

## Mattress/Bedding: The Emerging E-Commerce Market (Vol. 13)

For Volume 13 of this 68-page semiannual report, we have conducted dozens of interviews with e-commerce mattress company executives, as well as manufacturers and online reviewers. We estimate market share for emerging brands grew 350 bps to 14.0% in 2020 (an acceleration from the 180 bps of share gain we estimate in 2019). For 2021, we estimate market share for emerging brands will grow 160 bps to 15.6%. Looking ahead, we believe the outlook for 2H21 is positive and off to a strong start, but growth is likely to moderate as the industry laps strong demand from last year.

### Key Investment Points

**Emerging Brands Continue to Grow Rapidly.** Our proprietary research suggests market share growth for emerging mattress brands remains strong, as the COVID-19 backdrop and resulting changes in consumer behavior have ignited a more favorable environment for digital and home-related brands over the last 15 months.

- We believe consumer behavior as a result of COVID-19 continues to fuel NT and LT positive trends for home-related products.
- The combination of strong demand and COVID-19-related disruptions has led to elevated supply constraints beginning in 2020, which seem likely to continue through all of 2021. Product and freight costs have risen significantly, and many manufacturers and retailers have raised price accordingly.
- While Purple saw ST production issues in recent months, the Company outlined encouraging LT guidance on its first analyst day in June, calling for \$2.0B-\$2.5B of revenue with adjusted EBITDA margins of 14-15% within the next three to five years.
- Resident, which sells Nectar and DreamCloud beds, leverages digital advertising exceptionally well, has a growing wholesale business, and continues to drive strong growth.
- The "sleep fitness" mattress by Eight Sleep includes special technology to improve sleep and provide data-driven insights. Eight recently raised an \$86M Series C at a valuation approaching ~\$500M, and is reportedly on track to triple sales in 2021.
- While Casper recently delayed its timeline to become EBITDA positive, we believe the Company still has strong brand awareness among digitally native mattress brands and can drive sales with new products, store openings, and retail partnerships.
- Our proprietary Key First Look Data implies trends at Purple (Overweight-rated), Resident, and Saatva have been among the strongest of the larger emerging brands, while trends at Leesa appear the most moderated.
- Anti-dumping petitions against overseas manufactures have greatly reduced imports from several countries (including China and Vietnam). As such, we expect domestic producers of lower-priced mattresses to continue benefiting in 2H21.
- As of September 9, 2021, the majority of AMZN's Amazon Basics models were unavailable. While we are not certain, we believe this may be a result of supply chain disruptions, rising raw material costs, or potentially a refresh of the assortment.

### Consumer/Retail Hardlines

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#### Stock Implications ▲ Positive, ▼ Negative, — Neutral

Company	Stock	Rating	Target	Price	Mkt Cap.
▲ Purple Innovation, Inc.	PRPL	OW	\$40.00	\$23.71	\$1,585.3M

For analyst certification and important disclosures, please refer to the Disclosure Appendix.

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## EMERGING E-COMMERCE AND DTC TRENDS IN THE MATTRESS SECTOR

*For 2020, we estimate emerging brand revenue of \$3.1B, representing 14.0% market share, and y/y growth of ~\$945M, or 350 bps of the retail market.*

*For 2021, we project \$3.9B of revenue, representing 15.6% market share, and y/y growth of ~\$751M, or 160 bps of the retail market.*

*For 2022, we project \$4.5B of revenue, representing 17.7% market share, and y/y growth of ~\$619M, or 200 bps of the retail market.*

**Market Share Analysis: What This Means for Traditional Mattress Companies.** We expect direct-to-consumer and emerging brands to continue gaining market share in the years ahead. For perspective, we estimate the emerging mattress brands generated ~\$1.8B of revenue in 2018, representing 8.8% market share, and y/y growth of ~\$455M, or 2.0% of the retail market. For 2019, we estimate ~\$2.2B of revenue, representing 10.5% market share, and y/y growth of ~\$392M, or 1.8% of the retail market. For 2020, we estimate ~\$3.1B of revenue, representing 14.0% market share, and y/y growth of ~\$945M, or 3.5% of the retail market. For 2021, we forecast ~\$3.9B of revenue, representing 15.6% market share, and y/y growth of ~\$751M, or 1.6% of the retail market. Finally, for 2022, we forecast ~\$4.5B of revenue, representing 17.7% market share, and y/y growth of ~\$619M, or 2.0% of the retail market. Supporting our projections are dozens of in-depth interviews with e-commerce mattress company executives, as well as manufacturers, machinery suppliers, and online reviewers. See Figure 1 for more detailed online mattress revenue projections and market share analyses.

From volumes 1-11 of this report (dating back to our original deep-dive report in June 2015 through the last semiannual report in March 2021), we found that the emerging threat was underappreciated. The impact of the emerging brands is more widely understood today but continues to evolve in new ways. Within the context of an industry that typically grows its retail market value by MSD in dollars, we believe emerging brands could again account for over half of industry growth in 2021 (as it did in 2016-2020).

Rounding out our market share analysis, in addition to our calculation for the “emerging brands,” as we call them, we believe there is another 10-15% of market share penetration from other direct players in the market, including Amazon, Wayfair, 1-800-Mattress, Costco, IKEA, etc. These “channels” overlap with the emerging brands by selling some of those brands themselves. These retailers also sell traditional brands. Lastly, the traditional manufacturers already sell DTC themselves, generally a MSD to low-teens percentage of their businesses. Taking these groupings together, we estimate about 30% share penetration of total DTC within the mattress sector.

### **Emerging Mattress Case Study: Early Years for Tempur-Pedic and Sleep Number.**

While one might assume that direct sales are a new phenomenon in the mattress industry, direct sales were a cornerstone of TPX's and SNBR's success in their early years. In 2002 (the year before TPX went public), TPX generated \$165M in domestic revenue (with \$110M in domestic mattress revenue). This was achieved with only two mattress models: the Classic and the Deluxe. At the time, 29% of TPX's revenue was generated through its direct channel. The Company relied on its direct response television marketing and had a significantly smaller retail footprint. Subsequently, the percentage of direct sales declined as the Company increased its penetration in traditional bedding retailers and focused on driving customers into stores. This reversed in 2017 when the Company generated \$2.2B in North American sales (including Sealy) with ~6% from the direct channel, up 400 bps from a low of 2% in 2016. Similarly, for SNBR, the direct channel represented ~28% of sales in 2001. The channel was 7.6% of sales in 2019 and 2018, up slightly from a low of 7.0% in 2017 and 6.0% of sales the prior two years. In 2020, TPX's direct channel represented ~13.4% of NA revenues while SNBR's direct channel represented ~14.5% of revenues.

Figure 1 KBCM Emerging Mattress Brand Revenue Estimates

(\$ in millions)

	2012	2013	2014	2015	2016	2017	2018	2019	2020P	2021E	2022E	
Emerging Brand Revenue	\$10	\$25	\$75	\$226	\$764	\$1,364	\$1,819	\$2,211	\$3,155	\$3,907	\$4,526	
YoY Growth %		150.0%	200.0%	201.3%	238.1%	78.5%	33.3%	21.6%	42.7%	23.8%	15.9%	
YoY Growth \$	\$	15	\$	151	\$	538	\$	455	\$	392	\$	619
KBCM "Top 4" Revenue				\$176	\$414	\$730	\$1,069	\$1,398	\$2,025	\$2,539	\$3,042	
YOY Growth %					135%	76%	46%	31%	45%	25%	20%	
% of Total				78%	54%	54%	59%	63%	64%	65%	67%	
U.S. Market Overview												
Mattresses			\$6,632	\$7,271	\$7,569	\$7,932	\$7,993	\$8,182	\$8,564	\$9,763	\$10,057	
Foundations			1,880	2,049	2,011	2,106	2,393	2,325	2,667	2,720	2,747	
Wholesale Market Size (ISPA)			\$8,512	\$9,320	\$9,580	\$10,038	\$10,386	\$10,507	\$11,231	\$12,483	\$12,805	
Retail Markup Assumption			2.0x	2.0x	2.0x	2.0x	2.0x	2.0x	2.0x	2.0x	2.0x	
Retail Market Size (KBCM Estimate)			\$17,024	\$18,640	\$19,159	\$20,075	\$20,772	\$21,014	\$22,463	\$24,966	\$25,610	
Growth %				9.5%	2.8%	4.8%	3.5%	1.2%	6.9%	11.1%	2.6%	
Emerging Mattress Brands Market Share (of \$s)			0.4%	1.2%	4.0%	6.8%	8.8%	10.5%	14.0%	15.6%	17.7%	
Emerging Mattress Brands Market Share Growth				0.8%	2.8%	2.8%	2.0%	1.8%	3.5%	1.6%	2.0%	
Unit Share Analysis												
Mattress Units Shipped (ISPA)			25.6	28.8	26.9	28.9	30.4	30.4	33.3	34.3	34.9	
Mattress Average Unit Price at Wholesale (ISPA)			\$259	\$253	\$281	\$275	\$263	\$269	\$258	\$285	\$288	
Mattress Average Unit Price at Retail (ISPA)			\$518	\$505	\$563	\$549	\$525	\$538	\$515	\$570	\$576	
Est. Online Mattress ASP			\$700	\$700	\$700	\$800	\$850	\$850	\$875	\$900	\$900	
Online Mattress Units Shipped			0.1	0.3	1.1	1.7	2.1	2.6	3.6	4.3	5.0	
Emerging Mattress Brands Market Share (of Units)			0.4%	1.1%	4.1%	5.9%	7.0%	8.5%	10.8%	12.7%	14.4%	
Emerging Mattress Brands Market Share Growth				0.7%	2.9%	1.8%	1.1%	1.5%	2.3%	1.8%	1.7%	

Note: Revenue estimates are representative of all emerging e-commerce companies mentioned in this report. Units in millions.

Note: KBCM Top 4 includes Casper, Purple, Resident (which makes Nectar and others), and Saatva, which KBCM research indicates to be the largest emerging brands (listed alphabetically).

Source: Company website, media reports, ISPA, and KeyBanc Capital Markets Inc.

**How Do the Traditional and Emerging Online Competitive Dynamics Compare?** We are asked this question frequently and highlight some of the most important industry dynamics below.

### **Traditional Industry Overview**

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- ⇒ Highly Consolidated from a Manufacturing Perspective
- ⇒ Increasingly Consolidated Within the Retail Channel, Particularly in the Specialty Segment, but Still Fragmented Overall
- ⇒ 40%+ Product Margins for Manufacturers
- ⇒ 50%+ Product Margins at Retail
- ⇒ Primarily Domestic Manufacturing, Minimal Importation
- ⇒ Minimal Inventory in Channel
- ⇒ Negative Working Capital (Drives a Cash Benefit from Growing Sales)

### **Emerging Online Brands Competitive Considerations**

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- ⇒ Low Barriers to Entry
- ⇒ Minimal Inventory and Capital Needed, as Third-Party Manufacturing Makes/Ships the Product
- ⇒ Digital Marketing Is Critical
- ⇒ High Quality Customer Service Is Necessary, and Especially Important During the Returns Process
- ⇒ Favorable Customer Reviews Are Critical
- ⇒ KBCM Estimates Gross Margin of 40-50%
- ⇒ KBCM Estimates Industry Return Rates of 10-15%, Which Are Losses as Product Is Recycled or Given to Charity
- ⇒ Optimize Product(s) for Highest Satisfaction/Lowest Return Rate
- ⇒ Increasingly Looking for Own and Third-Party Physical Retail Distribution
- ⇒ Product Lineups Are Expanding to Include New Entry Level and Higher End Models, and More Accessory Products

Figure 2 Mattress Industry Competitive Financial Overview

Company Name	Tempur Sealy International Inc.	Sleep Number Corp.	Purple Innovation Inc.	Casper Sleep Inc.	Sleep Country Canada	Eve Sleep plc.
<b>Ticker</b>	<b>TPX</b>	<b>SNBR</b>	<b>PRPL</b>	<b>CSPR</b>	<b>ZZZ</b>	<b>EVE</b>
Exchange	NYSE	NASDAQ	NASDAQ	NYSE	TSE	LSE
Time Period	2021E	2021E	2021E	2021E	TTM (6/30/2021)	2020A
Sales	5,043	2,302	834	605	699	34
Growth (% , YOY)	37.2	24.0	28.6	21.7	43.1	9.0
Gross Profit	2,264	1,414	375	295	228	20
Gross Margin (%)	44.9	61.4	45.0	48.7	32.7	57.3
SG&A	1,360	1,112	321	363	122	23
% of Sales	27.0	48.3	38.5	60.0	17.5	67.0
Advertising Expense	332.5**	253.0**	130.3**	156.8**	40.6**	8.0**
% of Sales	9.0**	13.6**	20.1**	31.6**	6.8**	24.2**
Operating Income	931	237	51	(64)	106	(3)
Growth (% , YOY)	50.8	28.4	(36.6)	14.1	77.7	79.9
Operating Margin (%)	18.5	10.3	6.1	(10.6)	15.2	(9.7)
Adjusted EBITDA	1,098	321	81	(31)	157	(3)
Growth (% , YOY)	40.9	19.8	(8.4)	30.6	48.6	81.1
EBITDA Margin (%)	21.8	14.0	9.7	(5.2)	22.4	(7.9)
Net Income	651	184	54	(91)	71	(3)
Growth (% , YOY)	60.4	32.4	397.6	(1.3)	95.8	82.8
Returns (and Gross Revenue Deductions)	111.9**	81.5**	50.5**	80.1***	n/a	2.7
% of Sales	3.0**	4.4**	7.8**	20.4***	n/a	7.8
Proprietary Stores	600	650	~30	~75	287	0
Wholesale Doors	>25,000	n/a	~2,750	>2,000	n/a	n/a
Manufacturing Facilities	Yes	Yes	Yes	No	No	No
Number of Mattress Models	33	9	7	7	n/a	4
Direct Channel Revenue (%)	14.0%*	99.9%*	68.6%*	69.5%*	100.0%	72.9%**
Store Revenue (%)	n/a	86.3%*	n/a	n/a	n/a	n/a
E-Commerce Revenue (%)	n/a	13.6%*	n/a	n/a	n/a	n/a
Wholesale Revenue (%)	86.0%*	0.1%*	31.4%*	30.5%*	0.0%	27.1%**
North America Revenue (%)	86.0%*	100.0%	100.0%	100.0%	100.0%	0.0%
International Revenue (%)	14.0%*	0.0%	0.0%	0.0%	0.0%	100.0%
Patents	n/a	350+	100+	25	0	0

Note: Dollars in millions (with EVE and ZZZ data converted to dollars from local currency at a spot rate).

\*Based on TTM basis; \*\*Based on last FY basis; \*\*\*9M ended September 2019.

Source: Company filings and KeyBanc Capital Markets Inc. estimates for TPX, SNBR, and PRPL, and Street Estimates for CSPR from Thomson Reuters

Figure 3 Mattress Industry Competitive Financial Overview

Company Name	Tempur Sealy International Inc.	Sleep Number Corp.	Purple Innovation Inc.	Casper Sleep Inc.	Sleep Country Canada	Eve Sleep plc.
Ticker	TPX	SNBR	PRPL	CSPR	ZZZ	EVE
Exchange	NYSE	NASDAQ	NASDAQ	NYSE	TSE	LSE
Time Period	2020A	2020A	2020A	2020A	2020A	2020A
Sales	3,677	1,857	648	497	595	34
Growth (% , YOY)	18.4	9.3	51.4	13.1	8.5	9.0
Gross Profit	1,644	1,156	305	254	192	20
Gross Margin (%)	44.7	62.3	47.0	51.1	32.3	57.3
SG&A	1,042	930	228	329	106	23
% of Sales	28.3	50.1	35.1	66.2	17.8	67.0
Advertising Expense	333	253	130	157	41	8
% of Sales	9.0	13.6	20.1	31.6	6.8	24.2
Operating Income	618	185	80	(75)	86	(3)
Growth (% , YOY)	57.5	64.9	175.4	15.5	14.6	79.9
Operating Margin (%)	16.8	10.0	12.4	(15.1)	14.5	(9.7)
Adjusted EBITDA	780	268	88	(45)	135	(3)
Growth (% , YOY)	53.4	40.7	163.5	36.0	12.1	81.1
EBITDA Margin (%)	21.2	14.4	13.6	(9.1)	22.6	(7.9)
Net Income	406	139	11	(90)	57	(3)
Growth (% , YOY)	83.0	70.1	n/m	3.7	24.2	82.8
Returns (and Gross Revenue Deductions)	112	82	51	80.1**	n/a	2.7
% of Sales	3.0	4.4	7.8	20.4**	n/a	7.8
Proprietary Stores	400	602	9	67	281	0
Wholesale Doors	>25,000	n/a	2,200+	>2,000	n/a	n/a
Manufacturing Facilities	Yes	Yes	Yes	No	No	No
Number of Mattress Models	33	9	6	7	n/a	4
Direct Channel Revenue (%)	13.4%	99.7%	74.8%	73.1%	100.0%	72.9%*
Store Revenue (%)	n/a	85.2%	n/a	n/a	n/a	n/a
E-Commerce Revenue (%)	n/a	14.5%	n/a	n/a	n/a	n/a
Wholesale Revenue (%)	86.6%	0.3%	25.2%	26.9%	0.0%	27.1%*
North America Revenue (%)	85.9%	100.0%	100.0%	97.6%	100.0%	0.0%
International Revenue (%)	14.1%	0.0%	0.0%	2.4%	0.0%	100.0%
Patents	n/a	350+	100+	25	0	0

Note: Dollars in millions (with EVE and ZZZ data converted to dollars from local currency at a spot rate).

\*Based on FY19 basis; \*\*9M ended September 2019.

Source: Company filings and KeyBanc Capital Markets Inc. estimates

## KEY TAKEAWAYS: MATTRESS INDUSTRY EARNINGS SNAPSHOT

Figure 4 Mattress Industry 2Q21 Earnings Summary

	TPX	SNBR	PRPL	CSPR	ZZZ (in CAD)
Revenue (vs Consensus)	\$1,169.1M (beat)	\$484.3M (miss)	\$182.6M (beat)	\$151.8M (beat)	\$192.2M (beat)
Revenue Growth (y/y)	75.8%	70.0%	10.6%	37.7%	67.3%
Growth vs (2Q19)	61.7%	36.1%	77.3%	59.4%	15.4%
Direct Channel Growth (y/y)	78.4%	70.0%	-19.9%	31.3%	67.3%
Wholesale Channel Growth (y/y)	61.3%	n/a	233.2%	78.9%	n/a
Gross Margin	44.3%	60.5%	44.7%	47.8%	34.5%
Gross Margin Δ (y/y)	+368 bps	+326 bps	-471 bps	-399 bps	+235 bps
Operating Margin (%)	19.4%	6.1%	-1.4%	-10.2%	14.4%
Operating Margin Δ (y/y)	+891 bps	+1,039 bps	-2,148 bps	+623 bps	+607 bps
EPS (vs Consensus)	\$0.79 (beat)	\$0.88 (miss)	\$0.05 (miss)	(\$0.61)	\$0.48 (beat)
FY Revenue Guidance	Raised	Raised	Resumed, but below prior	n/a	n/a
FY EPS Guidance	Raised	Raised	n/a	n/a	n/a
Inflation Impact	Commodity inflation headwinds	\$13M of incremental input cost pressures, and expects >\$50M of incremental cost pressure in 2021	Experiencing rising costs in raw material and labor.	Experiencing inflationary pressures in raw materials, freight, and labor.	Higher container rates, inventory, and wage compensation costs.
Pricing/Promotion	Implemented pricing actions during 4Q20 and again in the beginning of 2Q21	ARPU grew 6.9% and units grew 59% y/y. Activating ~\$100M in annualized price increases across products.	Anticipates taking additional price increases in 3Q	Implemented a small price increase earlier this year, and doing a larger price increase as of October 1.	Increased average unit selling prices.
Supply Chain	Remains constrained (\$150M estimated headwind), but expected to be resolved by the end of 2021.	Supply constraints limited delivered sales in June and July, and Labor shortages at a Tier 1 supplier. Expects to catch up in 4Q to support very high delivery volumes	Largest challenge from raw machine capacity from the production issue, followed by labor and raw materials. Elevated backlog expected to clear out by the end of August.	Experiencing continued supply constraints in raw materials, freight, and labor across supply chain. Estimates impact on revenue of ~\$10M in 2Q21, and a ~\$20M anticipated impact in 3Q	Experiencing challenges within the supply chain, both locally and internationally.
Highlights from the Quarter	Acquisition of Dreams Announced  Expands Manufacturing Capacity - 4th manufacturing facility (Indiana) added in North America in the Last 12 Months.	Large backlogs, expected to continue through the balance of the year.  FY revenue and EPS guidance raised for the second time.	Isolated production issues related to Max machine reduced production for ~10 weeks, which negatively impacted both 2Q and 3Q revenue. However, production increased throughout July and reached full capacity during the last week of July.	Pushed back profitability timeline of being EBITDA positive to 2022 (from 2H21 expected previously), given continued supply chain and inflationary headwinds.  Rapid expansion of retail partnership channel.	Expanded digital footprint in partnership with Best Buy Canada, including an exclusive supply of traditional mattresses such as Tempur-Pedic, Sealy, Serta, Simmons, Simba, and Purple on BestBuy.ca.

Source: Company reports and KeyBanc Capital Markets Inc.

