



WAYFAIR (\$W) UNDERWEIGHT

COVID NORMALIZATION, DECELERATING
MOMENTUM, LACK OF DIFFERENTIATION
OR COMPETITIVE ADVANTAGE

WAYFAIR (\$W) UNDERWEIGHT

COVID NORMALIZATION, DECELERATING MOMENTUM, LACK OF DIFFERENTIATION OR COMPETITIVE ADVANTAGE

THESIS

We are initiating a sell rating and a price target of \$94.42 following Wayfair's Q4 FY2021 earning results. We are confident that Wayfair will not maintain much of the growth that it has achieved in the past two years due to COVID normalization, being continually overpriced with decelerating momentum, and having no real differentiation or competitive advantage. Our sell recommendation is due mainly to Wayfair's overvaluation while it is looking to face heavy software/technology-focused headwinds and have not turned a profit through a substantial amount of work-from-home tailwind. Through these challenges, we believe that Wayfair might even report lower figures than analyst estimates in the coming three years as revenue growth and consumer demand has dried up. Wayfair's future seems bleak as investors might have overlooked the current macroeconomic factors.

KEY DRIVERS

Tail End "Forgotten Child" of COVID Normalization As the world has pushed past year two of the COVID-19 pandemic, normalization has taken place. This includes rising interest rates, the passing of COVID software/technology tailwind growth, and now the headwinds of lowering forecasts with more pessimistic evaluations. While Wayfair benefited greatly from work-from-home and has accelerated a lot of online shopping traffic, investors already see this period of growth already in the rearview mirror along with sliding demand for its products. Management is starting to struggle heavily with margins as they accumulate high advertising costs and labor costs. Growth is currently lower than pre-pandemic levels, yet value correction has been slow to react to Wayfair. While rising interest rates are also on the horizon, it will continue to influence the equity market, making high-growth companies with little-to-no history of turning a profit even harder to defend.

Continually Overpriced with Decelerating Momentum As it stands in Q1 2022, Wayfair's valuation implies revenue to be 3x higher than industry peers: eBay, Williams-Sonoma, and Overstock. Wayfair's balance sheet is unappealing as it has racked up \$3.9B in debt while having -\$1.5B in equity, indicating that Wayfair has much more liabilities than assets. The largest problem for Wayfair is that it does not appear to have gained any long-term or sustainable growth in sales since 2019. Management reported a 55% revenue growth in 2020 after a 35% figure in 2019. Wayfair's revenue end of 2021 ended up being \$13.07B, which gives it a 20% compounded annual growth compared to 2019. That gives Wayfair a slower rate of growth than its reported Q4 2019 YOY of 26% before the pandemic and its spur of online traffic. To make matters worse, analysts are forecasting Wayfair's revenue in fiscal year 2025 to be \$23.8, representing an average growth rate of 12%.

No Real Differentiation or Competitive Advantage Wayfair plans on tackling the total addressable market for all home goods and furniture. While this industry is huge, it is also a very congested space. While they were rewarded with being the first prominent presence for online furniture shopping with a large variety of products in home decor, their marginal grip on the industry could not hold long enough without differentiation. As a comparison, during Q1 of 2022, Wayfair currently sits at a higher P/E ratio than Amazon, Walmart, Target, and Home Depot with 2-4x margins while having a smaller market share than all of them. These household-name brick and mortars have now, with the acceleration of COVID on online retail, have expanded horizontally into the virtual space while already facing the heaviest blunts of the pandemic. Wayfair seems to also have difficulty boosting margins due to the nature of the industry: higher-end furniture is an infrequent purchase for most households, and competition makes customer acquisition cost very high

PRICE:

\$111.94

(Reflects price on 4/08/22)

TARGET:

\$94.42

Tyler Wong

Head of Research, Global Investment Society
tywong@usc.edu

Becky Tian

Senior Analyst, Global Investment Society
liangbai@usc.edu

Jiaming Shi

Senior Analyst, Global Investment Society
shijiami@usc.edu

Victor Ogden

Associate, Global Investment Society
vogden@usc.edu

Lucy LePoidevin

Associate, Global Investment Society
lepoidev@usc.edu

SUMMARY

Rating	Underweight
Price Target	\$94.42
FY21 Rev (mil)	\$13,708
FY22E EPS	\$3.85
52-Week High/Low	\$100.57 \$339.56
Market Cap (mil)	\$11,605
EV/Sales	6.59x

