach its \$112 billion revenue target for 2030 but trades at a then-P/E multiple identical to eBay's current P/E, an investment in Wayfair might not necessarily provide a positive return. That is because, at Wayfair's current valuation, should it be valued at 14x 2030 earnings, those earnings would have to be \$1.8 billion in order to provide a positive 9-year return. Thus, in 2030, after having successfully expanded revenues by more than 26% per year for nine years, Wayfair needs to generate a net profit margin of around 1.6%. Assuming that its share count continues to increase, simply because of stock-based compensation, which is currently running at 2.3% of revenue, then it would issue another 11 million shares and reach a share count of 135 million in 2030. In such a case, it would need a net profit margin of around 2.0%. Even Amazon.com, if its AWS data center segment is excluded, does not generate a 1.5% net profit margin. It actually generated a negative operating margin in its most recent quarter, on that basis. Thus, even if Wayfair somehow can meet its enormous 8x revenue increase target by 2030, shareholders might not necessarily be rewarded.

Perhaps more realistically, if Wayfair only manages to expand its revenues by an average of 15% per year for the next five years and achieves a 2% operating margin and an ending P/E of 20x, it would be worth just \$7.8 billion (20x \$392 million of net earnings), or less than one-third of the current valuation.

Investment Summary

Wayfair's sales growth spiked in 2020, mainly because of the pandemic, which resulted in the temporary shutdown of physical furniture stores and made consumers more at ease with ordering furniture online rather than subjecting themselves to a potentially crowded, in-person, shopping experience at these brick-and-mortar stores, once they reopened. The 84% sequential sales growth in the second quarter of 2020 allowed the company to record its first-ever quarter of GAAP profitability (at least as a public company). However, that quarter also

THE DEVIL'S ADVOCATE REPORT

represented a peak, since its sales have declined steadily, with the recently reported third quarter of 2021 showing a 27% reduction from the peak.

This is partly a result of the receding pandemic, which means brick and mortar competitors are open and consumers are no longer as hesitant to visit the stores. There is also the law of the large numbers, since it is simply more difficult to expand a \$14 billion revenue line. Particularly in an environment of intense competition in the low-end online furniture market segment from companies such as Target, Walmart, IKEA, Bed Bath & Beyond, Restoration Hardware, West Elm and Bain Capital-controlled Bob's Discount Furniture. There will be lots of companies claiming their share of the furniture sales that is moving to the Internet, so competition will most likely continue to be intense, and mainly based on price. The pandemic probably made all of these (primarily) brick-and-mortar competitors shift their priorities to focus even more on improving their online sales channels.

As Wayfair's sales have declined, its profit margins have worsened significantly. From an operating margin of 7% in the second quarter of 2020, the company reported a 2% loss in the most recently reported quarter. This is partly the result of its operating expenses, which do not seem to moderate as a percentage of (rising) revenue, nor fall in proportion with a revenue decline. At 28% of sales, operating expenses in the third quarter of 2021 were almost identical with the experience in 2015, even though revenues have expanded more than 6-fold. Thus, the necessity of ever-increasing marketing and technology expenditures to secure sales has completely offset any potential scale economy benefits. Consequently, since Wayfair's gross margin has been range-bound at 23%-29% since 2013, with operating expenses not far from 30%, profitability has been difficult to reach.

Wayfair's shares appreciated 10-fold from the March 2020 lows amid a pandemic-driven demand surge, but now, even though its expansion and profitability have ceased completely, Wayfair continues to trade at a rapid-growth valuation of more than 100x next year's consensus earnings. For a company that is experiencing a decline in revenue and almost a 50% YTD reduction in profits compared to last year, that valuation appears unsustainable. Wayfair's management has targeted an 8x increase in revenue by 2030, which equates to an annualized revenue growth rate of more than 26%, but it appears that the company will not expand at all in 2021. Should that lack of growth continue for a few quarters, investors will most likely get impatient and revalue the company in line with slower-growing peers. If it were to trade in line with eBay or Overstock.com – both of which do exhibit both sales growth and profitability – its shares would decline 70%-80%. Consequently, shares of Wayfair are recommended for sale or short sale.

THE DEVIL'S ADVOCATE REPORT

WAYFAIR INC. CONSOLIDATED AND CONDENSED BALANCE SHEETS (Unaudited)

September 30, 2021 December 31, 2020

(in thousands, except per share data)

Assets:

Current assets

Cash and cash equivalents	\$	1,864,821	\$	2,129,440
Short-term investments		528,392		461,698
Accounts receivable, net		166,497		110,299
Inventories		66,621		52,152
Prepaid expenses and other current assets		328,862		292,213
Total current assets		2,955,193		3,045,802
Operating lease right-of-use assets		816,951		808,375
Property and equipment, net		653,673		684,306
Other non-current assets		40,400		31,446
Total assets	\$	4,466,217	\$	4,569,929

Liabilities and Stockholders' Deficit:

Current liabilities

Accounts payable	\$	1,072,529	\$	1,156,624
Other current liabilities		957,963		1,008,970
Total current liabilities		2,030,492		2,165,594
Long-term debt		3,049,475		2,659,243
Operating lease liabilities		867,595		869,958
Other non-current liabilities		48,736		67,031
Total liabilities		5,996,298		5,761,826

Stockholders' deficit:

Class A common stock		78		73
Class B common stock		26		27
Additional paid-in capital		221,733		698,482
Accumulated deficit		(1,747,030)		(1,885,950)
Accumulated other comprehensive loss		(4,888)		(4,529)
Total stockholders' deficit		(1,530,081)		(1,191,897)
Total liabilities and stockholders' deficit	\$	4,466,217	\$	4,569,929

WAYFAIR INC.

THE DEVIL'S ADVOCATE REPORT

CONSOLIDATED AND CONDENSED STATEMENTS OF OPERATIONS (Unaudited)

	Three months ended September 30,		Nine months ended September 30,	
	2021	2020	2021	2020
(in thousands, except per share data)				
Net revenue	\$ 3,121,083	\$ 3,839,570	\$ 10,456,227	\$ 10,474,305
Cost of goods sold	2,238,355	2,692,142	7,442,412	7,426,724
Gross profit	882,728	1,147,428	3,013,815	3,047,581
Operating expenses:				
Customer service and merchant fees	139,931	139,589	431,802	372,825
Advertising	315,024	344,025	1,032,662	1,037,562
Selling, operations, technology, general and administrative	497,571	441,960	1,435,388	1,377,410
Customer service center impairment and other charges	—	—	12,212	—
Total operating expenses	952,526	925,574	2,912,064	2,787,797
(Loss) income from operations	(69,798)	221,854	101,751	259,784
Interest expense, net	(8,406)	(36,315)	(23,620)	(87,472)
Other income (expense), net	3,889	(13,584)	(1,657)	(10,720)
(Loss) income before income taxes	(74,315)	171,955	76,474	161,592
Provision (benefit) for income taxes, net	3,706	(1,211)	5,833	414
Net (loss) income	\$ (78,021)	\$ 173,166	\$ 70,641	\$ 161,178
(Loss) earnings per share:				
Basic	\$ (0.75)	\$ 1.82	\$ 0.68	\$ 1.70
Diluted	\$ (0.75)	\$ 1.67	\$ 0.65	\$ 1.64
Weighted-average number of shares				
Basic	104,054	95,373	103,579	94,767
Diluted	104,054	109,200	106,600	98,021