## OVERVIEW: E-COMMERCE GROWTH IN THE MATTRESS/BEDDING SECTOR

Figure 5 Competitive Landscape Overview

Brand	Total Reviews	Amazon Reviews	Website Reviews	Amazon Average Rating	Website Average Rating	Overall Average Rating	Price Range
Linenspa	168,707	168,707		4.5		4.5	\$94 - \$300
Zinus	168,152	163,223	4,929	4.5	4.4	4.5	\$164 - \$631
Ashley Chime	73,984	67,884	6,100	4.5	4.6	4.5	\$180 - \$1503
Classic Brands	69,010	69,010		4.5		4.5	\$159 - \$1029
Tuft & Needle	61,913	15,296	46,617	4.4	4.6	4.6	\$806 - \$1441
Purple Mattress	53,301	557	52,744	4.6	4.4	4.4	\$1199 - \$3099
Vibe	42,889	42,889		4.6		4.6	\$325 - \$410
Nectar (by Resident Home)	36,734	1,459	35,275	4.4	4.8	4.8	\$707 - \$1699
Lull	35,778	361	35,417	4.6	4.6	4.6	\$799 - \$1399
Lucid	32,927	32,927		4.6		4.6	\$200 - \$530
Casper	26,799	4,927	21,872	4.5		4.5	\$595 - \$3244
Nature's Sleep (by GhostBed)	26,079	55	26,024	4.5	4.7	4.7	\$1599 - \$3499
Endy	24,017		24,017		4.9	4.9	\$850 - \$850
Leesa	23,570	1,273	22,297	4.2	4.5	4.5	\$599 - \$1954
Avocado	16,704		16,704		4.7	4.7	\$1499 - \$3999
GhostBed	13,908	659	13,249	4.4	4.7	4.7	\$750 - \$2027
Bear Mattress	13,656		13,656		4.8	4.8	\$747 - \$1272
Sweetnight	13,637	12,116	1,521	4.5	4.8	4.5	\$378 - \$720
Brooklyn Bedding	12,917	292	12,625	4.1	4.7	4.7	\$355 - \$1799
Helix Sleep	12,107		12,107		4.5	4.5	\$999 - \$1749
Sleep Innovations	11,314	11,307	7	4.5	5.0	4.5	\$170 - \$500
WinkBed	7,584		7,584		4.8	4.8	\$1499 - \$1699
Cocoon Bed (by Sealy)	6,104		6,104		4.7	4.7	\$799 - \$1099
Novosbed	6,067		6,067		4.7	4.7	\$999 - \$999
Nest Bedding	5,522		5,522		4.7	4.7	\$719 - \$3689
Plush Beds	5,172		5,172		4.9	4.9	\$999 - \$2399
Dreamcloud (by Resident)	5,114	136	4,978	3.8	4.8	4.8	\$999 - \$1499
Live and Sleep	4,194	3,681	513	4.4	4.9	4.5	\$350 - \$899
Coolvie	3,704	3,704		4.5		4.5	\$336 - \$368
Keetsa	2,184		2,184		4.8	4.8	\$790 - \$2390
Saatva	2,157		2,157		4.9	4.9	\$1374 - \$2845
Brentwood Home	2,138	127	2,011	4.2	4.7	4.7	\$599 - \$1499
Idle Sleep	2,095		2,095		4.7	4.7	\$695 - \$2260
Big Fig	1,208		1,208		4.8	4.8	\$1799 - \$1799
Zoma Sleep	1,189	40	1,149	4.8	4.8	4.8	\$799 - \$1010
Eight Sleep	1,017		1,017		4.7	4.7	\$2495 - \$3495
Bed in a Box	822		822		4.7	4.7	\$759 - \$1799
Happsy	756	78	678	4.3	4.8	4.7	\$1399 - \$1399
Awara (by Resident Home)	747	20	727	3.7	4.7	4.7	\$1199 - \$1199
Tempur Cloud	679	82	597	4.1	4.5	4.5	\$1399 - \$2050
FIN	631		631		4.9	4.9	\$799 - \$1299
Eve	626		626		4.6	4.6	\$384 - \$1079
Loom & Leaf (by Saatva)	543		543		4.9	4.9	\$1699 - \$1699
Luxi	494	14	480	3.6	4.8	4.8	\$749 - \$1099
eLuxury Supply	405	248	157	4.2	4.8	4.4	\$900 - \$1439
Yogabed	307		307		4.6	4.6	\$999 - \$1299
Zotto	261		261		4.8	4.8	\$1175 - \$1175
Tulo (by MFRM)	245	116	129	4.1	3.8	3.9	\$330 - \$940
Molecule	240	3	237	5.0	4.8	4.8	\$899 - \$1899
Wright	200		200		4.9	4.9	\$1755 - \$1995
Zenhaven (by Saatva)	198		198		4.9	4.9	\$2274 - \$2274
Parachute	174		174		4.4	4.4	\$1899 - \$1899
Boll & Branch	129		129		4.9	4.9	\$2500 - \$2500
Aviya	68	23	45	3.8	4.9	4.5	\$1249 - \$2336
Reverie	61		61		4.9	4.9	\$3499 - \$3499
Floyd	35		35		4.7	4.7	\$1195 - \$1195
Sonno (by DWR)	2		2		5.0	5.0	\$1495 - \$1495

Source: Company websites, Amazon.com, and KeyBanc Capital Markets Inc.



Figure 6 Key Growth and Funding Commentary

Company Name	Founded	Location	Funding	Est. # of Employees
BedInABox	2006	Johnson City, TN	Self-funded (undisclosed amount)	11-50
Brooklyn Bedding	1995	Phoenix, AZ	Merged with Nest Bedding in January 2017	201-500
Casper	November 2013	New York, NY	\$55M Series B, June 2015 (\$555M post money valuation) \$170M Series C, 6/17, w / Target @ ~\$75M, June 2017 (\$920M valuation) \$100M Series D, Existing Investors, (Target, NEA, IVP, and Northw est VP) March 2019 (\$1.1B valuation)  Filed S-1 on January 10, 2020. Implied IPO Market Cap of \$665M-\$770M	597 full-time, 234 part-time, 831 total (S-1).
Eight Sleep	2014	n/a	\$6M Seed, 2014 \$10.4M Series A, October 2016 \$5M in Series A, January 2017 \$14M Series B, March 2018 \$40M Series C, November 2019 \$86M Series C, August 2021 (~\$500M valuation)	11-50
Endy	2015	Toronto, Canada	Sleep Country Canada acquired Endy in December 2018 for \$65M cash and up to another \$25M in 3 years based on performance	51-200
Eve	2015	London, UK	\$788K Seed, May 2015 \$3.28M in Series A, November 2015 \$9.16M in Venture Round, August 2016 \$18.3M in Series B, October 2016 £35M raised in IPO, May 2017 (@ £140M valuation) Market Cap of £9.5M as of September 9, 2021	73 (2019 Annual Report)
GhostBed	n/a	Plantation, FL	n/a	51-200
Helix Sleep	2014	Philadelphia, PA	\$800K Seed, July 2015 \$7.35M in Series A, August 2016 Total: \$8.2M	11-50
Leesa	2014	Virginia Beach, VA	\$9M in Series A, July 2015 (\$45M post money valuation) \$23M in Series B, July 2017	11-50
Nest Bedding	2011	Albany, CA	Merged with Brooklyn Bedding in January 2017	51-200
Resident Home (Ow ns Nectar)	n/a	n/a	Initially bootstrapped \$5M Total Series A of \$10.5M Convertible Note of \$16.2M \$12.5M in Venture Equity, January 2020 \$130M Series B, January 2021	170
GoodMorning.com (previously Novosbed)	2009	Long Beach, CA	Self-funded with \$40,000 from family members Have publicly stated that they have no intention of sourcing other funding	11-50
Purple	2015	Alpine, UT	GPAC invested at valuation of ~\$500M in February 2018	~1,600
Saatva (including Loom & Leaf and Zenhaven)	June 2010	Westport, CT	n/a	101-250
Tuft & Needle	2013	Phoenix, AZ	Self-funded (undisclosed amount) Acquired by Serta Simmons in September 2018 (KBCM estimates a transaction value of ~\$350M)	51-200
Yogasleep	2014	Charlotte, NC	Acquired by Marpac in January 2018, terms undisclosed	11-50
Zotto	2015	Irvine, CA	\$94,301 raised via 165 backers on Kickstarter as of October 2, 2015, exceeding its \$75,000 goal	2-10

Source: Company website, Crunchbase, media reports, LinkedIn, and KeyBanc Capital Markets Inc. estimates

Figure 7 Implied Valuations from Industry Datapoints in Recent Years

Acquisitions	Details	Estimated Revenue	Implied Price/Sales
Yogabed	Acquired on January 16th, 2018. Terms undisclosed.	—	—
Brooklyn Bedding	Merged with Nest Bedding in January 2017.	—	—
Tuft & Needle	Acquired by SSB on September 18th, 2018. KBCM estimates a \$350M acquisition price with cash and equity in SSB.	~\$165M (2018)	2.1
Endy	Sleep Country Canada acquired Endy in December 2018 for \$64M cash and up to another \$25M in 3 years based on performance.	~\$20M (2017)	—
Joybird (Furniture)	Acquired by LZB on July 16th, 2018. No additional terms or financial details were disclosed. Acquisition price range of \$68M-\$140M	\$109M (F21 actual)	1.9
Public Market		2021E	
Eve	£35M raised in IPO, May 2017. (@ £140M valuation) Market Cap of £9.5M as of September 9, 2021	£27M	0.4
Purple	GPAC invested at valuation of ~\$500M in February 2018 Market Cap of \$1.6B as of September 9, 2021	\$834M	1.9
Casper	\$55M Series B, June 2015 (\$555M post money valuation) \$170M Series C, 6/17, w/ Target @ ~\$75M, June 2017 (\$920M valuation) \$100M Series D, Existing Investors, (Target, NEA, IVP, and Northwest VP) March 2019 (\$1.1B valuation)  Filed S-1 on January 10, 2020. Implied IPO Market Cap of \$665M-\$770M Market Cap of \$203.9M as of September 9, 2021	\$606M	0.3
Private Market			
Leesa	\$32M total raised. Valuation undisclosed.	-	-
Boll & Branch	\$7M Series A, April 2016 (Silas Capital) \$4.5M Series B, October 2017 (Silas Capital) \$100M, August 2019 \$111.5M total raised. Valuation undisclosed.	-	-
Brooklinen	\$20K Seed Round, August 2014 \$10M Series A, March 2017 (FirstMark) \$50M Series B, March 2020 (Summit Partners) Undisclosed PE round, June 2021 (Freeman Spogli)	-	-
Floyd	\$256K Kickstarter, February 2014 \$123K Kickstarter, December 2015 \$875K Seed Round, May 2016 (La-Z-Boy) \$5.6M Series A, January 2018 (Beringea, La-Z-Boy) \$15M Series B, April 2021 (Walden Ventures)	-	-
Burrow	\$920K Seed Round, August 2016 \$4.3M Seed Round, Dec. 2017 (Red & Blue Ventures) \$14M Series A, March 2018 (New Enterprise) \$9.1M Series B, July 2019 \$750K Venture Round, August 2019 (Alumni Ventures) \$25M Series C, February 2021 (Parkway VC)	-	-
Parachute Home	\$44.8M total raised. Valuation undisclosed.	-	-

Source: Company reports, media reports, Thomson Reuters, Crunchbase, and KeyBank Capital Markets Inc. estimates

**The E-Commerce Opportunity Has Attracted Many Investors in Recent Years.** The sector has drawn significant investor interest in recent years. Most notable are some of the raises Casper and PRPL have done. On January 10, 2020, Casper filed its S-1, announcing plans for an IPO. The filing priced Casper shares between \$17-\$19 per share, implying a market cap of \$665M-\$770M (depending on share price and the overallotment).

As of September 9, 2021, CSPR's market cap was about \$202M. For Casper, this follows several private funding rounds including \$100M in March 2019, which included current investors such as NEA, IVP, Norwest, and Target, as well as several new investors, according to *Furniture Today*. Previously, in June 2015, Casper closed a Series B funding round where the Company raised \$55M at a \$555M post-money valuation. Investors in the second round of funding included celebrities such as Leonardo DiCaprio, Tobey Maguire, and Adam Levine, who joined Ashton Kutcher as investors in the Company. Several of Casper's existing institutional investors also increased their investment in the Company, sources reported. Subsequently, in June 2017, Target is reported to have invested at least \$75M into Casper at a \$920M valuation (reported in the media).

Overweight-rated Purple (PRPL), which went public in in early 2018, completed a 10M share secondary offering at a price of \$7.00 per share in November 2019. The transaction amounted to a total of ~\$70M gross proceeds before deducting underwriting discounts and commissions. Subsequent to the SPAC transaction, PRPL has not tapped the equity markets for funding for itself. However, it has seen several secondary offerings involving investors in the business. Most recently, in April 2021, Coliseum Capital Partners, L.P. and Blackwell Partners LLC completed a secondary offering to sell over 7M shares for a price of \$30.00 per share.

## HOW COVID-19 IS RESHAPING THE MATTRESS INDUSTRY

**Strong Demand in 1H21, but Unit Growth Has Been Moderate.** Industry association ISPA (which tracks a sample of domestic mattress manufacturers) indicated that mattress growth over the last four quarters grew 16.4% y/y. Interestingly, the majority of this growth was driven by AUP, which grew 13.5% y/y over the last four quarters, while unit growth only grew 3.9% y/y. However, given tougher comparisons in 2H, we expect mattress sales growth to moderate in the next two quarters.

**Figure 8 Historical ISPA Quarterly Data**

Units (thousands)	1Q19	2Q19	3Q19	4Q19	2019	1Q20	2Q20	3Q20	4Q20	2020	1Q21	2Q21	TTM
Mattresses	7,664	6,860	7,781	7,872	30,482	8,162	7,540	8,926	8,154	32,765	7,112	8,375	32,567
Domestic	5,406	5,690	6,263	5,797	23,466	5,466	5,473	6,354	5,795	23,076	5,924	6,274	24,348
Imports	2,258	1,169	1,519	2,075	7,016	2,696	2,067	2,572	2,360	9,689	1,188	2,100	8,220
Stationary Foundations	4,670	4,536	5,116	5,109	19,799	4,797	4,297	4,746	4,559	18,324	4,997	5,192	19,494
Domestic	3,250	3,357	3,520	3,057	13,545	2,822	2,964	3,366	2,902	11,831	2,957	3,375	12,600
Imports	1,420	1,179	1,596	2,052	6,254	1,975	1,333	1,380	1,658	6,493	2,040	1,817	6,894
Motion Foundations	514	717	687	671	2,589	689	518	832	1,619	3,903	873	788	4,112
<b>Total</b>	<b>12,848</b>	<b>12,113</b>	<b>13,584</b>	<b>13,652</b>	<b>52,870</b>	<b>13,648</b>	<b>12,355</b>	<b>14,504</b>	<b>14,332</b>	<b>54,992</b>	<b>12,981</b>	<b>14,354</b>	<b>56,172</b>
<b>Average Unit Price</b>													
Mattresses	262.68	275.09	271.96	271.93	268.67	252.01	225.98	269.72	273.58	255.50	305.47	301.57	286.68
Domestic	324.57	309.98	310.59	326.01	314.80	317.78	268.44	334.09	343.47	315.96	348.73	368.32	348.71
Imports	114.48	105.47	112.51	120.82	114.40	118.66	113.51	110.69	101.86	111.53	89.75	102.14	102.95
Stationary Foundations	71.61	72.16	70.05	75.02	71.96	73.42	71.59	68.52	64.16	69.23	73.45	90.97	74.74
Domestic	73.20	74.62	72.93	73.05	73.03	72.43	70.09	70.94	70.06	70.81	72.81	99.75	78.89
Imports	67.96	65.14	63.78	77.97	69.65	74.85	74.93	62.61	53.80	66.35	74.37	74.64	67.14
Motion Foundations	358.37	322.18	324.31	374.66	343.53	404.18	341.63	401.68	293.39	331.57	384.60	399.29	354.96
<b>Total</b>	<b>197.06</b>	<b>201.88</b>	<b>198.56</b>	<b>203.29</b>	<b>198.67</b>	<b>196.93</b>	<b>177.14</b>	<b>211.45</b>	<b>209.20</b>	<b>198.83</b>	<b>221.48</b>	<b>230.76</b>	<b>218.13</b>
<b>Dollars (millions)</b>													
Mattresses	2,013.2	1,887.1	2,116.1	2,140.6	8,189.6	2,056.9	1,703.9	2,407.5	2,230.8	8,371.5	2,172.5	2,525.5	9,336.3
Domestic	1,754.6	1,763.8	1,945.2	1,889.9	7,387.0	1,737.0	1,469.3	2,122.8	1,990.4	7,291.0	2,065.9	2,311.0	8,490.1
Imports	258.5	123.3	170.9	250.7	802.6	319.9	234.6	284.7	240.4	1,080.6	106.6	214.5	846.2
Stationary Foundations	334.4	327.3	358.4	383.3	1,424.8	352.2	307.6	325.2	292.5	1,268.6	367.0	472.3	1,457.0
Domestic	237.9	250.5	256.7	223.3	989.2	204.4	207.7	238.8	203.3	837.8	215.3	336.7	994.1
Imports	96.5	76.8	101.8	160.0	435.6	147.8	99.9	86.4	89.2	430.8	151.7	135.6	462.9
Motion Foundations	184.2	231.0	222.8	251.4	889.4	278.6	177.1	334.2	475.0	1,294.1	335.6	314.6	1,459.4
<b>Total</b>	<b>2,531.8</b>	<b>2,445.4</b>	<b>2,697.3</b>	<b>2,775.3</b>	<b>10,503.8</b>	<b>2,687.7</b>	<b>2,188.6</b>	<b>3,066.9</b>	<b>2,998.3</b>	<b>10,934.2</b>	<b>2,875.1</b>	<b>3,312.4</b>	<b>12,252.7</b>
<b>Y/Y Change</b>													
Units (thousands)	1Q19	2Q19	3Q19	4Q19	2019	1Q20	2Q20	3Q20	4Q20	2020	1Q21	2Q21	TTM
Mattresses	7.7%	-3.3%	-4.6%	5.1%	1.0%	6.5%	9.9%	14.7%	3.6%	7.5%	-12.9%	11.1%	3.9%
Domestic	-4.3%	-5.1%	-0.7%	8.4%	-0.7%	1.1%	-3.8%	1.5%	0.0%	-1.7%	8.4%	14.6%	5.9%
Imports	54.2%	6.6%	-17.7%	-3.1%	7.3%	19.4%	76.8%	69.3%	13.7%	38.1%	-55.9%	1.6%	-1.6%
Stationary Foundations	-0.3%	-8.2%	-1.0%	6.8%	-1.0%	2.7%	-5.3%	-7.2%	-10.8%	-7.4%	4.2%	20.8%	0.9%
Domestic	-14.3%	-11.7%	-8.7%	-4.4%	-10.1%	-13.2%	-11.7%	-4.4%	-5.1%	-12.7%	4.8%	13.9%	1.9%
Imports	59.1%	3.6%	21.8%	29.5%	27.1%	39.1%	13.1%	-13.5%	-19.2%	3.8%	3.3%	36.3%	-0.9%
Motion Foundations	-34.2%	-28.0%	-20.4%	11.5%	-20.2%	34.1%	-27.7%	21.1%	141.3%	50.8%	26.6%	52.0%	60.2%
<b>Total</b>	<b>2.1%</b>	<b>-7.0%</b>	<b>-4.2%</b>	<b>6.0%</b>	<b>-1.0%</b>	<b>6.2%</b>	<b>2.0%</b>	<b>6.8%</b>	<b>5.0%</b>	<b>4.0%</b>	<b>-4.9%</b>	<b>16.2%</b>	<b>5.5%</b>
<b>Average Unit Price</b>													
Mattresses	-0.6%	0.6%	2.8%	5.6%	1.8%	-4.1%	-17.9%	-0.8%	0.6%	-4.9%	21.2%	33.5%	13.5%
Domestic	7.3%	2.2%	0.7%	3.5%	3.1%	-2.1%	-13.4%	7.6%	5.4%	0.4%	9.7%	37.2%	14.6%
Imports	-2.7%	-4.2%	-1.6%	5.5%	0.0%	3.7%	7.6%	-1.6%	-15.7%	-2.5%	-24.4%	-10.0%	-14.5%
Stationary Foundations	4.9%	7.8%	4.1%	5.9%	6.0%	2.5%	-0.8%	-2.2%	-14.5%	-3.8%	0.0%	27.1%	1.6%
Domestic	5.4%	8.1%	5.6%	-2.2%	4.7%	-1.1%	-6.1%	-2.7%	-4.1%	-3.0%	0.5%	42.3%	8.5%
Imports	7.3%	8.7%	2.9%	23.7%	12.1%	10.1%	15.0%	-1.8%	-31.0%	-4.7%	-0.6%	-0.4%	-9.8%
Motion Foundations	0.5%	-6.4%	-7.4%	7.1%	-1.8%	12.8%	6.0%	23.9%	-21.7%	-3.5%	-4.8%	16.9%	2.8%
<b>Total</b>	<b>0.0%</b>	<b>0.7%</b>	<b>0.3%</b>	<b>5.6%</b>	<b>1.5%</b>	<b>-0.1%</b>	<b>-12.3%</b>	<b>6.5%</b>	<b>2.9%</b>	<b>0.1%</b>	<b>12.5%</b>	<b>30.3%</b>	<b>12.6%</b>
<b>Dollars (millions)</b>													
Mattresses	7.0%	-2.6%	-1.9%	11.0%	2.8%	2.2%	-9.7%	13.8%	4.2%	2.2%	5.6%	48.2%	16.4%
Domestic	2.7%	-3.0%	-0.1%	12.2%	2.4%	-1.0%	-16.7%	9.1%	5.3%	-1.3%	18.9%	57.3%	20.6%
Imports	50.1%	2.1%	-19.0%	2.2%	7.3%	23.8%	90.3%	66.6%	-4.1%	34.6%	-66.7%	-8.6%	-13.3%
Stationary Foundations	4.6%	-1.0%	3.1%	13.1%	5.0%	5.3%	-6.0%	-9.3%	-23.7%	-11.0%	4.2%	53.5%	4.0%
Domestic	-9.6%	-4.5%	-3.6%	-6.5%	-5.9%	-14.1%	-17.1%	-7.0%	-9.0%	-15.3%	5.3%	62.1%	11.4%
Imports	70.7%	12.6%	25.4%	60.2%	42.4%	53.2%	30.1%	-15.1%	-44.3%	-1.1%	2.6%	35.7%	-9.1%
Motion Foundations	-33.9%	-32.6%	-26.3%	19.4%	-21.6%	51.2%	-23.3%	50.0%	88.9%	45.5%	20.5%	77.6%	56.9%
<b>Total</b>	<b>2.1%</b>	<b>-6.4%</b>	<b>-3.9%</b>	<b>12.0%</b>	<b>0.5%</b>	<b>6.2%</b>	<b>-10.5%</b>	<b>13.7%</b>	<b>8.0%</b>	<b>4.1%</b>	<b>7.0%</b>	<b>51.3%</b>	<b>18.4%</b>

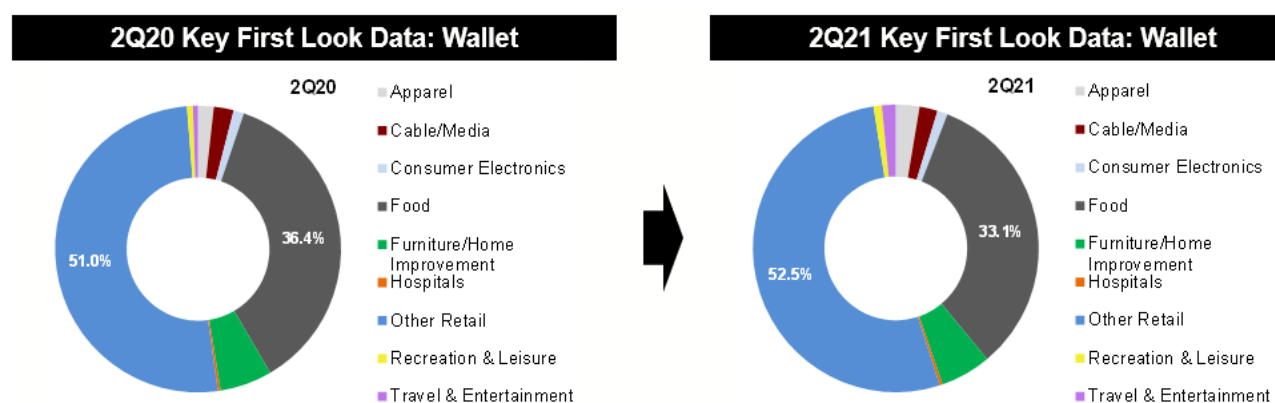
Source: International Sleep Products Association and KeyBanc Capital Markets Inc.