\$W Price (1Y)



COMPANY OVERVIEW

Founded in 2002 in Boston, Massachusetts, Wayfair Inc (NYSE: W) is an e-commerce marketplace focused on home goods. Wayfair sells a catalog of over 33 million home products, connecting consumers to over 23,000 suppliers. The platform has become the one-stop e-commerce shop for home goods, with products including furniture, home improvement products, and décor, serving broad a broad demographic, with consumer household income ranging from \$25,000 to \$250,000 annually. The majority of their sales are shipped directly from supplier to customer. As a result, Wayfair is able to offer a wide variety of products without holding significant inventory. The firm reports two segments: U.S. and International, with U.S. sales making up 82% of their revenue in 2021.

Wayfair connects many small suppliers with a lack of brand recognition to a large customer base. Many family-owned shops see Wayfair as an accessible way to tap into the e-commerce market. Their platform is driven by sales data and analytics, which informs suppliers on the demand for specific products, allowing suppliers to tailor their products to current consumer trends. As a result, the platform is able to supply one of the largest selections of home goods, with an emphasis on curating content to expose customers to new brands.

MANAGEMENT OVERVIEW

Co-founders Niraj Shah and Steven Conine met as engineering students in college, founding Wayfair soon after graduation. Both are still on today as co-chairmen, while Shah acts as the sole CEO. Before Wayfair, both Shah and Conine founded Spinners Incorporated, an IT services firm that was later sold to a technology consulting firm. Their engineering backgrounds have served as the basis for the data-driven nature of the company. Wayfair uses proprietary artificial intelligence and machine learning technology to tailor advertisements and product suggestions to buyer profiles. Shah and Conine have built out their management team across all facets of the business based on this data-driven decision-making process.

Management's plans for growth surround the expansion of their logistics network, as well as expanding into brick and mortar retail locations. Their logistics network includes CastleGate the Wayfair Delivery Network (WDN). Through CastleGate, suppliers can forward inventory into Wayfair warehouses ahead of time allowing for faster delivery. WDN lets Wayfair track and manage individual packages in their logistics network, which in turn reduces damage to goods, and increases delivery efficiency. Management has committed to investing in their logistics network, to have a greater proportion of their sales flow through the network, enhancing performance. In addition, management has been optimistic about expanding into physical retail stores to supplement their dominance in e-commerce. They have plans to open stores across the nation.

EARNINGS SUMMARY

At the end of the 2021 fourth quarter, Wayfair's total net revenue of \$3.3 billion decreased \$419 million, down 11.4% from last year. Their gross profit made up 27.1% of total net revenue and stood at \$881 million. In 2020, Wayfair benefited from the COVID-19 pandemic because people spent more time at home. However, as physical stores began to re-open in 2021, demand shifted

towards in-person shopping, hurting the e-commerce sector of furniture and home goods products. Repeated factory closures and port log jams also disrupted the global supply chain, leading to an inventory shortage that hurt Wayfair's sales. U.S net revenue declined by 8.8% from Q4 in 2020 and international net revenue declined by 23% year over year. These unfortunate events contributed to the decline in revenue in Q4. Wayfair also attributes the decline in revenue to the broader e-commerce softness this quarter. International business faced challenges because of the strict lockdown measures put into place during the pandemic.

The number of active customers decreased by 12.5% year over year, reaching \$27.3 million as of December 31, 2021. Additionally, the orders per customer decreased from 1.96 in the fourth quarter of 2020 to 1.89 in 2021. Orders delivered decreased by 26.7% year over year in the fourth quarter of 2021. These reports reiterate that the shift from online furniture and home goods shopping to in-person in 2021 negatively impacted Wayfair's financial performance.