**Figure 9 Key First Look Wallet**

Our Key First Look Data suggests that 2Q spending for furniture/home improvement slightly decreased as a percentage of total spending, losing share to apparel, travel & entertainment, recreation & leisure, hospitals, and other retail.

Category Share of Purchases			
Categories	2Q20	2Q21	Y/Y Change in Share (bps)
Apparel	1.8%	2.7%	90
Cable/Media	2.2%	2.0%	(21)
Consumer Electronics	1.2%	1.2%	(2)
Food	36.4%	33.1%	(327)
Furniture/Home Improvement	5.9%	5.7%	(19)
Hospitals	0.3%	0.3%	3
Other Retail	51.0%	52.5%	149
Recreation & Leisure	0.7%	0.9%	28
Travel & Entertainment	0.6%	1.6%	98

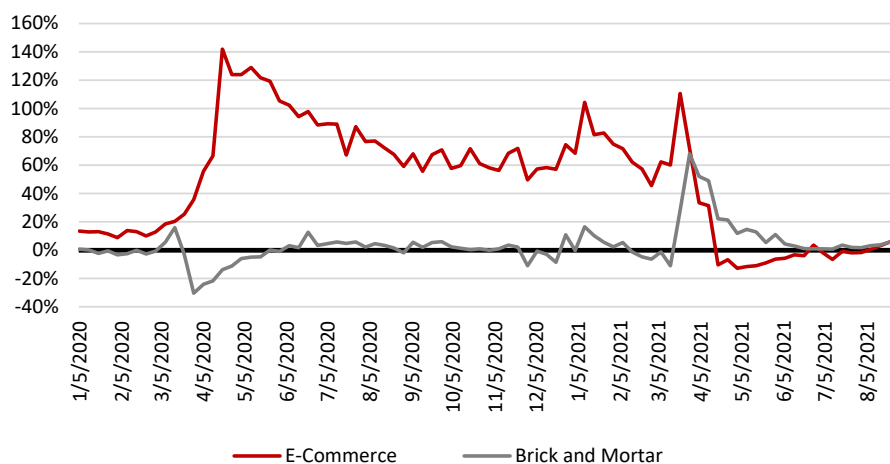
Source: KeyBank proprietary credit and debit card data

**Figure 10 2Q21 Key First Look Wallet**


Source: KeyBank proprietary credit and debit card data

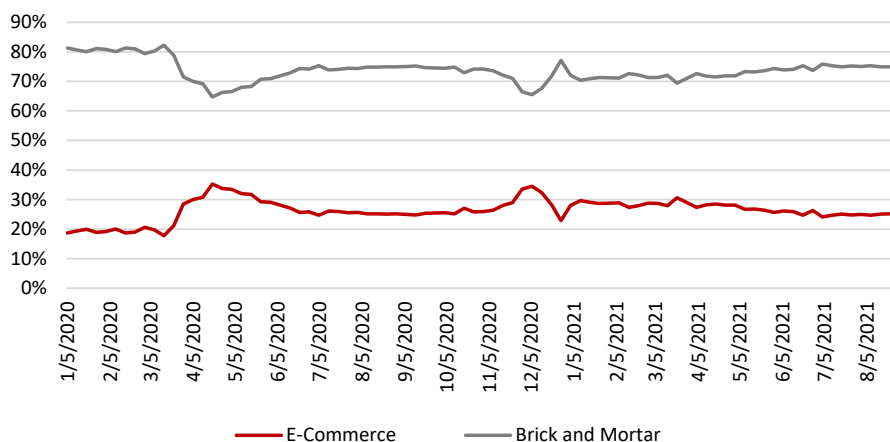
**Figure 11 Retail Dollar Spend: E-Commerce/DTC vs. Brick-and-Mortar Weekly Y/Y Change**

*As a result of the pandemic, consumers have shifted their spending to online platforms. However, as the economy has reopened, consumers have shifted some spending back to brick-and-mortar.*



Source: KeyBank proprietary credit and debit card data

**Figure 12 Retail Spending Mix: E-Commerce/DTC vs. Brick-and-Mortar (Weekly)**

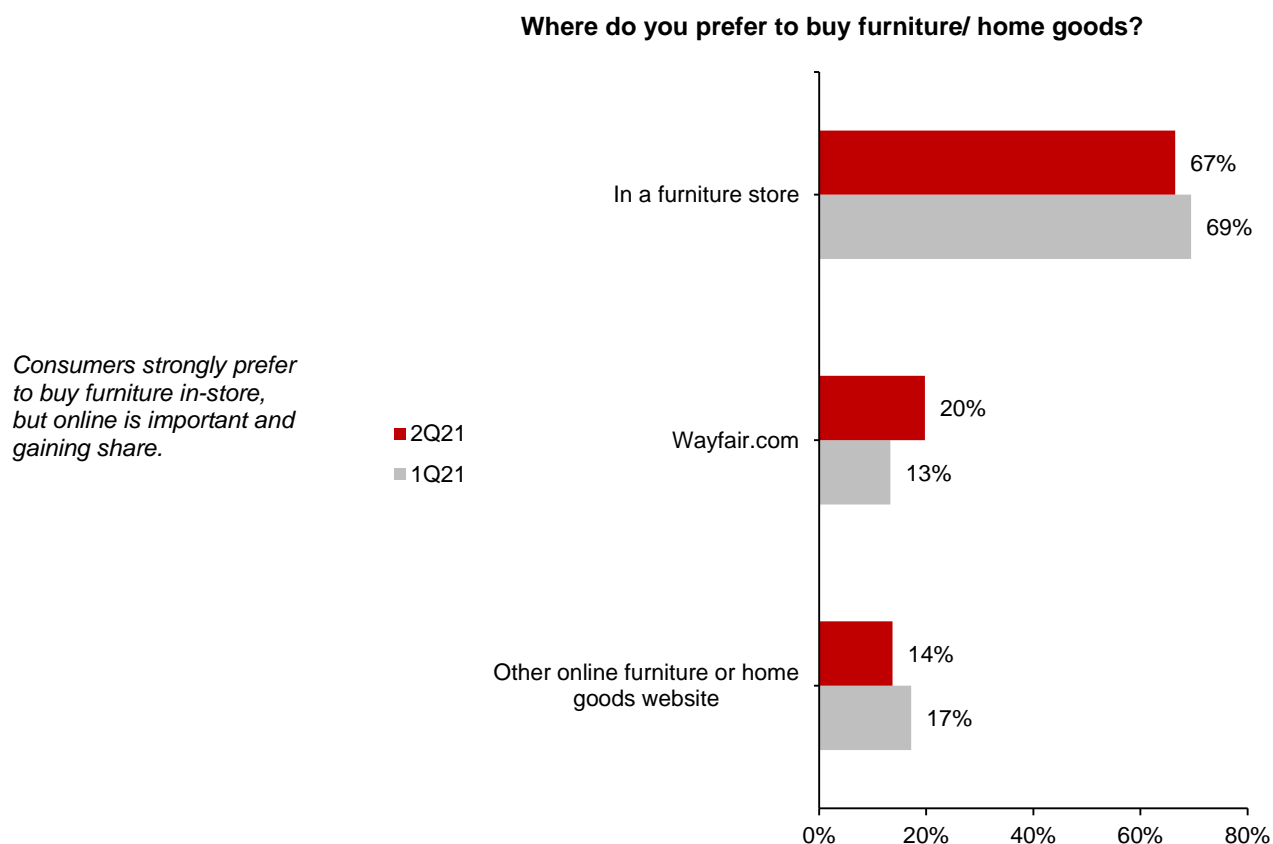


Source: KeyBank proprietary credit and debit card data

## CONSUMER SURVEY RESULTS

**KBCM Consumer Survey.** Each quarter, we survey consumers on many topics, including furniture and mattress-related questions. See our latest survey [here](#), which included 1,048 respondents. While respondents prefer to buy furniture in-store, online is still important. More specifically, younger respondents have greater adoption of online shopping for buying furniture/home goods, while older generations strongly prefer to buy in-store. We also asked questions on mattress purchase intent and brand awareness. Results show that 36% of respondents are considering purchasing a mattress in the next three months, and that Tempur-Pedic, Sealy, and Serta are the most considered brands.

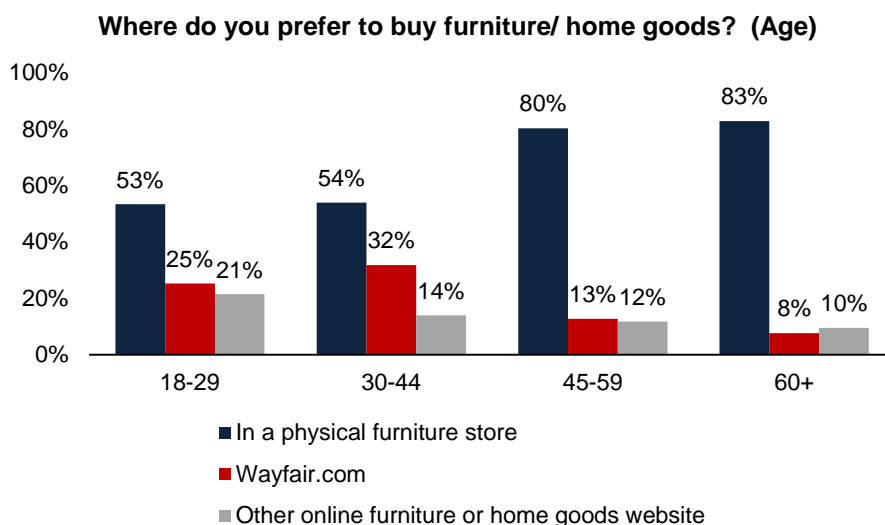
**Figure 13 Shopping Preference for Furniture/Home Goods**



Source: KBCM Consumer Survey Results

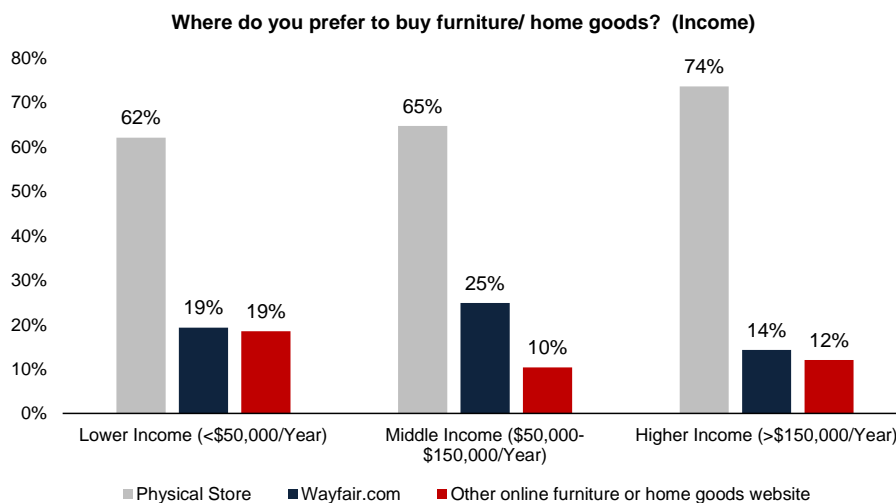
**Figure 14 Shopping Preference for Furniture/Home Goods: By Age Group**

*Even though COVID-19 has greatly accelerated DTC, the majority of consumers still prefer to purchase furniture in-store.*



Source: KBCM Consumer Survey Results

**Figure 15 Shopping Preference for Furniture/Home Goods: By Income**

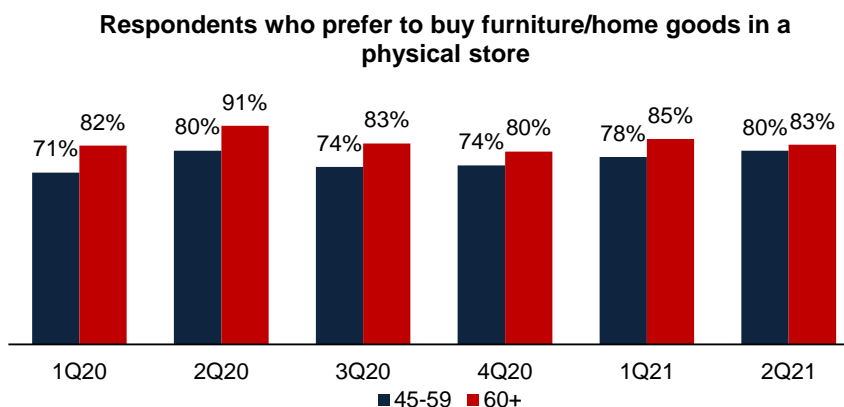


Source: KBCM Consumer Survey Results



**Figure 16 Shopping Preferences of Older Generations for Furniture/Home Goods**

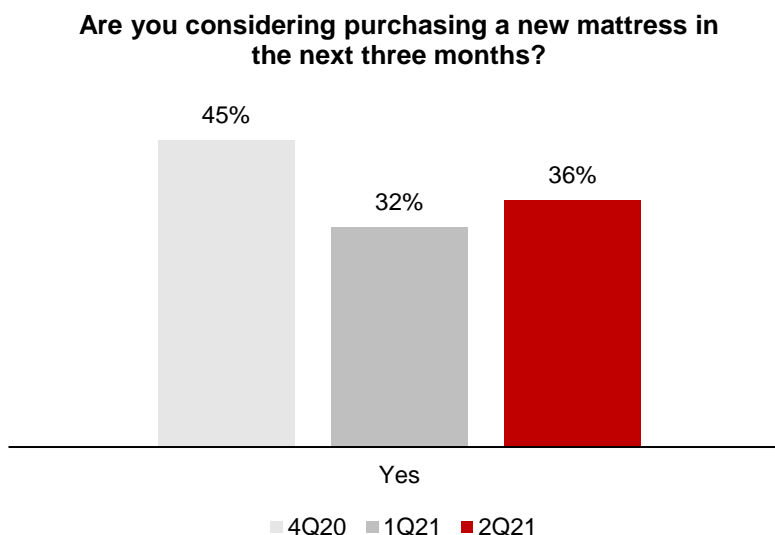
*Older generations strongly prefer to buy furniture and home goods in a physical store.*



Source: KBCM Consumer Survey Results

**Figure 17 Mattress Purchase Intent**

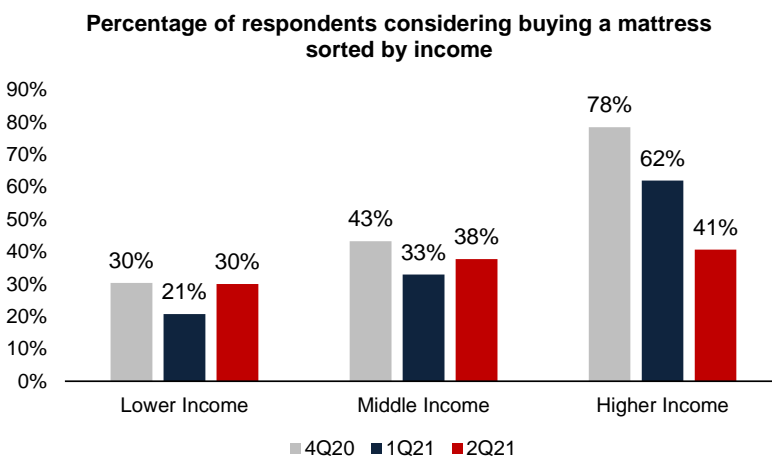
*36% of respondents say they are considering a mattress purchase in the next three months, up from 1Q21 levels but down from 4Q20 levels.*



Source: KBCM Consumer Survey Results

**Figure 18 Mattress Purchase Intent by Income**

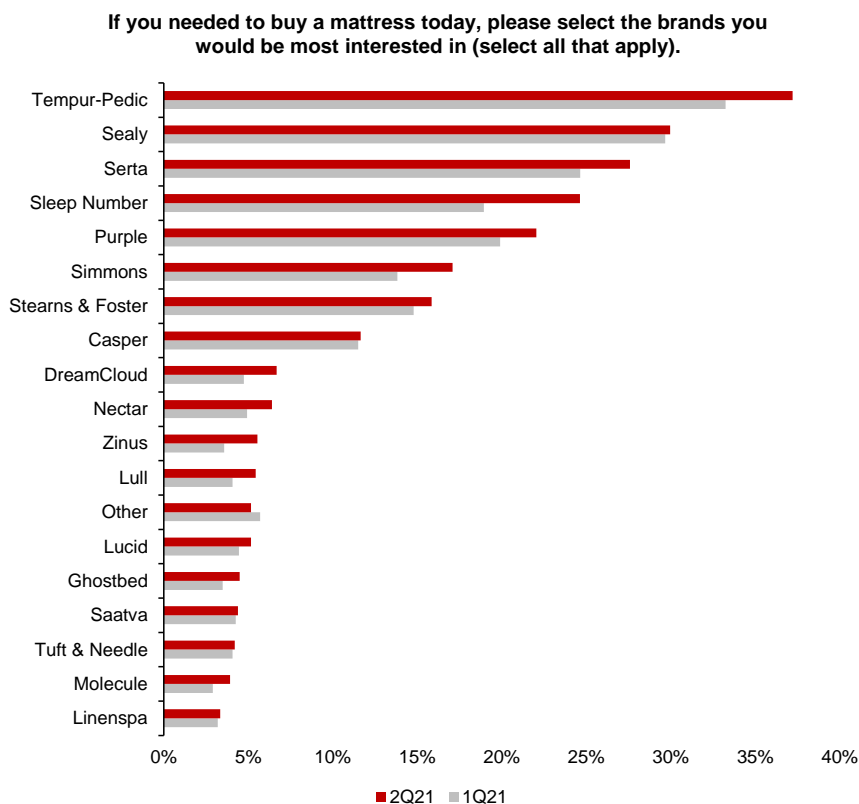
*Higher-income respondents indicated they are more likely to purchase a mattress in the next three months than lower- and middle-income respondents.*



Source: KBCM Consumer Survey Results

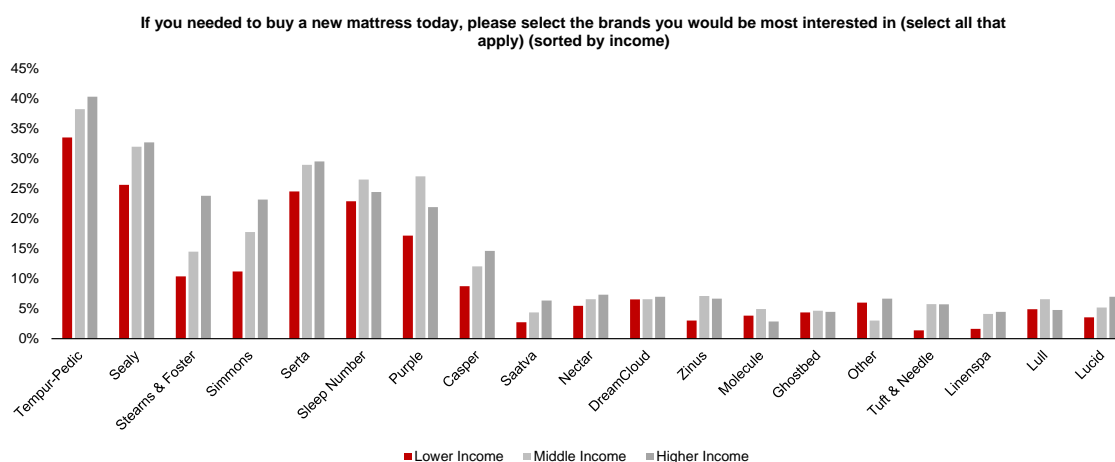
**Figure 19 Mattress Brand Interest**

*Our survey indicates Tempur-Pedic, Sealy, and Serta were the most considered mattress brands, with Purple as the strongest “emerging” brand.*



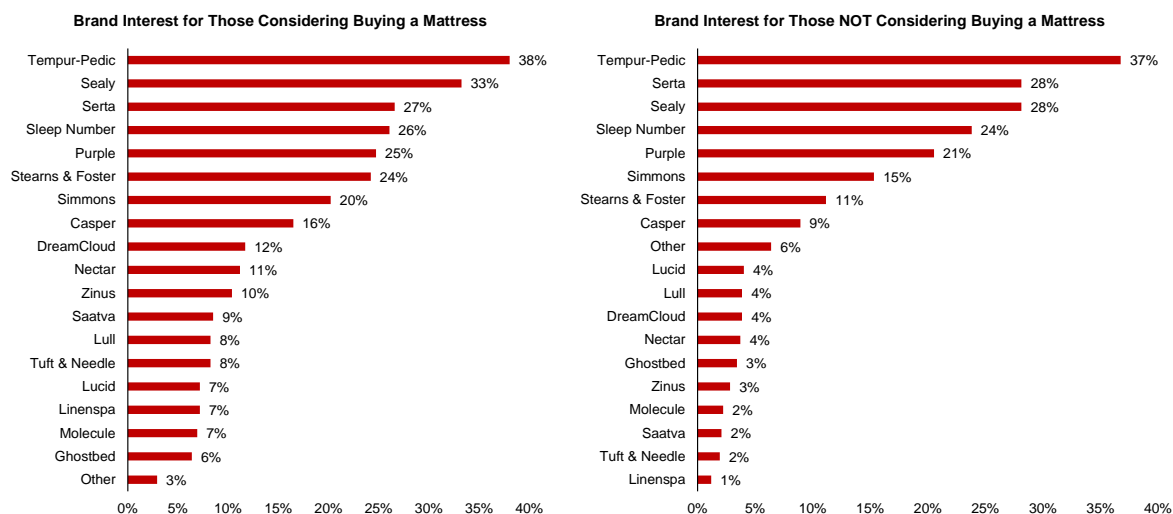
Source: KBCM Consumer Survey Results

**Figure 20 Mattress Brand Interest by Income**



Source: KBCM Consumer Survey Results

**Figure 21 Mattress Brand Interest by Intent to Purchase**



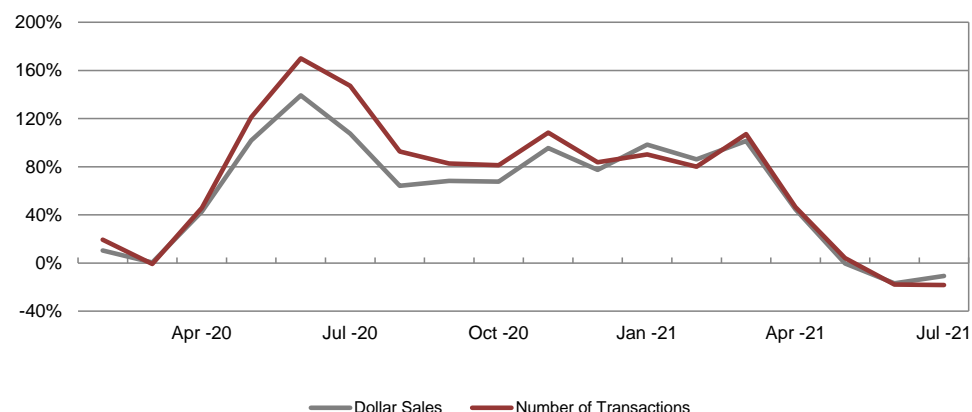
Source: KBCM Consumer Survey Results

## KEY FIRST LOOK CREDIT/DEBIT CARD DATA: SLOWING E-COMMERCE GROWTH

**Figure 22 Leading Digital Mattress Brands – Key First Look Data: Industry Rolling Three-Month Y/Y Growth**

*In 2020, leading digital mattress brands saw robust growth, fueled by “Nesting” trends and stay-at-home behavior that had favored e-commerce over physical retail.*

*However, more recently, our proprietary data suggests that the leading digital mattress brands have decelerated in recent months against difficult comparisons.*



*Note: This sample includes five of the largest digital emerging mattress brands.*

*Source: KeyBank proprietary credit and debit card data and KeyBanc Capital Markets Inc. estimates*

**Figure 23 Leading Digital Mattress Brands – Key First Look Data: Key Industry Metrics**

Digital Mattress Brands	Dollar Sales	Number of Transactions	Avg. Price / Transaction
LTM Y/Y Growth	35%	34%	1%
Last 6 Months Y/Y Growth	11%	7%	4%
LTM # Months w/ Negative Y/Y Growth	3	4	6
LTM # Months w/ Positive Y/Y Growth	9	8	6

*Note: This sample includes five of the largest digital emerging mattress brands.*

*Source: KeyBank proprietary credit and debit card data and KeyBanc Capital Markets Inc. estimates*

**Figure 24 Basket of Leading Digital Mattress Brands – Key First Look Data**

Date	Dollar Sales		Number of Transactions		Average Transaction Price	
	Monthly Y/Y Growth	Rolling 3M Y/Y Growth	Monthly Y/Y Growth	Rolling 3M Y/Y Growth	Monthly Y/Y Growth	Rolling 3M Y/Y Growth
Jul -21	13.6%	(10.7%)	(6.4%)	(18.2%)	21.4%	10.9%
Jun -21	(0.8%)	(16.7%)	(14.4%)	(17.8%)	15.9%	2.7%
May -21	(30.2%)	(0.4%)	(28.4%)	4.1%	(2.6%)	(4.6%)
Apr -21	(10.2%)	44.6%	(6.6%)	46.4%	(3.9%)	(2.9%)
Mar -21	103.0%	101.5%	118.7%	107.2%	(7.2%)	(1.8%)
Feb -21	87.5%	86.1%	83.7%	80.0%	2.1%	2.1%
Jan -21	121.9%	98.4%	122.7%	90.1%	(0.4%)	2.5%
Dec -20	57.6%	77.5%	50.0%	83.8%	5.1%	(7.9%)
Nov -20	120.9%	95.6%	114.1%	108.3%	3.2%	(8.1%)
Oct -20	48.8%	67.6%	100.0%	81.3%	(25.6%)	(9.1%)
Sep -20	110.4%	68.3%	108.3%	82.8%	1.0%	(8.2%)
Aug -20	45.8%	64.3%	47.0%	92.7%	(0.8%)	(14.9%)
Jul -20	55.7%	107.5%	100.8%	147.3%	(22.5%)	(17.1%)
Jun -20	98.7%	139.3%	146.7%	170.1%	(19.5%)	(12.0%)
May -20	164.1%	101.8%	190.4%	121.2%	(9.1%)	(8.3%)
Apr -20	147.9%	42.7%	167.6%	45.9%	(7.4%)	(0.7%)
Mar -20	(0.4%)	0.4%	8.6%	(0.8%)	(8.3%)	0.2%
Feb -20	5.8%	10.5%	(8.4%)	19.4%	15.6%	(6.9%)

*Note: This sample includes five of the largest digital emerging mattress brands.*

*Source: KeyBank proprietary credit and debit card data and KeyBanc Capital Markets Inc. estimates*

## CASPER UPDATE FOLLOWING FIRST YEAR AS PUBLIC COMPANY

**Casper Is Building an End-to-End Sleep Brand.** Our work continues to indicate that Casper has built one of the strongest digitally native mattress brands. In fact, for four years of conducting our “Google Organic Search” measurement, Casper has consistently ranked on page one. Additionally, its unaided brand awareness is the highest among its competition.

**Casper Completed Its IPO in February 2020.** Casper filed for its IPO in January 2020, initially pricing in the range of \$17-\$19 per share, which, just over a week later, was lowered to \$12-\$13 and was finally issued at a price of \$12. Casper raised \$88.4M at a market cap valuation of ~\$475M (well below the \$1.1B valuation set during its last private funding round by investors back in March 2019), representing ~1.2x revenues.

**2020 Financial Performance.** In 2020, Casper generated revenues of \$497.0M, an increase of 13.1% y/y. Gross margin was 51.1%, an increase of 204 bps y/y from 49.0% in 2019, driven by improved product mix, favorable shipping terms, and more efficient COGS management. Operating loss improved 15.5% y/y to \$75.0M, or 15.1% of revenue, compared to 20.2% in 2018. Net loss decreased 3.7% y/y to \$89.6M. Adjusted EBITDA loss improved to \$45.3M, compared to \$70.7M in 2019.

**Recent Trends (2Q21).** 2Q sales increased 37.7% to an all-time quarterly record of \$151.8M, reflecting continued strong demand across product categories and sales channels despite continued supply constraints. The increase in sales was driven by 79% growth in retail partnership channels (34.4% of revenue), as well as 31% y/y growth in direct-to-consumer (65.6% of revenue), offset by the exit of EU international operations last year. North America direct-to-consumer sales increased 31.3% y/y (or 70% above 2Q19) to \$99.5M, driven by strong e-commerce demand, both in terms of traffic as well as AOV. Casper expanded its retail presence to 72 stores during the quarter vs. 59 at 2Q20 and 67 at 4Q20. Sales to retail partners increased 78.9% y/y to \$52.2M, driven by sales growth at existing partners, and rapid expansion of the retail partnership channel. Recall, the Company previously unveiled its “Casper Cooling Collection” in late April, which is a new premium line of cooling mattress and sleep products designed to alleviate nighttime overheating, which is one of the leading concerns among consumers shopping for a mattress, according to management. Management noted that the launch of the Snow mattress line and cooling collection has resulted in an increased AOV sequentially in e-commerce channel as consumers opted for the premium product. Casper had over 25 retail partners as of June 30, including Amazon, Costco, Hudson's Bay, Target, Rooms to Go, Raymour & Flanigan, Sam's Club, Ashley HomeStore, Denver Mattress, Mathis Brothers, Nordstrom, Sit 'n Sleep, City Mattress, and Bed Bath & Beyond.

**3Q21 and 2021 Guidance.** Management provided guidance for 3Q21 and while updating FY21 guidance, reflecting certain business trends, seasonal factors, and the continuing impact of industry-wide supply chain challenges. The Company noted that strong demand trends have continued into 3Q, and expects net revenue of \$152M-\$159M, representing growth of 23.1-28.8% y/y, driven by continued growth in CSPR's e-commerce channel, improving foot traffic in stores, and the expansion of its retail partnerships. At the midpoint, this range represents 25.9% consolidated growth and 26% growth for its North America business in 3Q21. This compares to the Street consensus of \$156.3M, representing growth of 26.6%. Adjusted EBITDA is expected to be \$9.5M-\$12.5M vs. consensus of slightly positive (\$0.05M), as compared to an EBITDA loss of \$7.5M in 3Q20 and \$45.3M in FY20. Additionally, the Company expects a net loss of \$19.6M-\$22.6M for 3Q21 vs. consensus of (\$8.7M). Management continues to see cost pressure through 3Q and into 4Q due to inflationary pressures, but expects to see lower cost per units toward the end of 2021 as capacity constraints start to ease. For the full-year 2021, the Company continues to expect revenue of \$580M-\$610M (reiterated), representing growth of 16.7-22.7% y/y (vs. consensus of \$608.0M, representing growth of 22.3%). At the midpoint, this revenue range represents 19.7% y/y growth and 25.8% North America growth for 2021. Encouragingly, management noted week-over-week improvements in foot traffic and expects continued growth in the e-commerce channel along with strong growth in retail partnerships. CSPR pushed back its timeline of achieving positive adjusted EBITDA to during 2022 (vs. expectations to achieve profitability by 2H21), assuming that

manufacturing and supply chain capacity increases; materials shortages and labor and shipping constraints lessen; and inflationary pressure on input materials subsides. Management remains focused on recovering gross margin of over 50% in 2022 as the Company manages its supply chain, cost of goods, and overall operations. Furthermore, CSPR anticipates that media rates will remain high throughout the remainder of 2021; however, the Company will continue to adjust media mix to maximize its reach at the lowest available cost. The Company now expects 2021 capital expenditures of \$10M-\$13M (vs. <\$10M previously, and \$15.9M spent in 2020), as Casper is making investments into its supply chain and the replatforming of its website.

## PURPLE HAS BEEN HITTING ITS STRIDE AS A PUBLIC COMPANY

**Purple Listed as Public Company in Early 2018.** We have tracked Purple essentially from the time of its launch, closely following its rapid emergence and growth. Purple is uniquely positioned to leverage its proprietary Purple material, which it manufactures itself, and which appeals to many different consumer areas where comfort is important. In early November of 2017, Purple Innovation and Global Partner Acquisition Corp. jointly announced a definitive merger agreement. This resulted in Purple trading as a publicly listed company in early 2018, coincident with an investment by GPAC that valued Purple at about \$500M, or \$10.00 per share. While results were choppy following its IPO, PRPL has executed well under CEO Joe Megibow. We launched coverage in November 2019 with an Overweight rating. [See our initiation report here.](#)

*Purple's key point of differentiation is the proprietary and unique top layer of its beds, which have a way of feeling soft and firm at the same time.*

**What Is Purple?** Purple is a mattress manufacturer and retailer that specializes in innovative bedding products within the broader comfort area. Purple's key point of differentiation is the proprietary and unique top layer of its beds, which feel soft and firm at the same time. Purple's mattress has a top layer of Hyper-Elastic Polymer, which is a mineral oil-based, food grade material and 100% non-toxic, on a base layer of polyurethane foam (and pocket coils in the hybrid models). In addition to the chemistry of the material, the geometric form of the Purple layer is important. The layer has buckling columns (that look like a grid or waffle) that cradle your pressure points, while providing overall support for other areas of your body. Purple manufactures the Purple layer, assembles its products itself, and has been ramping up production capabilities. In 2018, its line was expanded to include models with an innerspring support base, in addition to the foam support base.

**Figure 25 The Current Purple Brand Architecture**

Name	Support Material	Inches of Purple Smart Comfort Grid	Price Queen (\$)
The Purple Mattress	Foam	2	\$1,199
The Purple Plus Mattress	Foam	2+2	\$1,599
Purple Hybrid	Innerspring	2	\$1,974
Purple Hybrid Premier	Innerspring	3	\$2,549
Purple Hybrid Premier	Innerspring	4	\$3,349
Kid Mattress (Tw in)	Foam	2	\$574
The Purple Mattress - Kids (Tw in) For Teens and Adults	Foam	2	\$674

*Source: Company website as of September 8, 2021, and KeyBanc Capital Markets Inc.*

**CEO Joe Megibow Has Driven a “Turnaround” at This Growth Company.** On October 1, 2018, Joe Megibow was appointed CEO of Purple Innovation. We believe Mr. Megibow has successfully driven a “turnaround” at Purple, working to improve operational efficiencies at the Company, while also positioning the Company for continued growth. Mr. Megibow was previously Senior Vice President and Chief Digital Officer at American Eagle Outfitters, Inc., where he oversaw the transformation and growth of American Eagle's \$550M+ direct-to-consumer business between 2012 and 2015. Previously, he held senior roles with Expedia, including VP and General Manager. Most recently, Mr. Megibow was an independent consultant to Advent International, a \$41B private equity firm. Since Mr. Megibow joined the Company, PRPL has done an impressive job of improving profitability and meeting or exceeding expectations communicated to investors.



**Strong 2Q21 Sales Growth, in Line with Guidance.** On August 19, PRPL reported 2Q sales grew 10.6% to \$182.6M, which was in line with the Company's most recent guidance of \$175M-\$185M (which represented growth of 6.0-12.4%), and above the consensus of \$181.5M. Sales growth was driven primarily by wholesale, with DTC revenue declining 19.9% y/y and wholesale revenue growing 233.2% y/y. Recall, management [previously noted](#) on June 29 that temporary production challenges (owing to an accident at one of the Company's facilities in May) were expected to reduce production for ~10 weeks, causing shipment backlogs, and negatively impact both 2Q and 3Q revenue. Purple increased production throughout July and reached full capacity during the last week of July. Encouragingly, had the Company not been faced with its production issue, management believes the Company would have been within its guidance ranges established during the 1Q21 call (sales of \$860M-\$900M and EBITDA of \$95M-\$105M). Additionally, the Company estimates \$50M in lost sales in 2Q and 3Q combined (with \$20M lost in 2Q) and ~\$22M in reduced gross margin dollars (with \$9M lost during 2Q). This loss was driven by delays in fulfilling mattresses across both channels, as well as a slowing in wholesale door openings. Management noted that, as consumers return to physical retail, the Company's digital channel was the most impacted by the events of 2Q, and thus management made the decision to allocate more inventory to wholesale partners.

**2021 Guidance.** Management resumed 2021 guidance (after withdrawing it on June 29), forecasting revenue of \$820M-\$850M (vs. \$860M-\$900M previously, and the consensus of \$821.6M), representing growth of 26.5-31.1% y/y, and adjusted EBITDA of \$78M-\$88M (vs. \$95M-\$105M previously), and the consensus of \$81.9M, representing growth of -11.5% to -0.1% y/y. Additionally, the Company plans on adding 400-500 stores in 2H, bringing the total to 2,700-2,800. Purple ended 2Q with nine Max machines (having retired Max 1 and brought HMax 1 online in limited capacity), with expectations for two more Max machines to come online in 2H and an additional two in 2022.

**Encouraging LT Targets.** At its analyst day in June 2021, management announced three- to five-year LT targets, with plans to achieve \$2.0B-\$2.5B of revenue with adjusted EBITDA margins of 14-15% within the next three to five years. The Company's LT sales target of \$2.0B-\$2.5B represents 208-285% growth (or \$1.35B-\$1.85B of growth) vs. revenue of \$650M in 2020. Approximately \$600M+ of this growth is expected to be achieved by higher unit volume and prices in PRPL's existing assortment; \$400M+ of this growth is expected to be driven by the introduction of two+ new mattresses priced above \$4K; \$400M+ of revenue growth should be driven by non-mattress goods, particularly bases; and \$75M+ of growth is expected to be driven by PRPL's exclusive partnership with Sleep Country Canada. The Company also targets 200 company-owned showrooms by 2025 (vs. 13 as of today), while growing its wholesale door count to 3,500 (vs. >2,300 currently). Channel mix is expected to remain at roughly two-thirds DTC and one-third wholesale in the LT. Adjusted EBITDA margins are expected to benefit from mix shift, more efficient promotions, manufacturing efficiency gains, fixed cost leverage, scaled distribution, and input cost management, partially offset by reinvestments for growth. Over the next few years, the Company expects R&D expense to track at roughly 2% of sales, G&A at roughly 7-8% of sales, and sales and marketing expense below 30% of sales.

**New Products and Initiatives.** At its analyst day, the Company provided details on products and initiatives that will help drive its three- to five-year outlook. Management plans on elevating its product by introducing two+ new mattresses priced above \$4K. Currently, the highest priced mattress Purple offers is its Hybrid Premiere 4, which sells for \$3,099 (for a queen model). By adding more premium mattresses, which could range up to \$6K+, the Company expects to raise its ASP to ~\$2,400 in three to five years from ~\$1,900 currently. These higher priced mattresses would also benefit margins. Additionally, the Company expects to grow non-mattress annual revenue to \$400M-\$500M from ~\$140M currently, driven by standalone products (cushions, for example) as well as mattress complements such as bases and foundations. The Company also discussed its owned showroom expectations, citing a target of 200+ in the U.S. by 2025 (with about 30+ stores expected this year). Finally, AI, intuitive adjustability, and sleep monitoring all serve as potential areas for future innovation, which could come in the form of partnerships or first-party developments.

**“Purple Plus” Model Introduced on PRPL’s U.S. Website.** In our late-August channel checks, we noticed the introduction of the “Purple Plus” mattress to PRPL’s U.S. website. Recall that the “Purple Plus” mattress was first introduced as an exclusive model to the Canadian market to support PRPL’s partnership with Sleep Country Canada (as announced on October 19, 2020). The “Purple Plus” model is listed as a premium version of the basic “Purple Mattress” and costs \$400 more than the basic model. Furthermore, the “Purple Plus” model contains an additional 2” of premium comfort foam while providing more breathability, additional dynamic support, and enhanced responsiveness. The introduction expands the number of mattresses available on PRPL’s U.S. website to six models from five models previously (or five from four, excluding the kid mattress). Looking ahead, we believe the introduction supports PRPL’s LT strategy outlined at its analyst day, where the Company announced plans to achieve revenue of \$2.0B-\$2.5B over the next three to five years, representing \$1.35B-\$1.85B of growth vs. revenue of \$650M in 2020, with \$400M+ of this growth driven by the introduction of two or more new premium mattresses

## UPDATED VIEWS ON PURPLE'S MARKET SHARE POTENTIAL

**Market Size and PRPL's Path Forward.** The U.S. mattress industry is estimated to be about \$20B. If PRPL were able to get 10% market share, that would imply ~\$1.3B of revenue for the Company, assuming a 50/50 split between PRPL's DTC and wholesale channels. Assuming a more DTC-heavy mix (two-thirds of total revenue), this scenario would imply PRPL revenue of ~\$1.5B. This estimate can have upside if PRPL is able to achieve over 10% of U.S. market share and if the Company is able to grow as successfully in the ~\$1.4B Canadian market, to which PRPL has only recently gained access. We believe over 10% share is achievable in the years ahead, which could potentially yield a \$45+ stock price (assuming 16% EBITDA margin and a multiple of 12.5x). However, PRPL's LT revenue target of \$2.0B-\$2.5B implies roughly 15% market share, which could potentially yield a \$60-\$75 stock over time, in our view. Over a longer horizon, our work suggests PRPL's market share could grow to 20%, which, depending on mix and multiple assumptions, can yield a stock in the \$80-\$95 range. Ultimately, we believe there is potential for the stock to appreciate by roughly \$25 for every 5% market share that PRPL captures. Our sensitivity table is available upon request.

**Figure 26 PRPL's LT Market Share Potential**

U.S. Long-Term Scenarios	U.S. Retail Market Size	Dollar Market Share (%)	PRPL Market Share (\$)	DTC % of Revenue	Wholesale % of Revenue	Implied PRPL Revenue	Long-Term EBITDA	Implied Enterprise Value	Implied Market Cap	Implied Share Price
10% Market Share, Even Split Between DTC and Wholesale	\$20,000	10%	\$2,000	50%	50%	\$1,333	\$213	\$2,667	\$2,734	\$40.87
10% Market Share, Larger DTC Presence	\$20,000	10%	\$2,000	67%	33%	\$1,500	\$240	\$3,000	\$3,068	\$45.86
15% Market Share, Even Split Between DTC and Wholesale	\$20,000	15%	\$3,000	50%	50%	\$2,000	\$320	\$4,000	\$4,068	\$60.80
15% Market Share, Larger DTC Presence	\$20,000	15%	\$3,000	67%	33%	\$2,250	\$360	\$4,500	\$4,568	\$68.28
20% Market Share, Even Split Between DTC and Wholesale	\$20,000	20%	\$4,000	50%	50%	\$2,667	\$427	\$5,333	\$5,401	\$80.73
20% Market Share, Larger DTC Presence	\$20,000	20%	\$4,000	67%	33%	\$3,000	\$480	\$6,000	\$6,068	\$90.70

Canada Long-Term Scenarios	Canada Retail Market Size	Dollar Market Share (%)	PRPL Market Share (\$)	DTC % of Revenue	Wholesale % of Revenue	Implied PRPL Revenue	Long-Term EBITDA	Implied Enterprise Value	Implied Market Cap	Implied Share Price
10% Market Share, Even Split Between DTC and Wholesale	\$1,600	10%	\$160	50%	50%	\$107	\$17	\$213	\$281	\$4.20
10% Market Share, Larger DTC Presence	\$1,600	10%	\$160	67%	33%	\$120	\$19	\$240	\$308	\$4.60

U.S. + Canada Long-Term Scenarios	Retail Market Size	Dollar Market Share (%)	PRPL Market Share (\$)	DTC % of Revenue	Wholesale % of Revenue	Implied PRPL Revenue	Long-Term EBITDA	Implied Enterprise Value	Implied Market Cap	Implied Share Price
10% U.S. Market Share + 10% Canada Market Share, Even Split Between DTC and Wholesale	\$21,600	10%	\$2,160	50%	50%	\$1,440	\$230	\$2,880	\$3,015	\$45.07
10% U.S. Market Share + 10% Canada Market Share, Larger DTC Presence	\$21,600	10%	\$2,160	67%	33%	\$1,620	\$259	\$3,240	\$3,375	\$50.45
15% U.S. Market Share + 10% Canada Market Share, Even Split Between DTC and Wholesale	\$21,600	15%	\$3,160	50%	50%	\$2,107	\$337	\$4,213	\$4,349	\$65.00
15% U.S. Market Share + 10% Canada Market Share, Larger DTC Presence	\$21,600	15%	\$3,160	67%	33%	\$2,370	\$379	\$4,740	\$4,875	\$72.88
20% U.S. Market Share + 10% Canada Market Share, Even Split Between DTC and Wholesale	\$21,600	19%	\$4,160	50%	50%	\$2,773	\$444	\$5,547	\$5,682	\$84.93
20% U.S. Market Share + 10% Canada Market Share, Larger DTC Presence	\$21,600	19%	\$4,160	67%	33%	\$3,120	\$499	\$6,240	\$6,375	\$95.30

Note: 67/33 split in dollar sales (for DTC vs. wholesale) would represent about a 50/50 split unit sales by channel.