Wayfair was resilient to the global supply challenges that occurred in 2021. By becoming a digital freight forwarder four years ago, Wayfair used CastleGate forwarding to cost-effectively transport products from the manufacturing location to North America and Europe. This technique offered a safety net for its suppliers, despite global increases in container prices and rising inflation. In 2022, Shah expects double CastleGate Forwarding volume.

The gross margin for Q4 was 27.2%; lower volumes year over year, inflation-driven supply chain bottlenecks, and tight labor markets contributed to the low gross margin result. Customer service and merchant fees made up 4.4% of net revenue as a result of increased compensation costs. Net cash from operating activities totaled \$89 million.

Niraj Shah, the CEO of Wayfair, believes that their product diversity and cost-efficient, fast, and reliable delivery will enable them to serve its \$800 billion addressable markets in the long run. In 2021, Wayfair added over 7,000 new suppliers to its database. Supplier diversification drives competition, encourages innovation, and creates better pricing for customers. Wayfair also increased its product selection by 11 million products. By offering more product options, consumers are incentivized to use Wayfair for all furniture and home goods products.

INDUSTRY DYNAMIC

Wayfair operates in the retail & wholesale industry and in the sub-industry of e-commerce. The retail & wholesale market includes sales of retail and wholesale services by entities that provide the service of making the goods available to consumers. These entities benefit the market by reducing the number of intermediaries involved in transferring goods from producers to consumers. In 2021, the market size was \$65,771.61 billion according to The Business Research Company, and is expected to grow to \$72,691.61 billion in 2022 at a compound annual growth rate of 10.5%. Retail and wholesale companies are adopting new strategies for data analytics in management to proliferate supply chain efficiency. The market is expected to expand as a result of rapid improvements in technology that make it easier for companies to meet consumers' desires. For

instance, significant drivers in the retail and e-commerce industry are investing in drones to reduce delivery times and productive efficiency. Doing so also allows retailers to decrease costs, thereby increasing profitability. Notably, Amazon has invested in its Prime Air deliveries to complete deliveries within 30 minutes of purchasing a product.

Unfortunately, the retail and wholesale industry suffered at the beginning of 2021 due to strict lock-down measures; it is expected, however, that companies will recover quickly as lockdown measures ease and the economy normalizes.

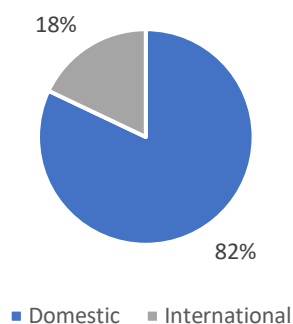
Major companies in the retail and wholesale market include Walmart Inc., Sinopec Limited, Amazon.com Inc, PetroChina Company Limited, CVS Health Corporation, Costco Wholesale Corp, Walgreens Boots Alliance Inc, and The Kroger Co. The Asia-Pacific region held the largest retail and wholesale market in 2021, followed by North America.

The e-commerce sector had a market value of \$13 trillion in 2021 and is expected to hold a compound annual growth rate of 27.4%. E-commerce refers to the commercial transactions taking place electronically, on the internet. E-commerce benefits the market significantly by enabling global reach, decreasing transaction costs, creating higher margins of profit, offering direct communication between parties, and quickly delivering goods and services. The substantial growth in this market can be attributed to urbanization, increasing internet and device usage, and proliferating preferences for online shopping. Unlike the retail and wholesale market, the COVID-19 pandemic has accelerated the demand for online shopping and other e-commerce services, propelling the industry forward.

REVENUE BREAKDOWN

As of fiscal year ended on December 31, 2021, Wayfair's total revenue reaches a record of \$13.7B, which represents a 11.4% YoY loss (\$437M decline in absolute values). Wayfair earns revenue through selling its products either in domestic or international markets. The rough breakdown of its revenue last year is illustrated below.

Figure 1.1: Sales by Segment



In 2021, Wayfair's family of sites produced a sales figure of \$11.25B, while the international markets contributed to the rest of net revenue (about \$2.46B). Compared to a year ago, its domestic sales (\$11.9B) have experienced a decline while the international sales (\$2.24B) saw an opposite increasing trend. This difference might be due to the fact that economic recovery abroad has stimulated the demands for Wayfair's products again.