Note: Canadian statistics have been converted into USD.

Note: Implied share price assumes 67M shares outstanding, debt of \$42M, cash of \$110M, and an EV/EBITDA multiple of 12.5x.

Note: We assume a LT EBITDA margin of 15%.

Note: Dollars in millions, except share price.

Source: KeyBanc Capital Markets Inc. estimates, Statistics Canada

## SAATVA CONTINUES TO GROW

**Differentiated DTC Mattress Brand.** Unlike the bed-in-a-box business model (which is popular with many DTC-oriented mattress brands), Saatva ships its luxury mattresses uncompressed, utilizing its large network of white-glove delivery partnerships. Furthermore, the Company has partnerships with ~18 manufacturing facilities across the U.S., which produce a variety of sleep-related products across seven different categories. The Company currently has one owned retail store (also known as the “viewing room”) in New York City, which performs at a \$5M annual run rate, according to management. The Company plans to open 20 locations over the next two years. Looking ahead, Saatva plans to shift its focus toward marketing and brand-building efforts, while leveraging the strong manufacturing and distribution partner network the Company has built over the last several years.

**Strong 2020 Results, Positive Outlook Ahead.** We estimate Saatva achieved ~\$300M of revenue and ~\$30M of EBITDA in 2020, leveraging the Company’s extensive manufacturing and distribution partnership network. For 2021, we forecast about \$400M of revenue, with the expectation for Saatva to roll out and refresh 20 new sleep products including one new lower-priced mattress line.

## TECHNOLOGY-ENABLED EIGHT SLEEP

**Eight Sleep Overview.** Founded in 2014, Eight Sleep focuses on the sleep technology market with its thermoregulating and biofeedback-enabled mattress. Eight’s “Pod” technology is available in two forms: the Pod Mattress (currently retailing for \$2,595), which includes an entire mattress with the Pod technology, and the Pod Cover (for \$1,795), which allows customers to retrofit any mattress with a technology-enabled cover. The Pod monitors your sleep, temperature, heartbeat, and breathing, and delivers statistics via the Company’s app, allowing customers to fall asleep faster and deeper with fewer wake-ups. Additionally, the Pod has dual-zone heating and cooling, which allows users to set their temperature preference in the Eight Sleep app. Moreover, the Pod Pro (which retails at \$3,095) includes “GentleRise” technology that wakes users with gentle vibration and gradual temperature changes. As of May 2021, Eight’s sleep database had 14K active users, totaling 500K nights measured per month and 80M hours of sleep measured in total. Eight’s average customer has \$100K-\$250K in annual income and is in the 26- to 44-year-old range. Similar to other new mattress brands, Eight has partnered with professional sports teams and other health-oriented brands.

**Figure 27 The Pod Mattress from Eight Sleep**



*Source: Company reports*

**Valuation and Recent Trends.** Since its founding, Eight has raised ~\$150M, most recently closing an \$86M Series C in August that was led by Valor Equity Partners at a valuation approaching ~\$500M. Recent financial performance has been strong, with revenue in 2021 expected to triple y/y. Additionally, the Company has plans to expand internationally, with the expectation to sell its technology in Europe and the U.K. by the end of 2021.

## EVE HAS STRUGGLED AS A PUBLIC COMPANY IN THE U.K.

**Eve's IPO in the U.K. in May 2017.** The IPO of Eve Sleep in May 2017, the first IPO for an online and emerging mattress brand, provided a detailed financial view into this company. Eve raised £35M at a market cap valuation of £140M (or ~\$180M), representing ~12x revenues. In 2016, revenues grew 355% to £12M, with a gross margin of 49% and EBITDA loss of £11M. Average order value was £445 and cost per customer acquisition was £245, implying a CAC/AOV of ~55%.

In 2017, revenues grew 132% to £28M, with a gross margin of 58% and EBITDA loss of £15M. The Company spent 62% of revenue on marketing, had a 12% return rate, and had an unprompted U.K. brand awareness of 6.6%.

In 2018, revenues grew 25.5% to £35M, with a gross margin of 53% and EBITDA loss of £19M. The Company spent 54% of revenues on marketing, and had a 9.3% return rate and an unprompted U.K. brand awareness of 11.2%.

In 2019, revenues decreased 31.5% to £24M, with a gross margin of 53% and EBITDA loss of £11M. The Company spent 51% of revenues on marketing, and had an 8.9% return rate and an unprompted U.K. brand awareness of 15.0%.

In 2020, revenues increased 5.7% to £25M, with a gross margin of 57% (up 418 bps y/y) and EBITDA loss reduced by 81% y/y to £2M. The Company spent 24% of revenues on marketing, and had an 7.8% return rate and an unprompted U.K. brand awareness of 17.0%.

As of September 9, 2021, EVE's stock price was £3.45, which implies a current market capitalization of about £9.5M (\$13M).

Currently, it appears that Eve's mattress offering in the U.S. has been discontinued. Most recently, Eve's U.S. mattress model was priced at \$849 for a queen (up from \$549 in December 2017, although Eve runs many large promotions such as 50% off). At the time, the after-discount price point was below most of the prices we commonly see in the U.S.

## SLEEP COUNTRY CANADA ACQUIRED ENDY; PARTNERSHIP WITH PRPL

**Sleep Country Canada Acquired Endy.** On November 29, 2018, Sleep Country Canada (ZZZ) announced its agreement to buy online mattress seller Endy for \$89M. The deal consisted of Sleep Country Canada paying \$63.7M of cash up front with up to another \$25M in three years if certain goals were reached. The deal was priced at 12.0x LTM EBITDA for Endy and would fall to 9.0x in 2020 if all the earn-outs are achieved. Management noted that the acquisition would complement the Company's national store footprint and diverse selection of sleep products.

Endy was reported to be profitable and growing. In 2018, the Company was on track to achieve \$50M in revenues and had been growing 150% YTD as of the time of the transaction. Given the valuation, this implies a DD EBITDA margin. For 2019, management noted that Endy's performance included a tremendous increase in brand search demand and significant revenue gains made in multiple provinces.

Sleep Country Canada is a Canadian mattress retailer, with 287 stores operating across Canada. The Company sells a variety of brands, including Purple, Sealy, Serta, Simmons, Kingsdown, Tempur-Pedic, Dormeo, Bloom, and Sunset Collection beds. Sleep Country Canada is traded on the Toronto Exchange under the ticker ZZZ and has a market cap of approximately \$1.2B CAD. Additionally, ZZZ has a partnership with Walmart to sell its popular Bloom mattress-in-a-box offering through Walmart's Canadian website.

In 2018, Sleep Country Canada's revenues grew 6.1% to \$623M, with a gross margin of 30.4% and adjusted net income of \$64M. The Company reported same-store-sales growth of 1.4% in 2018.

In 2019, Sleep Country Canada's revenues grew 14.3% to \$712M (with full-year inclusion of revenue from Endy), with a gross margin of 31.3% and adjusted net income of \$59M. The Company reported same-store-sales growth of 0.3% in 2019.

In 2020, Sleep Country Canada's revenues grew 6.4% to \$758M, with a gross margin of 32.3% (up 100 bps y/y) and adjusted net income of \$72M. The Company did not report 2020 (due to 2Q20) same-store-sales growth due to the extended temporary closure of the Company's retail stores in spring 2020.

**Strong 2Q21 Performance.** 2Q revenue increased by 67.3% y/y to \$192.2M (vs. the consensus of \$165.4M), 29.6% of which represented e-commerce sales. The increase was primarily driven by a 65.5% y/y increase in same-store sales (vs. the consensus of +44.7%) and four new stores and wrap stores. Management noted that the retail store network was temporarily closed for an average of 32.7% of normal operating days as a result of COVID-19 government-mandated closures in 2Q21 vs. 54.0% in 2Q20. Mattress and accessories revenues grew by 66.6% and 69.8%, respectively. On June 30, 2021, Sleep Country operated through 287 stores (vs. 276 stores in 2020), and three leading e-commerce platforms: sleepcountry.ca, dormezvous.com, and endy.com. The Company also has 17 DCs and fulfilment centers (vs. 17 DCs in 2020) across Canada. During 2Q21, the Company entered into a partnership with Best Buy Canada, one of Canada's largest omnichannel retailers, to retail a selection of the Company's sleep solutions on the Best Buy marketplace. The Company will exclusively supply the traditional mattress category on BestBuy.ca, which includes mattress brands such as Tempur-Pedic, Sealy, Serta, Simmons, Simba, and Purple. Sleep Country previously launched an exclusive Canadian partnership with Purple Innovation during 4Q20, which is believed to elevate the Company's extensive premium sleep product assortment, which is available through both the Company's e-commerce platforms and retail store network.

**Partnership with Purple.** On October 19, 2020, Sleep Country announced it will be PRPL's exclusive Canadian retail partner, marking PRPL's entry into the Canadian retail market. ZZZ also announced a new Canada-exclusive mattress model designed in collaboration with PRPL, the "Purple Plus Mattress." However, more recently, PRPL has started selling the "Purple Plus Mattress" online in the U.S. market as well. Sleep Country began selling PRPL mattresses both online and in-store starting on November 10. Looking ahead, if PRPL were to represent 10% of ZZZ's sales, that could generate wholesale revenues of \$30M+ for PRPL.

**Pilot Program with Walmart Canada.** On August 31, 2021, ZZZ announced a pilot program with Walmart Canada to introduce 10 "Express" stores in Walmart locations. The initial pilot stores will have an average footprint of 500 square feet, while offering ZZZ's bed-in-a-box selection and eight to nine traditional mattresses for clientele to experience on site. If successful, we expect the extended partnership to help grow PRPL's market share within Canada.



## SERTA SIMMONS BEDDING ACQUIRED TUFT & NEEDLE

**Acquisition Overview.** On September 28, 2018, Serta Simmons Bedding closed its acquisition of direct-to-consumer digital mattress brand company Tuft & Needle. The deal was announced on August 21, 2018. Although details of the deal were not disclosed, KBCM estimates a transaction value of ~\$350M, about 2x sales.

**Tuft & Needle.** Tuft & Needle was one of the first major digital mattress bed-in-a-box brands and has accumulated more reviews than any other digital mattress brand we track. The Company also sells its mattresses through brick-and-mortar retail, including Walmart and Lowe's stores.

## LEGGETT & PLATT ACQUIRED ELITE COMFORT SOLUTIONS

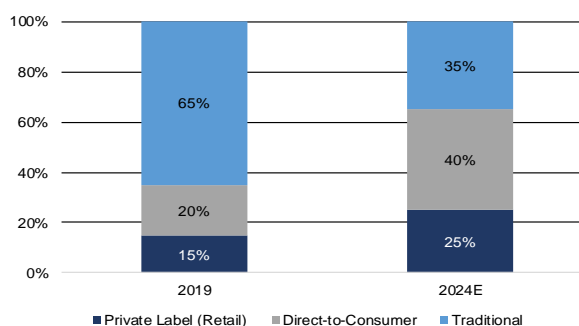
**Transaction Overview.** On November 7, 2018, Leggett & Platt (LEG) announced that it entered into a definite agreement to acquire Elite Comfort Solutions for \$1.2B. The transaction closed in January 2019.

**Elite Comfort Solutions.** ECS, which was a portfolio company of Arsenal Capital Partners prior to its sale, had 16 facilities across the U.S. and generated \$611M in annual sales in 2017. The Company is a leader in specialized foam technology and manufacturing, primarily for bedding and furniture. Recall that LEG management originally expected the deal to be accretive to its EBITDA margin rate, which was 14.3% in FY17. At the time of acquisition, ECS had been growing revenue by DD, and LEG expected this to continue in the future. ECS customers consist of leading traditional bedding and boxed bed brands. At the time of acquisition, traditional bedding, boxed bedding, and furniture made up 35%, 30%, and 25% of ECS's sales by end market, respectively.

**2Q21 Bedding Sales Primarily Driven by Price Increases.** For LEG's 2Q21, bedding sales increased 48% y/y, with volume up 22%, driven by strong home-related product demand. Raw material-related selling price increases added 26% to sales. Bedding sales were up 7% vs. 2019, primarily due to input cost increases (steel, chemicals, and nonwoven fabrics). Volume was lower vs. 2Q19 levels due to continued foam shortages and labor availability. Management noted that the chemical supply used in foam improved throughout 2Q, but at a slower pace than anticipated due to production issues and logistics bottlenecks. Looking ahead, management believed that chemical constraints could persist throughout 2H. Furthermore, in Europe, the Company noted softer demand, aligning with seasonal trends. Management noted that European customers were purchasing more mattresses online and in compressed forms, which has increased demand for specialty foam products.

**Figure 28 LEG's View on the Industry: A Continuing Shift to an Omnichannel Environment**

*Leggett & Platt management expects direct-to-consumer to continue to take share. To take advantage of this trend, LEG purchased ECS, which has an innovation advantage in the specialty foam and hybrid segment (which caters largely to direct-to-consumer brands).*



Source: LEG Investor Presentation, November 2019

## CORSICANA MATTRESS ACQUIRES SYMBOL

**Corsicana Mattress Acquires Symbol.** In August 2020, value-focused bedding manufacture Corsicana Mattress acquired rival Symbol Mattress. While details of the transaction were not disclosed, *Furniture Today* estimates that the combined companies will have more than \$450M in combined sales. The combined company will operate 16 manufacturing facilities and employ more than 1,300 people. The Companies are owned by Long Point Capital, a private equity firm with headquarters in New York and Royal Oak, MI.

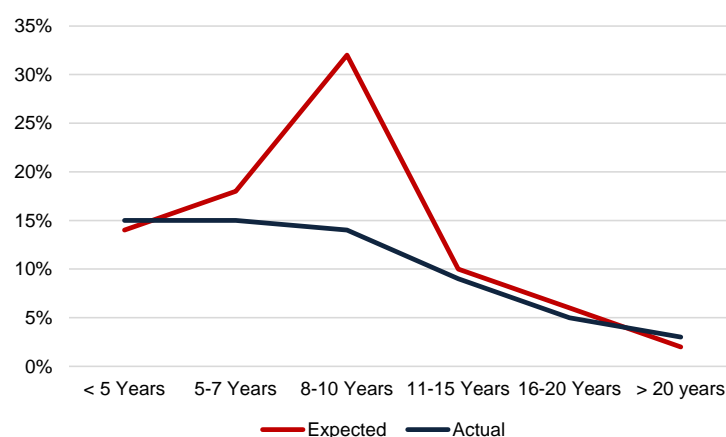
## MERGER OF MANUFACTURERS FXI AND INNOCOR

**FXI and Innocor Merged.** On March 5, 2019, polyurethane foam producers FXI and Innocor signed a definitive agreement to merge, which was initially expected to close in 2H19. FXI and Innocor were owned by One Rock Capital Partners LLC and Bain Capital Private Equity, respectively, and both have retained ownership of the merged company. Financial terms of the deal were not disclosed. After a thorough anti-trust review process, the transaction completed on February 25, 2020. In connection with obtaining Federal Trade Commission approval of the merger, FXI and Innocor agreed to sell three production facilities to Future Foam Inc., including FXI's Kent, WA, location and Innocor facilities located in Indiana and Mississippi. After the merger and the divestitures, FXI had 34 manufacturing and distribution facilities throughout North America with ~4,150 employees.

## MATTRESS REPLACEMENT CYCLE COULD BE SHRINKING

**Shrinking Replacement Cycle.** According to recent research from The Better Sleep Council, mattress replacement cycles have shrunk from an average of 10.3 years in 2007 to 9.0 years in the most recently published survey work conducted in 2021. Moreover, consumers today expect their bed to last 9.5 years, down from 10.9 years expected in 2007. We believe the rapid growth of lower-cost digital brands has played a role in shrinking both the actual replacement cycle and consumer expectations of the replacement cycle. A shorter cycle would be a positive for unit and dollar sales in the future.

**Figure 29 Mattress Replacement Cycle (Consumer Expectations vs. Actual)**

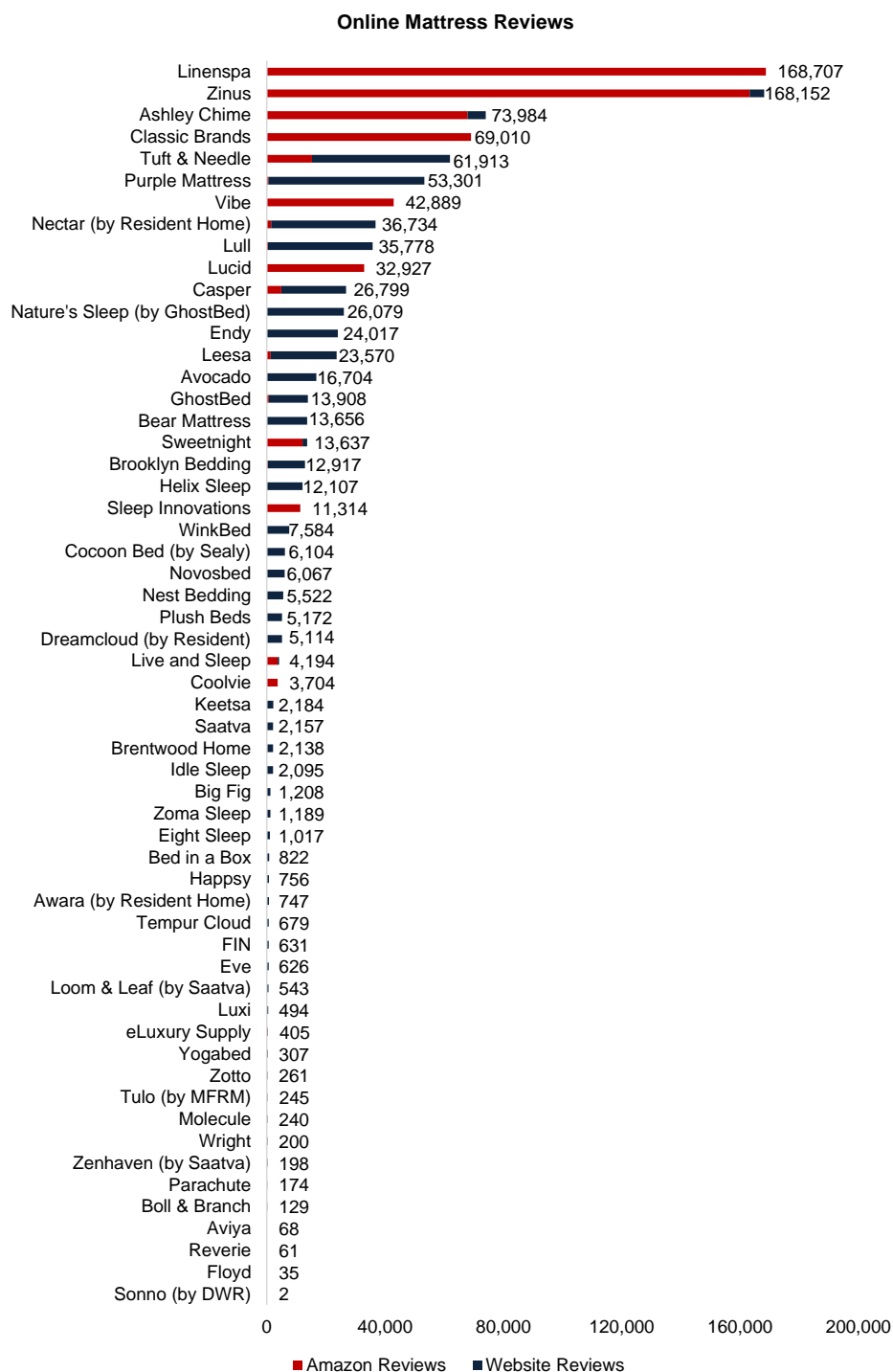


Source: The Better Sleep Council, Sleep Savvy, and KeyBanc Capital Markets Inc.



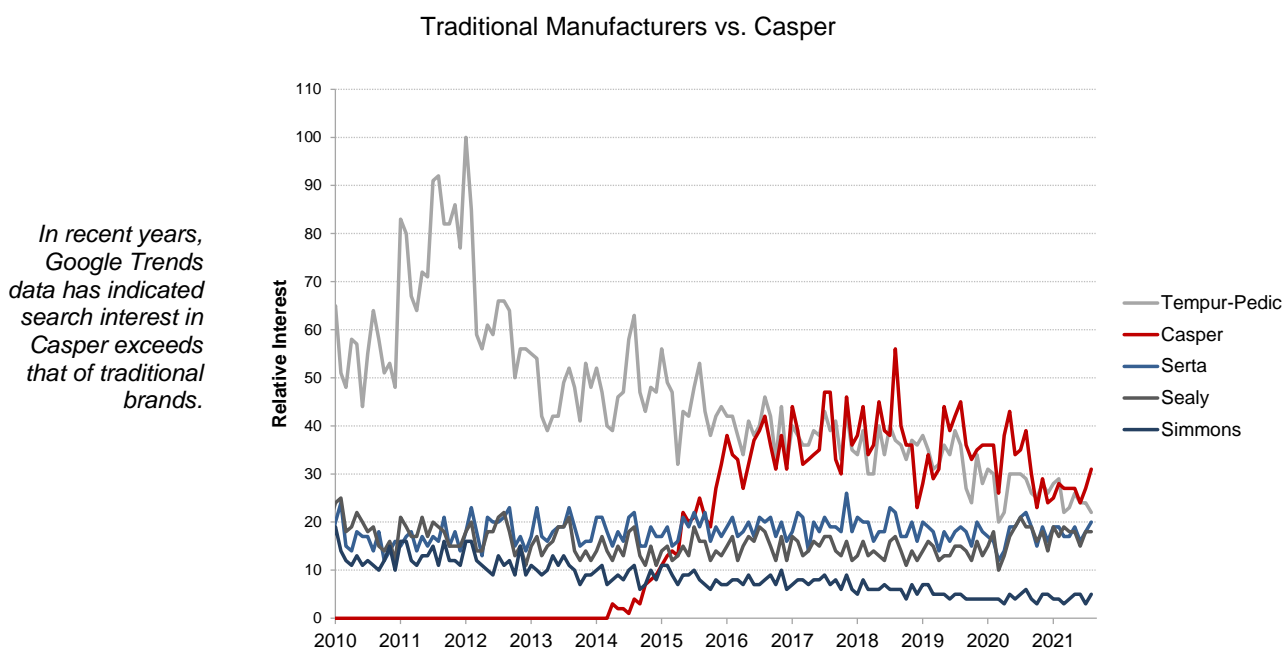
## REVIEWS, GOOGLE TRENDS, AND RATINGS

Figure 30 Number of Reviews: Landscape Overview



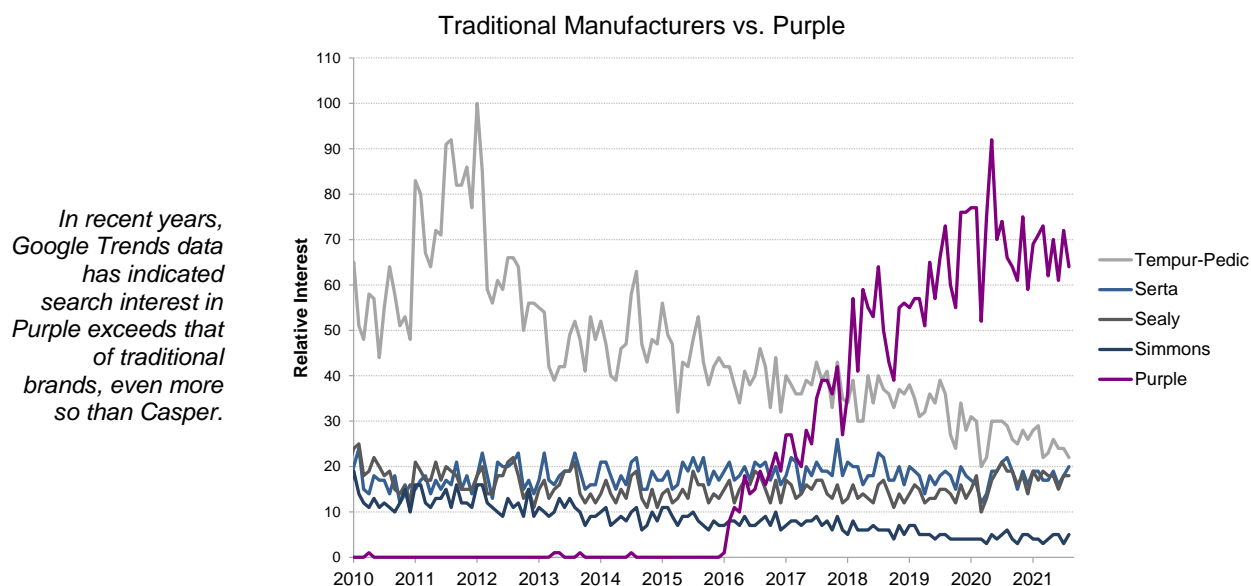
Source: Company websites, Amazon.com, and KeyBanc Capital Markets Inc.

**Figure 31 Google Trends Data: Indicative of Growing Consumer Interest in E-Commerce Brands**



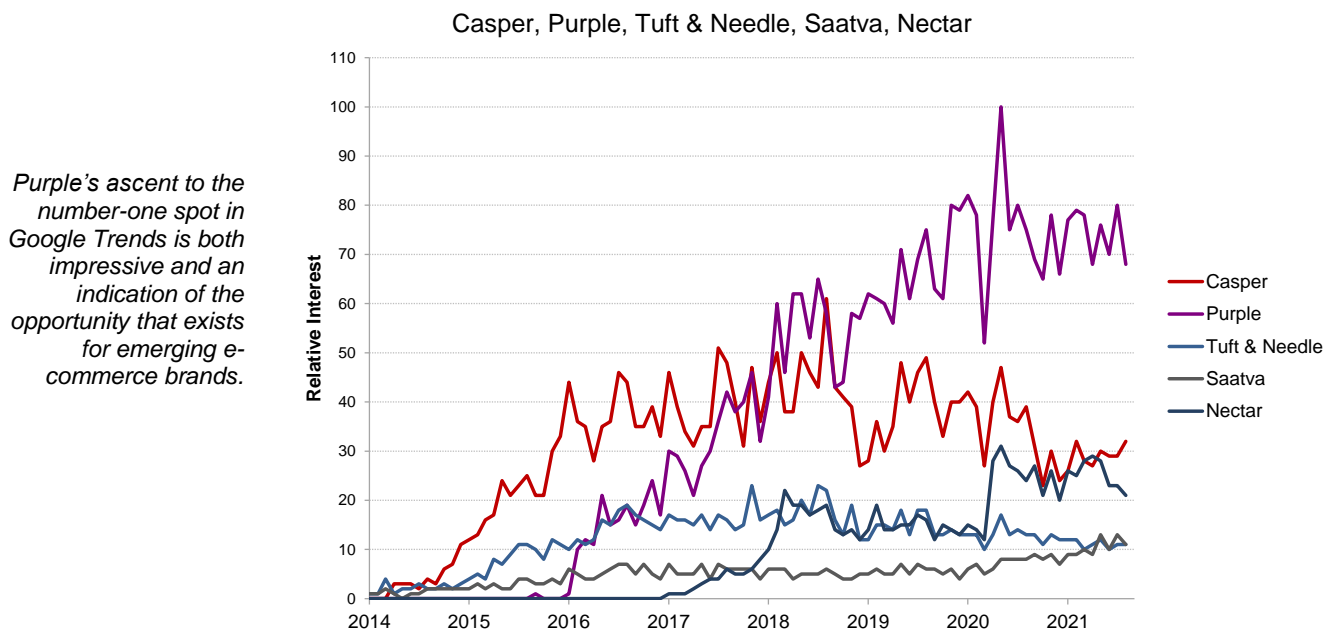
Source: Google Trends and KeyBanc Capital Markets Inc.

**Figure 32 Google Trends Data: Indicative of Growing Consumer Interest in E-Commerce Brands**



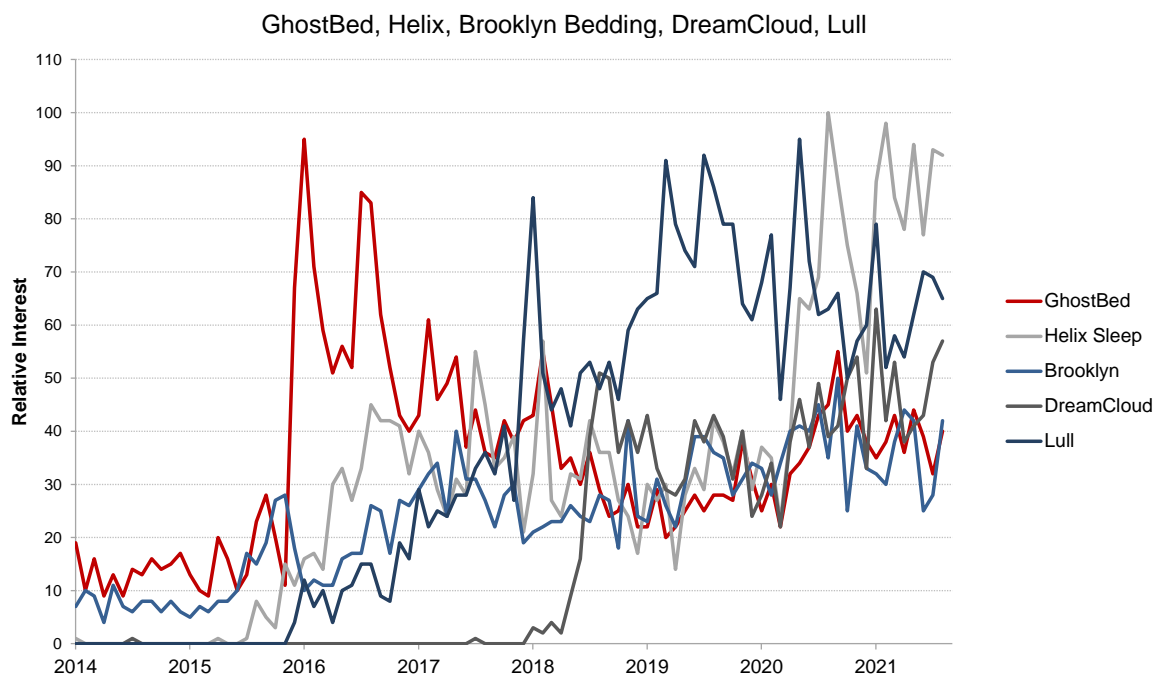
Source: Google Trends and KeyBanc Capital Markets Inc.

**Figure 33 Google Trends Data: Digital Brand Market Leaders**



Source: Google Trends and KeyBanc Capital Markets Inc.

**Figure 34 Google Trends Data: Many Other Brands Are Having Success**



Source: Google Trends and KeyBanc Capital Markets Inc.

Per our report on August 2, 2015, over 10 years of data, the term "mattress" had a 71% correlation with quarterly mattress sales (with a one-quarter lag).

**How Important Is Google Trends and Google Organic Search? Our Analysis Suggests It Is Very Important in This Industry.** It is our belief that more and more Americans start their shopping process with searches on Google and Amazon. In 2015, we ran an extensive search across numerous search terms to look for products and categories that were particularly correlated with search terms. We found a very high correlation with the term "mattress." Per our report on August 2, 2015, over 10 years of data, the term "mattress" had a 71% correlation with quarterly mattress sales (with a one-quarter lag).

**Figure 35 Google Organic Search: Emerging Brands Outpacing Traditional Brands**

Company	Page # for "Mattress" Search		Page # for "Memory Foam Mattress" Search		Company	Page # for "Mattress" Search		Page # for "Memory Foam Mattress" Search	
	8/13/2021	2/16/2021	8/13/2021	2/16/2021		8/13/2021	2/16/2021	8/13/2021	2/16/2021
Casper	1	1	2	2	No Link returned through page 15 for following companies:				
Lull	2	8	2	4	MyPillow Mattress	-	-	15	15
Purple Mattress	3	2	9	1	Emma Mattress	-	-	-	6
Ikea	3	4	2	2	PlushBeds	-	-	7	7
Leesa	4	4	6	2	Classic Brands	-	-	-	8
Amerisleep	4	4	3	2	WakeFit	-	-	-	12
The Original Mattress Factory	4	5	13	-	Tomorrow Sleep	-	-	-	8
Parachute	4	6	-	-	Bob-O-Pedic	-	-	7	4
Tuft & Needle (owned by SSB)	4	6	-	8	Future Foam	-	-	-	8
Serta	4	7	11	-	Cantwell	-	-	-	8
Sleep Number	5	5	13	10	Christeli	-	-	-	9
Helix Sleep	5	6	14	-	Dynasty Mattress	-	-	-	9
Bear Mattress	5	6	8	-	Nature's Sleep	-	-	-	9
Layla Sleep	5	6	2	2	Perfect Cloud	-	-	-	10
Lucid	5	12	4	3	Gelfoambd	-	-	-	12
Nectar Sleep (by Resident Home)	6	4	1	1	Texas Mattress Makers	-	13	-	11
Avocado Green Mattress	6	6	-	-	Eight Sleep	-	11	-	-
Tempur-Pedic	7	4	4	4	Charles P. Rogers	-	11	-	-
Gardner Mattress	7	-	-	-	Foam Factory	-	11	-	7
Sleepy's	8	9	13	-	Bed Gear	-	9	-	-
Sealy	8	10	-	-	Nest Bedding	-	8	-	-
Hastens	8	15	-	-	Happsy	-	7	-	-
Saatva	9	5	-	13	Sherwood Bedding	-	-	10	-
Dreamcloud (by Resident Home)	9	7	11	-	Sleep Innovations	-	-	10	-
Simmons Beautyrest	9	15	-	-	Douglas by GoodMorning.com	-	-	13	-
Amore Beds	9	-	-	-	Spring Air	-	-	14	-
Birch (by Helix)	10	10	-	-	airweave	-	-	14	-
Keetsa	10	10	-	-					
Puffy	10	13	4	11					
Simmons	10	-	4	-					
Zinus	10	-	3	6					
Diamond Mattress	10	-	-	-					
Reverie	11	8	-	-					
Bed In A Box	11	10	10	6					
Cocoon (owned by Sealy)	11	10	7	-					
Wright	11	-	-	-					
Zoma	11	-	7	-					
Brentwood Home	12	5	-	-					
Ghostbed	12	6	-	7					
FloBeds	12	-	-	-					
Essentia	12	-	7	4					
Lebeda	13	-	-	-					
My Green Mattress	13	-	-	-					
Allswell Home	13	-	8	-					
Awara Sleep	13	-	-	-					
Brooklyn Bedding	14	-	8	-					
Joybed	14	-	-	-					
Naturepedic	14	-	-	-					
Restonic	15	-	7	-					

Note: Table above shows the page number on which each of the companies listed above appeared for an organic Google search.  
Source: Google and KeyBanc Capital Markets Inc.

**Figure 36 Tempur-Pedic Brand Customer Ratings and Reviews**

Collection	Mattress	Models	Rating (Out of 5)		Number of Reviews	
			9/8/2021	3/1/2021	9/8/2021	3/1/2021
Adapt	Medium and Medium-Hybrid	2	4.5	4.5	1,314	1,150
ProAdapt	Soft, Medium, Firm, and Medium-Hybrid	4	4.5	4.5	2,926	2,505
LuxeAdapt	Soft and Firm	2	4.5	4.5	628	527
ProBreeze	Medium and Medium-Hybrid	2	4.5	4.5	942	937
LuxeBreeze	Soft and Firm	2	4.5	4.5	942	937
Cloud	Medium	1	4.5	4.5	611	481
<b>Average/Total:</b>			<b>4.5</b>	<b>4.5</b>	<b>7,363</b>	<b>6,537</b>

Note: Tempur ratings from September 2021 based on visual observation, as no official rating calculation was accessible at time of publication.

Source: Company website and KeyBanc Capital Markets Inc.

**Figure 37 Sleep Number Brand Customer Ratings and Reviews**

Collection	Mattress	Rating (Out of 5)		Number of Reviews	
		9/8/2021	3/1/2021	9/8/2021	3/1/2021
Classic	C2 (new 360)	4.6	4.6	13,596	10,464
	C4 (new 360)	4.7	4.7	13,223	10,065
Performance	P5 (new 360)	4.7	4.7	13,627	10,259
	P6 (new 360)	4.7	4.7	11,242	7,970
	PSE (new)		4.7		4,099
Innovation	i7 (new 360)				
	i8 (new 360)	4.8	4.8	32,060	22,251
	i10 (new 360)	4.8	4.8	11,121	7,765
	iLE	4.8	4.8	16,791	13,928
Memory Foam	m7 (new 360)	4.7	4.7	4,177	3,050
<b>Average/Total:</b>		<b>4.7</b>	<b>4.7</b>	<b>115,837</b>	<b>89,851</b>

Source: Company website and KeyBanc Capital Markets Inc.

Figure 38 Mattress Brand Social Media Presence

Brand	Handle	Instagram Followers	Average Likes	Engagement Rate
Lull	@lullbed	214,272	60.9	0.03%
Casper	@casper	172,818	204.4	0.12%
Purple	@purple	156,441	325.1	0.29%
Avocado	@avocadomattress	97,132	239.3	0.26%
Tuft & Needle	@tuftandneedle	80,132	583.6	1.64%
Endy	@endy	61,198	108.8	0.19%
Nectar (Resident)	@nectarsleep	59,259	55.1	0.11%
Sleep Number	@sleepnumber	45,990	66.4	0.18%
Eight Sleep	@eightsleep	42,951	56.7	0.14%
Tempur-Pedic	@tempurpedic	41,738	111.9	0.33%
Leesa	@leesasleep	40,978	17.1	0.04%
Zinus	@zinus	39,122	113.7	0.30%
Molecule	@moleculesleep	38,988	288.4	0.74%
Linenspa	@linenspa	27,064	131.6	1.27%
DreamCloud (Resident)	@dreamcloudsleep	26,956	24.6	0.10%
Eve Sleep	@evesleep	26,345	93.0	0.40%
Helix	@helixsleep	25,925	43.8	0.19%
Saatva	@saatva	20,942	23.0	0.12%
Nest Bedding	@nestbeddingorganics	20,505	23.8	0.19%
Serta	@serta	19,232	71.3	0.48%
Awara (Resident)	@awarasleep	15,010	34.1	0.25%
Ghostbed	@ghostbed	12,118	100.3	1.35%
Bear Mattress	@bearmattress	12,104	15.8	0.13%
Stearns & Foster	@stearnsandfoster	10,875	42.5	0.40%
Sealy	@sealy	8,272	57.4	0.74%
Plush Beds	@plushbeds	6,562	12.1	0.21%
Keetsa	@keetsa_mattress	5,659	54.3	1.02%
WinkBeds	@winkbeds	3,451	37.6	1.23%
Level Sleep (Resident)	@levelsleep	1,658	32.3	2.13%
Novosbed	@novosbed	590	16.6	1.79%

Source: SocialBlade.com as of September 7, 2021

Note: Engagement rate based on latest 20 pictures uploaded to Instagram.

**Figure 39 Mattress Brand Social Media Growth: Change in Number of Instagram Followers**

Brand	Followers (March '21)	Followers (September '21)	% Change
Serta	12,911	19,232	49.0%
Endy	49,464	61,198	23.7%
Linenspa	22,505	27,064	20.3%
Saatva	17,496	20,942	19.7%
Sealy	7,157	8,272	15.6%
Zinus	33,907	39,122	15.4%
Tuft & Needle	70,416	80,132	13.8%
DreamCloud (Resident)	23,717	26,956	13.7%
Avocado	85,653	97,132	13.4%
Ghostbed	10,921	12,118	11.0%
Sleep Number	41,641	45,990	10.4%
Tempur-Pedic	38,568	41,738	8.2%
Purple	145,211	156,441	7.7%
Stearns & Foster	10,107	10,875	7.6%
Nectar (Resident)	55,543	59,259	6.7%
Helix	24,870	25,925	4.2%
Lull	207,870	214,272	3.1%
Casper	169,251	172,818	2.1%
Bear Mattress	11,893	12,104	1.8%
Leesa	40,800	40,978	0.4%
Molecule	39,105	38,988	-0.3%

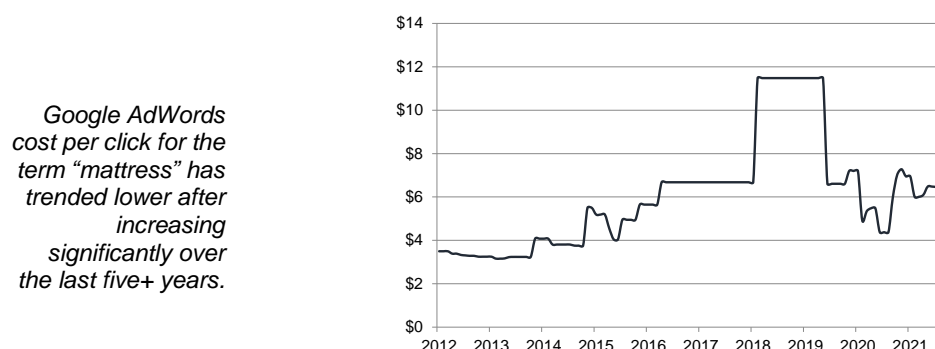
Source: SocialBlade.com as of March 1, 2021, and September 7, 2021

Note: Comparison data unavailable for omitted brands.

## CUSTOMER ACQUISITION COSTS MODERATING

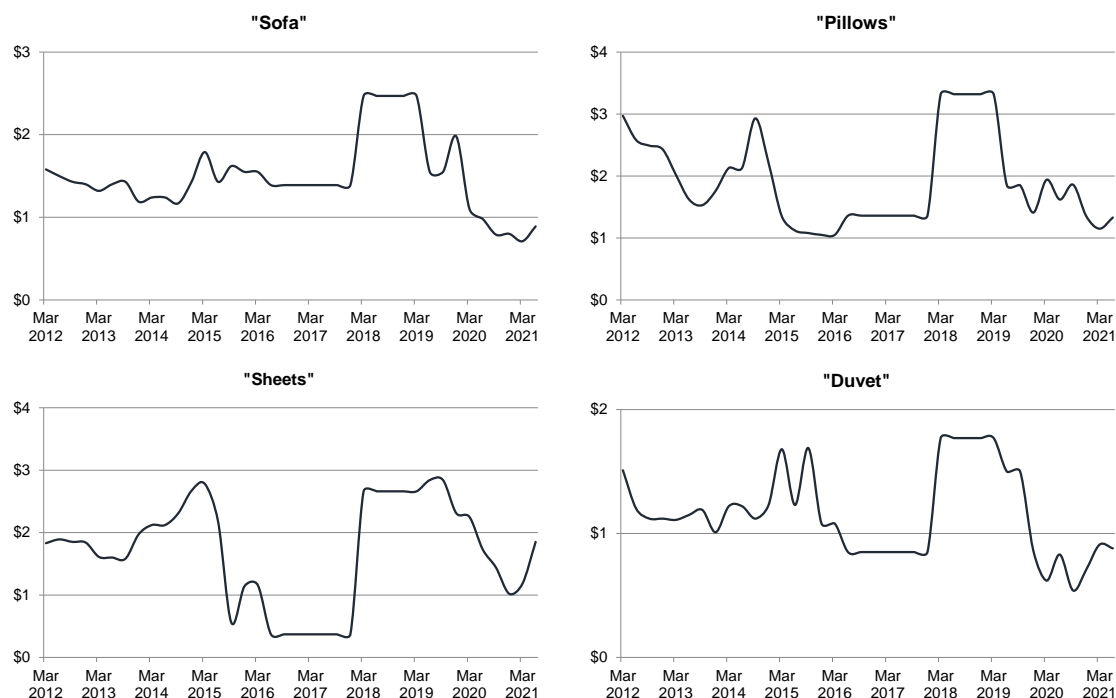
**Digital Advertising Costs Have Recently Moderated After Years of Increases.** The emerging brands have been particularly successful and creative in the use of digital markets to drive awareness and conversion. This includes the use of Google AdWords, SEO, Facebook, YouTube, and other digital and social vehicles. After recent decreases from historical highs, cost per click for the keywords we track has largely ticked up. Data below from SEMrush illustrates the broader, multiyear trend in digital ad costs and customer acquisition costs. We discuss the evolving consumer “funnel” at length in our October 2019 report, “Digital Disruptors 2: How Emerging Brands Are Reshaping the Consumer Landscape.”