ACQUISITIONS

The most notable acquisition of Wayfair occurred in 2016, where it acquired a Boston-based mobile messaging application called Trumpit. The full terms of this deal was not disclosed, but Wayfair was entitled to hire former employees of Trumpit and seven board members joined Wayfair as well. It announced that this acquisition would integrate Trumpit's powerful in-app messaging feature into its own application, enabling customers to text message the companies instead of emailing or calling them. It seemed like Wayfair was really attempting to build out their customer service experience by leveraging this type of technology.

Back in 2013, Wayfair acquired another lifestyle retailer called DwellStudio known for its design of modern home furnishings. The rationale behind this acquisition was associated with Wayfair's determination to strengthen its leadership position in the retail market by adding a brand with core competencies in original design, with a special focus on babies and children. The popularity is evidenced by DwellStudio's sales in more than 800 retail stores throughout 40 countries.

DCF MODEL BREAKDOWN

We made a DCF valuation for Wayfair. For our valuation, we used a WACC of 9.7%, which is much higher than the cost of capital in the industry and signifies a higher risk than average. This WACC is also similar to the WACC calculated in FactSet. The beta that we used to calculate Wayfair's cost of equity is 1.016. It is calculated by first taking the average of the unlevered beta of Wayfair's comparable companies and then re-levers it to Wayfair's capital structure. Along with a 6.1% market risk premium, we make a sensitivity table to show how the value of WACC may change with different beta and market risk premium.

	9.7%	Beta		
		0.916	1.016	1.116
Market	5.10%	7.9%	8.5%	9.1%
Risk	5.60%	8.4%	9.1%	9.7%
Premium	6.10%	9.0%	9.7%	10.4%
	6.60%	9.5%	10.3%	11.0%
	7.10%	10.0%	10.8%	11.7%

We conducted two approaches, one is the perpetuity approach and the other is the exit multiple approach. Both approaches yield a similar target price. We estimated the long-term growth rate to be 2%. This estimation is based on the decline in growth of the projected revenue for Wayfair and the difficulties that the e-commerce companies are facing currently. The sensitivity table allows you to check how different values in WACC and long-term growth rate will affect the target price.

Figure 2.2: Sensitivity Table for Equity Value per Share (Perpetuity Approach)

	Equity value per share					
	90.79	Long term growth rate (g):				
		1.0%	1.5%	2.0%	2.5%	3.0%
WACC:	10.7%	67.52	71.54	76.01	81.04	86.72
	10.2%	73.01	77.57	82.68	88.45	95.03
	9.7%	79.15	84.35	90.22	96.91	104.60
	9.2%	86.06	92.03	98.83	106.66	115.74
	8.7%	93.88	100.80	108.76	118.00	128.85

For the exit EBITDA multiple approach, we assume the business

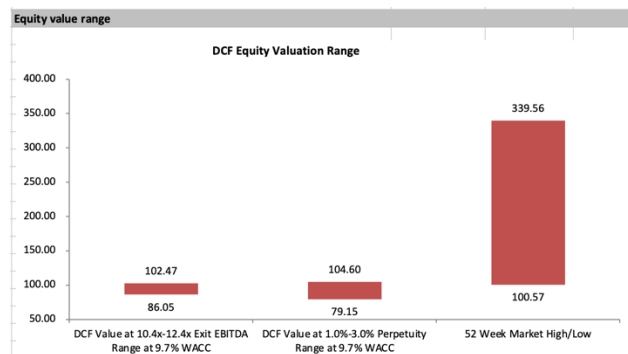
is sold for a multiple of 11.4x. This assumption is based on the EV/EBITDA multiple for Wayfair's comparable companies, including Target, TJX, Lowe's, Home Depot, and Walmart. This estimated multiple, 11.4x, is closed to the implied exit EBITDA multiple calculated with the perpetuity approach, which is 11.0x. The sensitivity table shows how different values in WACC and exit EBITDA multiple affect the target price.