**Figure 40 Google AdWords Cost per Click for the Term “Mattress” Trended Higher in Recent Years**



Source: SEMrush.com and KeyBanc Capital Markets Inc.

**Figure 41 Google AdWords Cost per Click for Other Related Terms**



Source: SEMrush.com and KeyBanc Capital Markets Inc.



## AMAZON PRIVATE LABEL UPDATE

**Amazon's Changing Presence in the U.S. Mattress Industry.** In September 2018, we spotted Amazon private label mattresses on Amazon's U.S. site for the first time, as we wrote about at the time. From 2016-2018, we warned of this risk extensively, citing industry conversations, as well as AMZN's private label offering in the U.K. (which was introduced in 2016 as displayed below). At the time, we expected this line would likely take share from other lower-price online brands, rather than having an effect on the middle or upper price points. In September 2018, Amazon launched three memory foam models: an 8", 10", and 12" priced at \$199.99, \$229.99, and \$259.99, respectively, for queen-sized beds. Since this introduction, AMZN has added additional models under the Company's private label brand Rivet and has partnered with Tuft & Needle to provide an exclusive Amazon-T&N mattress offering. While the offering raised some concern among investors for public retailers and manufacturers of mattresses, we believe the biggest share gains by these models were at the expense of other low price beds on Amazon, like the Zinus Memory Foam 12" Green Tea mattress (at the time we spotted Amazon Basics's launch, the Zinus Green Tea mattress had 8,241 customer reviews at 4.2 stars, and had been a top seller for Amazon in the category for a year and a half).

**Amazon Basics Mattress Currently Unavailable.** As of September 9, 2021, the majority of AMZN's Amazon Basics models were unavailable (besides the brand's cooling, gel-infused mattress). While we are not certain why this is, we believe it may be a result of supply chain disruptions, rising raw material costs, or potentially a refresh of the assortment.

**Figure 42 Amazon Private Label/Exclusive U.S. Mattress Offering as of March 2021 – Current Amazon Basics Offering Not Available on the Website**


Brand	Type	Price Queen (\$)	# of Reviews	Avg. Rating	Date of Oldest Review
Amazon Basics: Memory Foam - Soft	6-inch	\$163	9,295	4.5	9/21/2018
	8-inch	\$255			
	10-inch	\$296			
	12-inch	\$356			
Rivet Mattress: Memory Foam	10-inch	\$475	460	4.3	10/18/2018
Tuft & Needle: Nod	8-inch	\$404	2,208	4.5	11/13/2018
Amazon Basics Premium Hybrid - Medium Feel	10-inch	\$368	733	4.5	12/17/2019

Source: Amazon.com, company website as of March 1, 2021, and KeyBanc Capital Markets Inc.

## DYNAMICS TO WATCH: ZINUS AND IMPORT BRANDS

**Zinus Update.** Since 2016, we have highlighted import brands such as Zinus, which sells at a particularly sharp price point (\$229 for a 12" queen currently, and we have seen it listed as low as \$179 in the past) as a significant threat to lower priced domestically produced mattresses. The Zinus beds rank among the best-selling mattresses on Amazon. While it is unlikely that low cost import brands like Zinus are taking share from the luxury side of the market, it was clear they were taking unit share overall at a significant rate. The price for Zinus's most popular mattress, however, has increased over the past few years following anti-dumping duties placed on China in late 2019. Production for Zinus mattresses has since moved to Indonesia, which only faces a 2.61% preliminary anti-dumping duty.

**Figure 43 12" Zinus Memory Foam Queen Mattress on Amazon Prime**



Down from \$270.99 in March '21

Up 24% y/y from 39,988 reviews in March 21.

**Zinus 12 Inch Green Tea Memory Foam Mattress / CertiPUR-US Certified / Bed-in-a-Box / Pressure Relieving, Queen**

[Visit the Zinus Store](#)

★★★★★ 114,246 ratings

Price: **\$229.88**

**Pay \$38.31/month for 6 months, interest-free upon approval for the Amazon Rewards Visa Card**

Size: **Queen**

Narrow Twin Twin Twin XL Full **Queen**

Short Queen King California King

Style: **12 Inch**

6 Inch 8 Inch 10 Inch **12 Inch**

Pattern Name: **Mattress**

**Mattress** Mattress + Bed Frame

Roll over image to zoom in

6 VIDEOS

Source: Amazon.com and KeyBanc Capital Markets Inc.

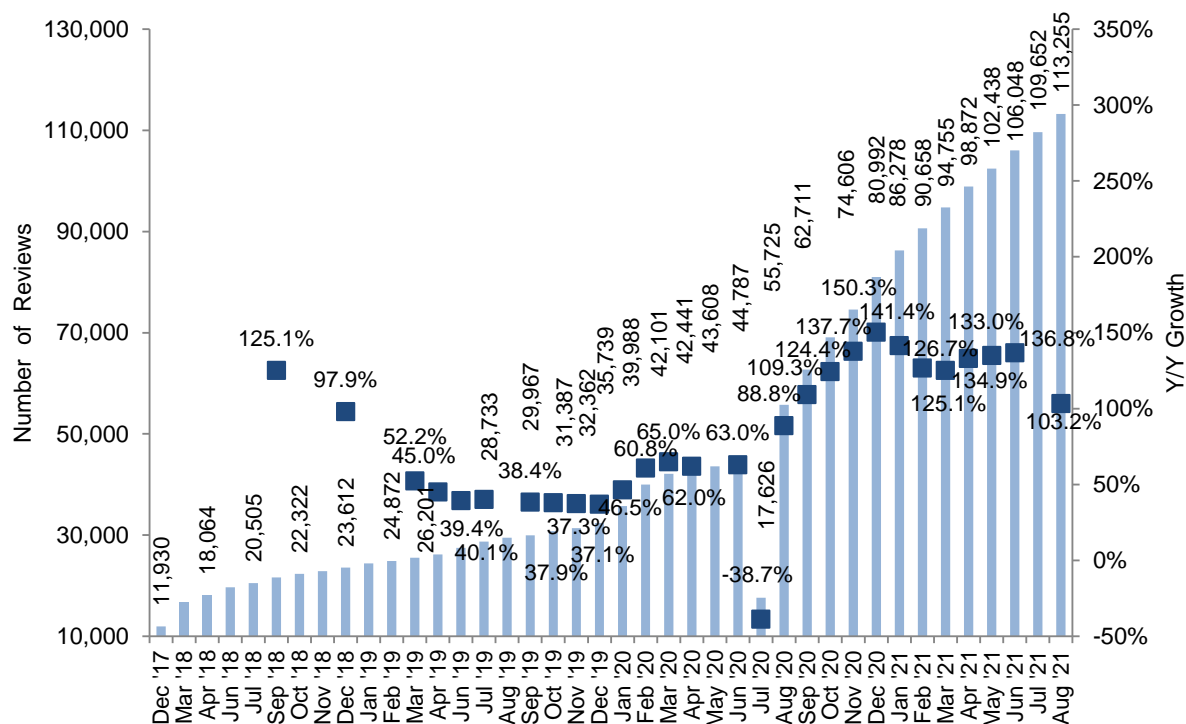
**Figure 44 Our Experience Testing Zinus's \$450 Premium Offering Was Surprisingly Comfortable**



*Note: The above mattress was purchased on [www.zinus.com](http://www.zinus.com) and is its Cooling Euro Top Pocketed iCoil® Spring Mattress. We have not deconstructed the bed, nor tested it for extended use. However, the bed has been surprisingly comfortable in limited use. Note the slight curvature in the front left corner, which was an impression left from being packaged in a box.*

*Source: Zinus and KeyBanc Capital Markets Inc.*

**Figure 45 ZINUS – Number of Online Reviews on Amazon (Zinus 12" Green Tea Mattress)**



*Source: Amazon.com and KeyBanc Capital Markets Inc.*

## ANTI-DUMPING EFFORTS DRASTICALLY REDUCE IMPORTS

**Figure 46 U.S. Imports of Mattresses 2016-2020**

	2020	2019	2018	2017	2016	2020/2019 Change	2019/2018 Change	2018/2017 Change	2017/2016 Change
<b>Units (thousands)</b>									
China	N.M.	1,769	5,688	4,335	1,638	N.M.	-68.9%	31.2%	164.6%
Total Imports	9,178	6,949	6,815	5,410	2,643	32.1%	2.0%	26.0%	104.7%
China Market Share	N.M.	5.8%	18.7%	15.0%	6.1%	N.M.	-12.9%	3.7%	8.9%
Total Import Market Share	27.6%	22.8%	22.4%	18.7%	9.8%	4.8%	0.5%	3.7%	8.9%
<b>Dollar (millions)</b>									
China	\$3	\$165	\$538	\$427	\$165	-98.4%	-69.3%	25.9%	158.6%
Total Imports	\$842	\$668	\$644	\$528	\$263	26.1%	3.6%	22.0%	101.1%
China Market Share	0.0%	2.0%	6.8%	5.5%	2.2%	-2.0%	-4.8%	1.4%	3.3%
Total Import Market Share	10.0%	8.3%	8.2%	6.8%	3.5%	1.7%	0.1%	1.4%	3.3%
<b>Average Unit Price (\$)</b>									
China	N.A.	\$93.19	\$94.53	\$98.50	\$100.78	N.M.	-1.4%	-4.0%	-2.3%
Total Imports	\$91.75	\$96.14	\$94.56	\$97.65	\$99.35	-4.6%	1.7%	-3.2%	-1.7%

Source: International Sleep Products Association, U.S. ITC, and KeyBanc Capital Markets Inc.

Chinese mattress imports grew at a dramatic rate over the last several years until 2019. These mattresses generally have AUR that is <\$600. However, the anti-dumping petition in the spring of 2019 took down Chinese mattresses imports significantly (as low as -99% in 2H19). The unit decline of ~69% to 1.8M units in 2019 from 5.7M units in 2018 (per the U.S. ITC) was substantial.

Dumping margins were announced in the range of 57.03-192.04% for larger Chinese producers (including Healthcare Co. and Zinus) with a duty of 162.76% on additional Chinese-based suppliers and a 1,731.75% duty for all other Chinese producers that did not cooperate in the investigation.

### Chinese Mattress Imports Declined in 2019 Due to Anti-Dumping and Tariff Action.

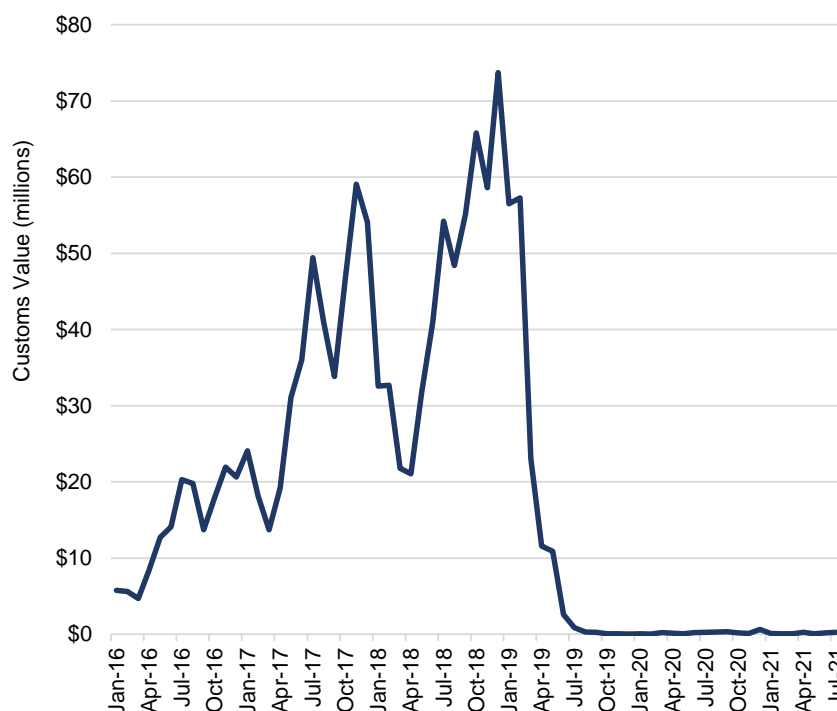
Historically, mattress manufacturing has been largely domestic and localized, which minimized transportation costs and working capital inventory demands. With the ability to roll-pack foam beds, this has reduced shipping costs, while online distribution has enabled low-cost brands to gain awareness. Chinese mattress imports grew dramatically in recent years until 2019. These mattresses generally have AUR that is <\$600. The unit growth of ~165% from 1.6M units in 2016 to 4.3M units in 2017 and 31% growth to 5.7M units in 2018 (per the U.S. ITC) had been substantial. However, the anti-dumping petition in the spring of 2019 took Chinese mattresses imports significantly down in a matter of months, with a unit decline of 69% to 1.8M units in 2019.

**U.S. Producers Win Petition.** On September 18, 2018, in response to growing imports, a group of mattress manufacturers filed an anti-dumping petition against Chinese manufacturers with the U.S. Department of Commerce and the U.S. International Trade Commission. Following the petition's announcement, mattress imports from China began to drastically reduce, while imports from Vietnam and other countries picked up share. As a result of this petition, on May 29, 2019, domestic manufacturers received a favorable ruling on low-price Chinese imports, which were being sold below cost illegally. On October 18, the U.S. Department of Commerce announced its final determination on the anti-dumping duty, fining select exporters at margins ranging from 57.03-1,731.75%. This included dumping rates of 57.03% for Zinus, 192.04% for Healthcare Co., and 162.76% for all other Chinese exporters found to be eligible for a separate rate. Furthermore, the department assigned a China-wide rate of 1,731.75% for all other producers and exporters that did not cooperate in the investigation. Encouragingly, the final determination increased the anti-dumping rate significantly vs. what was initially announced in May 2019. Recall that dumping margins are the difference between the Chinese producers' U.S. prices and a normal value calculated under U.S. trade law. These duties are in addition to the tariffs being applied to Chinese goods, which include mattresses. As a result of the ruling, Chinese mattress imports have sharply declined beginning April 2019.

**Anti-Dumping Duties Investigations on Seven Other Countries.** On April 21, 2020, the U.S. Department of Commerce announced the initiation of new anti-dumping investigations on seven additional mattress exporting countries. The alleged dumping margins were as follows: 326.5-675.8% for Cambodia, 213.4-429.7% for Indonesia, 42.9% for Malaysia, 57.4-183.2% for Serbia, 414.8-763.3% for Thailand, 267.5-609.5% for Turkey, and 481.7-989.9% for Vietnam. More recently on October 28, the Department of Commerce announced preliminary dumping rates on these countries ranging from 2.61-989.90%. In March 2021, the Department of Commerce announced its final mattress anti-dumping rates, which were as follows: 45.34% for Cambodia, 2.22% for Indonesia, 42.92% for Malaysia, 112.1% for Serbia, 37.48%-763.28% for Thailand, 20.03% for Turkey, and 114.92%-668.38% for Vietnam.

**Figure 47 China Mattress Imports**

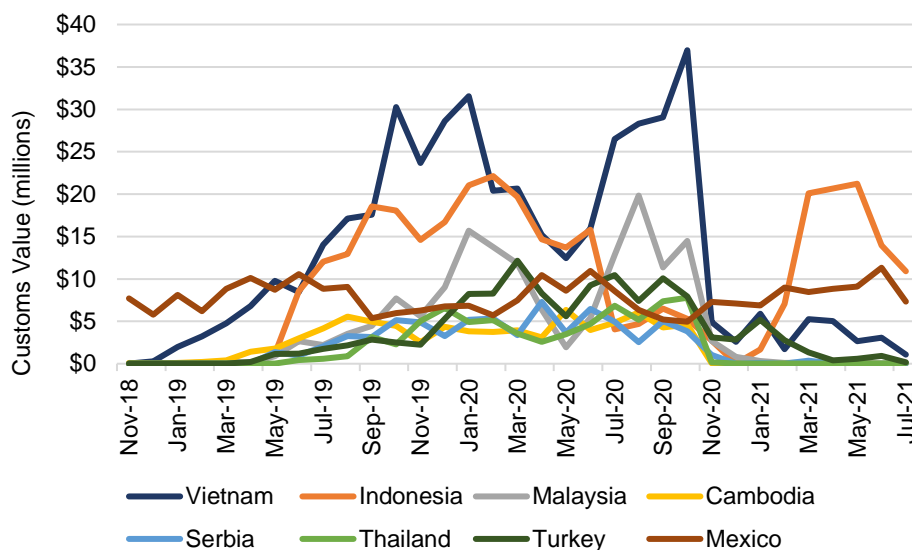
*As a result of the significant anti-dumping margins placed on China, mattress imports from the country have declined over 99% y/y beginning in 2H19.*



Source: U.S. International Trade Commission, Census Bureau, and KeyBanc Capital Markets Inc.

**Figure 48 Other Mattress Importers**

*While many countries initially benefited from anti-dumping margins placed on China in 2H19, new margins have since been expanded to several other countries, including Vietnam, Indonesia, Malaysia, Cambodia, Serbia, Thailand, and Turkey.*

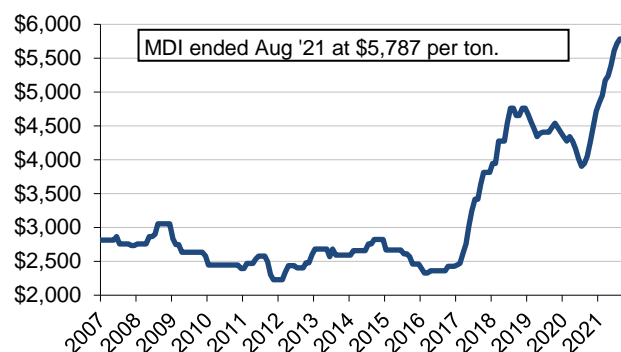


Source: U.S. International Trade Commission, Census Bureau and KeyBanc Capital Markets Inc.

## SUPPLY CONSTRAINTS AND RISING INPUT COSTS

**Supply Constraints and Rising Input Costs.** The combination of accelerating demand and COVID-19-related disruptions has led to elevated supply constraints throughout 2020, which continued in 1H21. As such, foam input prices (such as MDI and TDI) have increased significantly over the last several months following about a year and a half of y/y declines. Looking ahead, we expect higher foam prices to persist through 2H21, which could pressure margins (particularly for memory foam bed-in-a-box brands). Fortunately, given the strong mattress demand backdrop for 1H, we believe leading brands will have pricing power to offset this headwind.

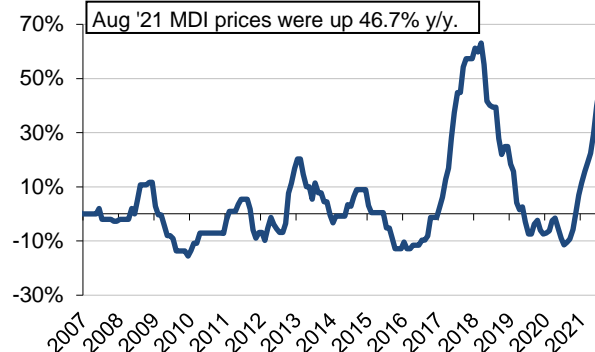
### Methylene diphenyl diisocyanate (MDI)



Note: USD per ton.

Source: Tecnon OrbiChem and KeyBanc Capital Markets Inc.

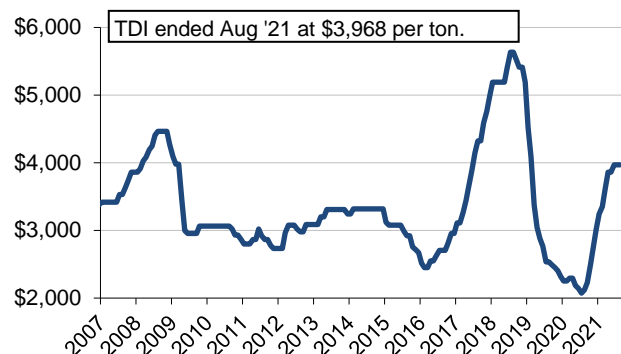
### Methylene diphenyl diisocyanate (MDI) (% Change Y/Y)



Note: USD per ton.

Source: Tecnon OrbiChem and KeyBanc Capital Markets Inc.

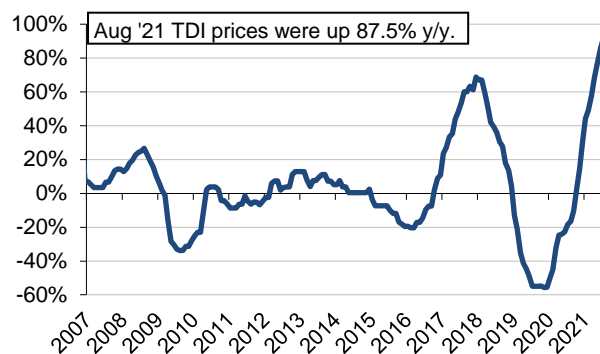
### Toluene diisocyanate (TDI) 10 Years



Note: USD per ton.

Source: Tecnon Orbichem and KeyBanc Capital Markets Inc.

### Toluene diisocyanate (TDI) (% Change Y/Y)

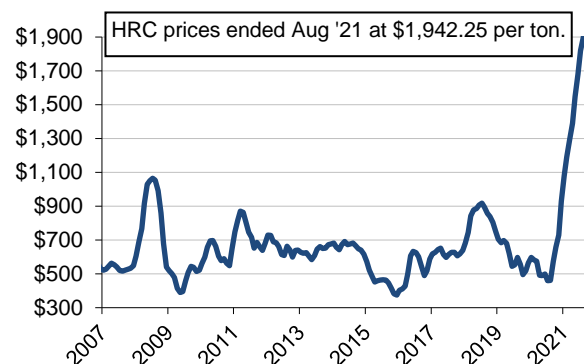


Note: USD per ton.

Source: Tecnon Orbichem and KeyBanc Capital Markets Inc.



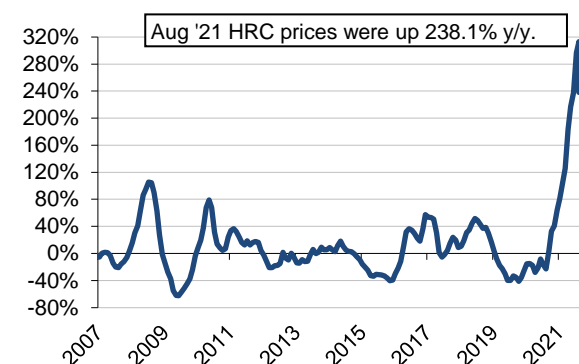
### Steel: Flat Product/HRC Prices



Note: USD per ton.