Figure 2.3: Sensitivity Table for Equity Value per Share (Exit Multiple Approach)

		Equity value per share				
		Exit EBITDA Multiple				
		10.4x	10.9x	11.4x	11.9x	12.4x
WACC:	\$94.42					
	10.7%	81.88	85.81	89.75	93.68	97.61
	10.2%	83.94	87.96	91.97	95.99	100.01
	9.7%	86.05	90.16	94.26	98.37	102.47
	9.2%	88.22	92.41	96.61	100.80	105.00
8.7%	90.44	94.73	99.01	103.30	107.59	

Thus, our DCF model with the perpetuity approach gives us a target price of \$90.79 based on an 9.7% of WACC and a 2% long-term growth rate. Our upside valuation case is \$104.60 and our downside valuation is \$79.15. Similarly, the exit multiple approach gives a target price of \$94.42, with an upside valuation of \$102.47 and a downside valuation of \$86.05. Either estimated price shows that Wayfair is overvalued. The equity value per share is approximately 18.87% lower than its current price of \$111.91. The equity value range shows 52 Week Market High/Low, as well as the range of using exit EBITDA approach and the perpetuity approach.

Figure 2.4: DCF Equity Value per Share Range



COMPS

Figure 2.1: Comp Set

Company Name	Market Capitalization Latest	LTM Net Debt	Total Enterprise Value Latest	LTM Tangible Book Value/Share	LTM Total Revenue	LTM EBITDA	LTM EBIT	LTM Diluted EPS Excl. Extra Shares
eBay Inc. (NASDAQ:EBAY)	32,331.7	2,109.0	34,440.7	9.41	18,030.0	3,460.0	2,959.0	6.38
Qurate Retail, Inc. (NASDAQ:QRTA)	1,772.5	8,187.0	10,059.5	(19.06)	14,044.0	2,008.0	1,471.0	0.82
RH (NYSE:RH)	8,255.4	1,256.9	9,512.3	44.45	3,758.8	1,058.4	962.4	22.13
Williams-Sonoma, Inc. (NYSE:WSM)	10,513.4	433.9	10,947.3	21.94	8,245.9	1,640.2	1,453.1	14.75
Bed Bath & Beyond Inc. (NASDAQ:BBBY)	1,866.0	2,551.2	4,417.2	5.58	8,435.5	543.5	250.4	(3.70)
Tractor Supply Company (NASDAQ:TSCO)	26,509.1	3,041.3	29,550.4	17.21	12,731.1	1,440.2	1,370.0	8.61
Chewy, Inc. (NYSE:CHWY)	18,140.6	(168.7)	17,971.9	0.04	8,890.8	(31.4)	(72.0)	(0.18)
Wayfair Inc. (NYSE:W)	11,779.3	1,655.0	13,434.3	(15.59)	13,708.0	69.0	(82.0)	(1.26)
Summary Statistics								
High	32,331.7	8,187.0	34,440.7	44.45	14,044.0	3,460.0	2,959.0	22.13
Low	1,772.5	(168.7)	4,417.2	(19.06)	3,758.8	(31.4)	(72.0)	(3.70)
Mean	14,201.2	2,487.2	16,707.9	11.37	9,503.7	1,474.4	1,199.0	6.12
Median	10,513.4	2,109.0	10,947.3	9.41	8,890.8	1,640.2	1,370.0	6.82

Figure 2.2: Comp Set Trading Multiples

Company Name	TEV/Total Revenues LTM - Latest	TEV/EBITDA LTM - Latest	TEV/EBIT LTM - Latest	P/Diluted EPS Before Extra LTM - Latest
eBay Inc. (NASDAQ:EBAY)	3.3x	9.5x	11.6x	144.8x
Qurate Retail, Inc. (NASDAQ:QRTA)	0.7x	5.0x	7.3x	5.7x
RH (NYSE:RH)	2.5x	8.0x	10.0x	15.2x
Williams-Sonoma, Inc. (NYSE:WSM)	1.3x	5.4x	7.5x	10.0x
Bed Bath & Beyond Inc. (NASDAQ:BBBY)	0.5x	3.5x	17.4x	NM
Tractor Supply Company (NASDAQ:TSCO)	2.3x	13.9x	21.6x	27.5x
Chewy, Inc. (NYSE:CHWY)	2.0x	NM	NM	NM
Wayfair Inc. (NYSE:W)	1.0x	63.4x	NM	NM
Summary Statistics				
High	3.3x	13.9x	21.6x	144.8x
Low	0.5x	3.5x	7.3x	5.7x
Mean	1.8x	7.6x	12.6x	40.6x
Median	2.0x	6.7x	10.9x	15.2x

From the two tables above (Source: Capital IQ search), it can be seen that among the seven companies that can be viewed as Wayfair's comparables, the implied mean EV/EBITDA ratio should be 7.6x, which is way below Wayfair's actual current EV/EBITDA ratio. Hence, we conclude that Wayfair is indeed overvalued at this point and a short position on this stock is justified given the mispricing.

RISKS

Favorable Tailwinds An e-commerce company focused on the sale of home goods has strong macroeconomic tailwinds that should be beneficial for the business. Spurred on by the COVID-19 pandemic, e-commerce has rapidly grown to be the staple channel for consumers to purchase goods of any sort. Retailers with purely physical stores have been disrupted, as e-commerce provides a convenient option with a broader range of products. In addition, Wayfair's focus on home goods exposes them to the effects of increased homebuilding. In 2020, work-from-home became a reality. Consumers began to migrate away from city centers knowing that they can clock in while in their living room. As a result, homebuilding in 2021 increased significantly, posing a strong tailwind that should drive up demand for home goods. However, because of these tailwinds, both e-commerce and home goods have become crowded industries with stiff competition. In order to truly capitalize on overall industry growth, Wayfair needs to beat out its competitors.

Supply Network One of Wayfair's core competencies is the vast supplier network that they've been able to develop. Wayfair connects consumers to over 23,000 individual suppliers - a number that has grown from 12,000 in Q4 of 2019. The firm has created a solution for founder and family-owned suppliers who lack brand recognition and access to retail. The firm's investment into its logistics networks has supplemented its supply network, providing a cost-effective platform for suppliers to access a cheaper, and faster channel for retail sales. Given supply chain constraints in 2021, suppliers instead used the CastleGate Forwarding service provided by Wayfair, making them one of the top importers in the U.S. by volume. As a result, Wayfair has developed an extensive network of suppliers across the world, which has in turn lowered their retail prices for shoppers.

Expansion into Brick-and-Mortar Stores Management has been optimistic about expanding into physical retail stores. There is a range of benefits to having both an online and physical presence. Home goods retailers benefit massively from in-person shopping, where consumers can see and feel the products in person. Supplemented by a dominant e-commerce presence, the combination can boost sales, reduce churn, and

facilitate returns. Wayfair has consistently brought up the idea of expanding into physical stores across all of the different brands under their name. However, it currently features a single retail location in Florence, Kentucky, which is still closed from the COVID-19 pandemic.

OUTLOOK

In the fiscal year of 2022: It could be expected that a value drop is looming for Wayfair. Many analyst fair value estimates have consistently been lower than the current price for Wayfair. Management has been reporting less growth while not tackling the problem of its business model. Forward P/E ratios and other comparative figures to peers have still put Wayfair at multiple levels higher than competitors while it has continually faced price drops in the past twelve months. Current macroeconomic factors signal further headwinds and the continuous reevaluation of high-growth equity. The upcoming two quarterly reports will be crucial for Wayfair, as further downward momentum of revenue growth and margin will stack up more cards against investing with them.

Long-term outlook: While Wayfair might face its worse period of a lull state in the upcoming months, it still does not take from the problem that it does not have a sustainable business model. Their growth relies on maintaining the current consumer base as long as they can as they experience marginal growth. Being a hub of various smaller furniture retailers, Wayfair at its peak still only knocked on a slim fraction of the addressable market it has its eyes on. A lot is at rest with management, Wayfair is currently a sinking ship and there seems to be no plans of rescue or restructuring in sight. With the ticking time they have, management needs to pivot Wayfair's position to generate something sustainable.