Source: SBB and KeyBanc Capital Markets Inc.

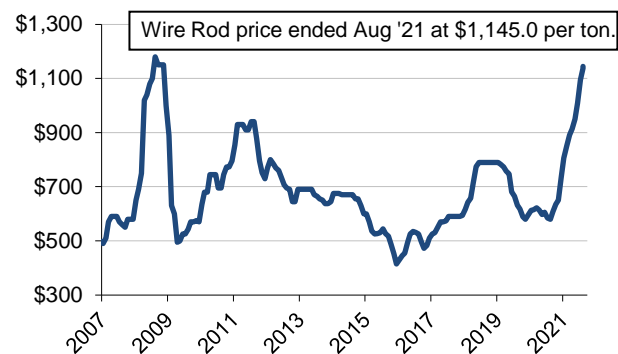
### Steel: Flat Product/HRC Prices – Y/Y Growth



Note: USD per ton.

Source: SBB and KeyBanc Capital Markets Inc.

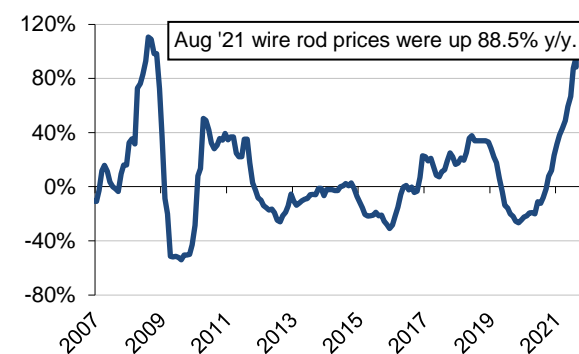
### Steel: Long Product/Wire Rod Prices



Note: USD per ton.

Source: SBB and KeyBanc Capital Markets Inc.

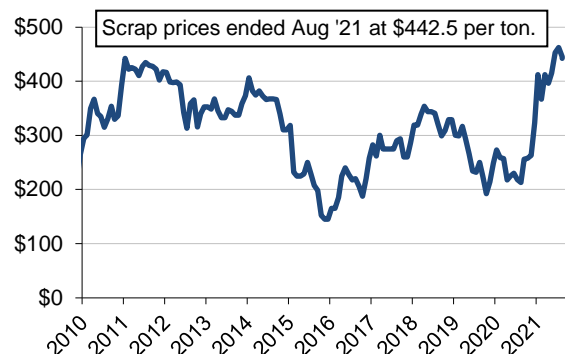
### Steel: Long Product/Wire Rod Prices – Y/Y Growth



Note: USD per ton.

Source: SBB and KeyBanc Capital Markets Inc.

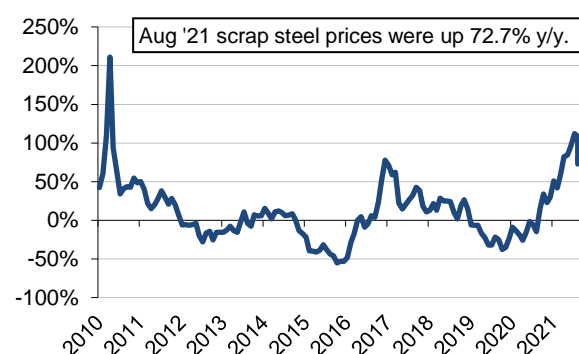
### Steel: Scrap/HMS 1/2 Prices



Note: USD per ton.

Source: SBB and KeyBanc Capital Markets Inc.

### Steel: Scrap/HMS 1/2 Prices – Y/Y Growth



Note: USD per ton.

Source: SBB and KeyBanc Capital Markets Inc.

**Figure 49 Mattress Delivery Times (Tracked and Published Bi-Weekly by KBCM)**

	5/3/2021	5/17/2021	6/1/2021	6/14/2021	6/28/2021	7/12/2021	7/26/2021	8/9/2021	8/30/2021	Last 4 Week Change	Commentary
Purple											
The Purple Mattress (Queen)	Leaves warehouse in 1-3 days	Leaves warehouse in 1-3 days	Leaves warehouse in 5-7 days	Leaves warehouse in 7-10 days	Leaves warehouse in 7-10 days	Leaves warehouse in 10-14 days	Leaves warehouse in 10-14 days	Leaves warehouse in 2-3 weeks	Leaves warehouse in 5-7 days	▼	PRPL shipping times have varied over the past 4 weeks
Purple Hybrid Premier 3 Inch (Queen)	Leaves warehouse in 1-3 days	Leaves warehouse in 1-3 days	Leaves warehouse in 7-10 days	Leaves warehouse in 2-3 weeks	Leaves warehouse in 5-7 days	Leaves warehouse in 5-7 days	Leaves warehouse in 5-7 days	Leaves warehouse in 7-10 days	Leaves warehouse in 5-7 days	▼	
Purple Hybrid Premier 4 Inch (Queen)	Home delivery will be scheduled within 7-10 days	Home delivery will be scheduled within 7-10 days	Home delivery will be scheduled within 7-10 days	Home delivery scheduled in 6-7 weeks	Home delivery scheduled in 3-4 weeks	Home delivery scheduled in 3-4 weeks	Home delivery scheduled in 5+ weeks	Home delivery scheduled in 5+ weeks	Home delivery scheduled in 1-2 weeks	▼	
White Sheets (Queen)	Leaves warehouse in 1-3 Days	Leaves warehouse in 1-3 Days	Leaves warehouse in 1-3 Days	Leaves warehouse in 1-3 Days	Leaves warehouse in 1-3 Days	Leaves warehouse in 1-3 Days	Out of stock	Leaves warehouse in 1-3 Days	Leaves warehouse in 1-3 Days	▼ ▲	
Plush Pillow	Leaves warehouse in 1-3 Days	Leaves warehouse in 1-3 Days	Leaves warehouse in 1-2 weeks	Leaves warehouse in 1-2 weeks	Leaves warehouse in 5-7 days	Leaves warehouse in 5-7 days	Leaves warehouse in 2-3 weeks	Leaves warehouse in 2-3 weeks	Leaves warehouse in 5+ weeks	▲	
Casper											
Original Mattress (Queen)	Delivered in 2-5 Days	Delivered in 2-5 Days	Delivered in 2-5 Days	Delivered in 3-9 days	Delivered in 3-9 days	Ships in 3-6 days*	Ships in 10-13 days	Ships in 14-17 days	Ships in 10-13 days	▼	CSPR shipping times have varied over the past 4 weeks
Wave Hybrid (Queen)	2-5 Days, but may take up to 14 days via scheduled delivery	2-5 Days, but may take up to 14 days via scheduled delivery	2-5 Days, but may take up to 14 days via scheduled delivery	2-5 Days, but may take up to 14 days via scheduled delivery	3-9 Days, but may take 1-3 weeks via scheduled delivery	3-9 Days, but may take 1-3 weeks via scheduled delivery	3-9 Days, but may take 1-3 weeks via scheduled delivery	3-9 Days, but may take 1-3 weeks via scheduled delivery	3-9 Days, but may take 1-3 weeks via scheduled delivery	▼ ▲	
Nova Hybrid Mattress (Queen)	Delivered in 2-5 Days	Delivered in 2-5 Days	Delivered in 2-5 Days	Delivered in 3-9 days	Delivered in 3-9 days	Delivered in 3-9 days	Delivered in 3-9 days	Delivered in 3-9 days	Ships in 13-16 days *	▲	
Nectar											
Queen Mattress	Shipping within 14-21 business days	Shipping within 14-21 business days	Shipping within 14-21 business days	Shipping within 14-21 business days	Shipping within 14-21 business days	Shipping within 14-21 business days	Shipping within 14-21 business days	Shipping within 7-10 business days	Shipping within 2-3 business days	▲	Nectar shipping times have increased over the past 4 weeks
Mattress Firm											
Sealy 12" Plush Memory Foam Mattress	Delivery in 7-10 business days	Delivery in 7-10 business days	Out of stock	Out of stock	Out of stock	Out of stock	Out of stock	Out of stock	Out of stock	▼ ▲	Mattress Firm shipping times have largely increased over the past 4 weeks
Sealy Ease 3.0 Adjustable Base	Delivers in 1 day	Delivery in 5 days	Delivery in 2 days	Delivery in 1 day	Delivery in 1 day	Delivery in 1 day	Delivery in 1 day	Delivery in 2 days	Delivery in 6 days	▲	
Tempur-Pedic Pro Adapt 12" Firm Mattress	Delivers in 1 day	Delivery in 2 days	Delivery in 2 days	Delivery in 1 day	Delivery in 2 weeks	Delivery in 1 week	Delivery in 6+ weeks	Delivery in 2 days	Delivery in 6+ weeks	▲	
Purple 2 Hybrid Mattress	Delivers in 7-10 business days	Delivers in 7-10 business days	Out of stock	Delivers in 7-10 business days	Out of stock	Delivery in 1 day	Delivery in 1 day	Delivery in 5 days	Delivery in 6 days	▲	
Tempur-Pedic											
Tempur-Breeze	7-14 Days	7-14 Days	7-14 Days	7-14 Days	7-14 Days	7-14 Days	7-10 days typically, but could take 3-5 weeks	7-10 days typically, but could take 3-5 weeks	7-10 days typically, but could take 3-5 weeks	▼ ▲	TPX shipping times have remained consistent over the past 4 weeks
Tempur-Adapt	7-14 Days	7-14 Days	7-14 Days	7-14 Days	7-14 Days	7-14 Days	7-10 days typically, but could take 3-5 weeks	7-10 days typically, but could take 3-5 weeks	7-10 days typically, but could take 3-5 weeks	▼ ▲	
Tempur-Cloud	5-7 Days	5-7 Days	5-7 Days	5-7 Days	5-7 Days	5-7 Days	7-10 days typically, but could take 3-5 weeks	7-10 days typically, but could take 3-5 weeks	7-10 days typically, but could take 3-5 weeks	▼ ▲	
Adjustable Base	7-14 Days	7-14 Days	7-14 Days	7-14 Days	7-14 Days	7-14 Days	7-10 days typically, but could take 3-5 weeks	7-10 days typically, but could take 3-5 weeks	7-10 days typically, but could take 3-5 weeks	▼ ▲	
Sleep Number											
C2	13-19 days	2-3 weeks	4 weeks	3-4 weeks	30 days	6-8 weeks	3-4 weeks	2-6 weeks in most areas	4-6 weeks	▲	SNBR shipping times increased over the past 4 weeks
P5	13-19 days	2-3 weeks	4 weeks	3-4 weeks	30 days	6-8 weeks	3-4 weeks	2-6 weeks in most areas	4-6 weeks	▲	
Adjustable Base	13-19 days	2-3 weeks	4 weeks	3-4 weeks	30 days	6-8 weeks	3-4 weeks	2-6 weeks in most areas	4-6 weeks	▲	

Source: Company Websites and KeyBanc Capital Markets Inc.

\*Switched quote from days to delivery to days to shipment. CSPR estimates an additional three to five days for delivery.

Note: Data prior to this table has been previously published and is available upon request.

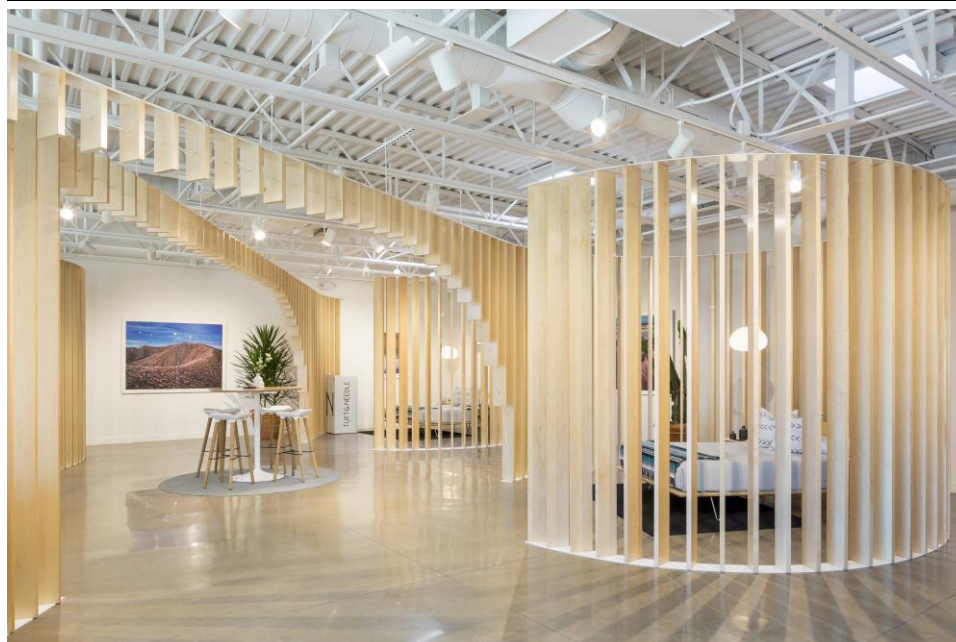


## PHYSICAL RETAIL PRESENCE BECOMING INCREASINGLY IMPORTANT

**Limited but Expanding Retail Presence.** One of the key drivers to e-commerce mattress companies' profitability is their ability to offer compelling value while cutting out the "middleman," or third-party retailers. However, more recently a number of e-commerce brands are building out their own stores to allow customers to experience their products. This is similar to what we have seen with other, more established internet retailers that have found it beneficial to have a limited retail presence (such as Warby Parker and Bonobos). Anecdotally, we have heard of people travelling several hours to visit these showrooms and test the products before buying. We believe a brick-and-mortar presence will ultimately be a cornerstone of growth for many of these young companies.

In particular, Casper expanded its retail presence to 72 stores as of August 2021 (in addition to over 25 retail partners currently), an increase of 13 net new stores compared to August 2020. Similarly, PRPL has driven very strong growth through its wholesale channels. As of 2Q21, PRPL was in over 2,300 wholesale doors. PRPL has also been testing and refining the Company's own branded stores, currently with 13 company-owned showrooms operational, and anticipates ending 2021 with 30 showrooms. Interestingly, on the traditional side of the industry, TPX has been opening up its own stores that complement its existing third-party retail partners. TPX had 76 Tempur-Pedic retail stores at the end of 2020 (vs. 56 at the end of 2019). In addition to its high-end Tempur-Pedic retail stores, TPX also operates through Sleep Outfitters, which is a regional bedding retailer with 99 stores across five states in the U.S. that serves consumers across all price points. Furthermore, in 2019, TPX announced three new or expanded third-party retail relationships in the U.S. (with Mattress Firm and Big Lots) and Europe (with Beter Bed Holding), which resulted in the largest expansion of stores in TPX's history. In 2020, TPX continued this retail partner expansion, adding new distribution at several existing retail chains.

**Figure 50 Tuft & Needle Showroom**





*Source: Company website*

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Figure 51 Casper Showrooms



Source: Company website

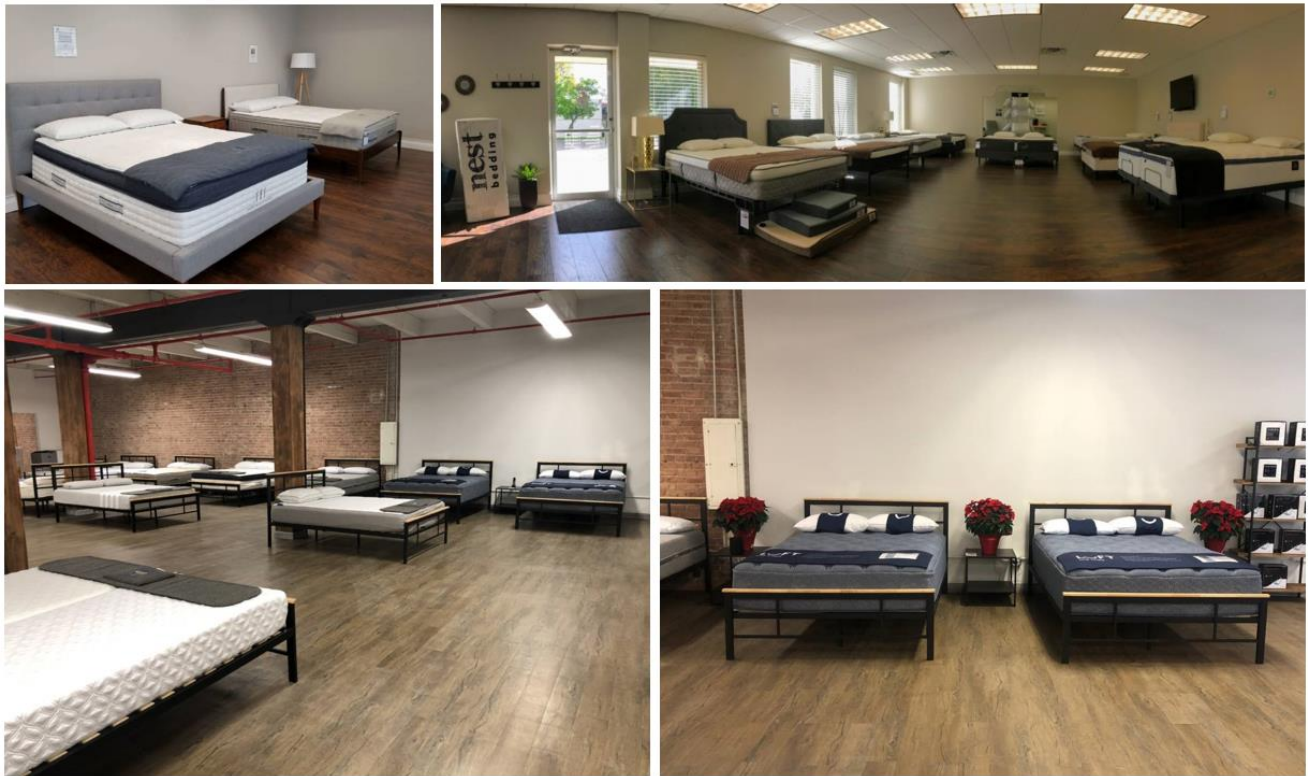
Figure 52 Purple Showrooms



Source: Company website



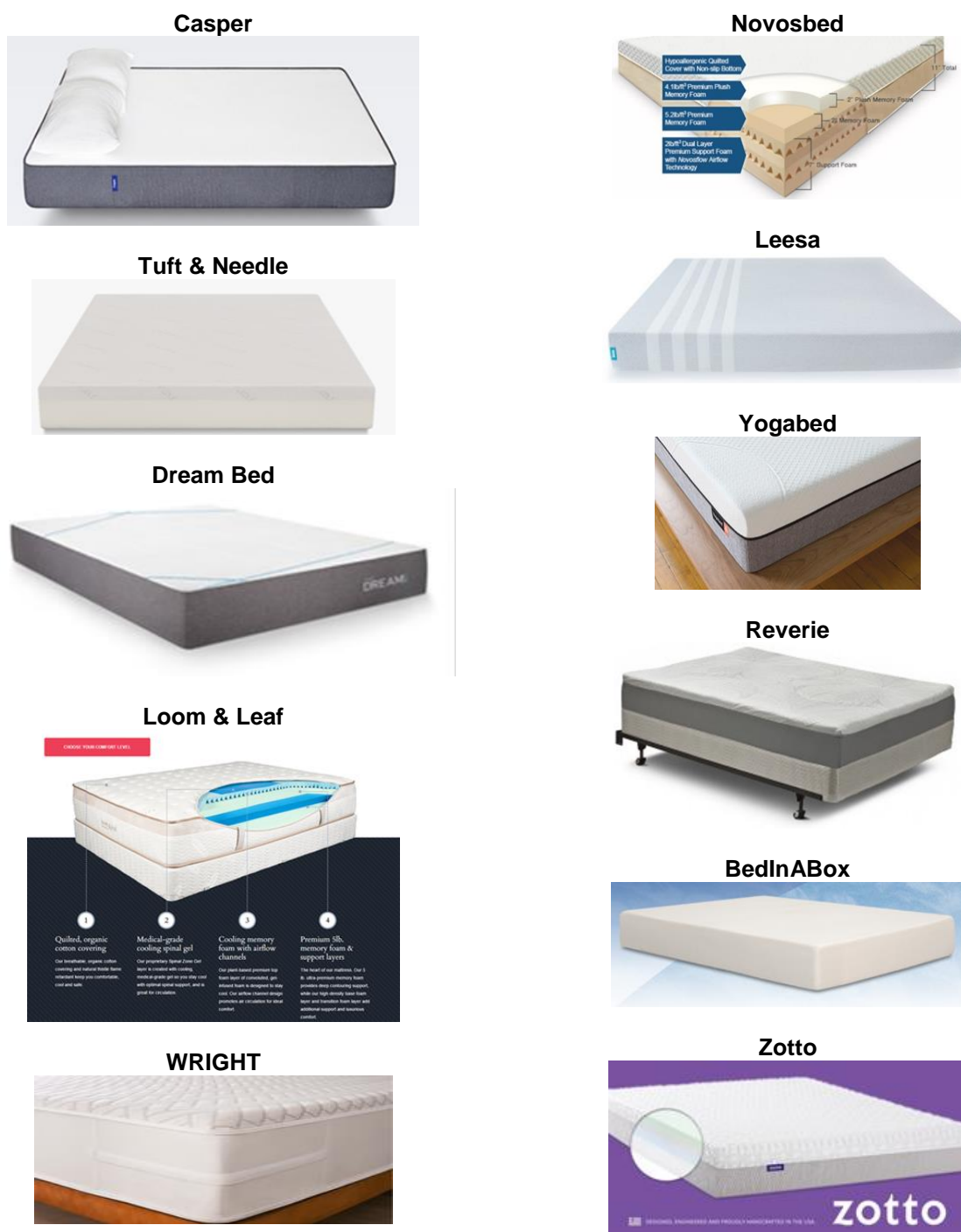
**Figure 53 Sleep Sherpa Mattress Showrooms – Located in Chicago and Minneapolis**



*Source: Company websites and KeyBanc Capital Markets Inc.*

## ADDITIONAL INFORMATION ON E-COMMERCE MATTRESS BUSINESS MODEL

Figure 54 Online Mattress Brands – Product Examples



Source: Company websites

## Online Mattress Brands – Product Examples (cont'd)

**Brooklyn Bedding**



**Cocoon Bed (by Sealy)**



**GhostBed**



**Helix Sleep**



**Nectar**



**KEETSA**



**Nest Bedding**



**Lull**



**SAATVA**



**Purple Mattress**



**WinkBed**



Source: Company websites

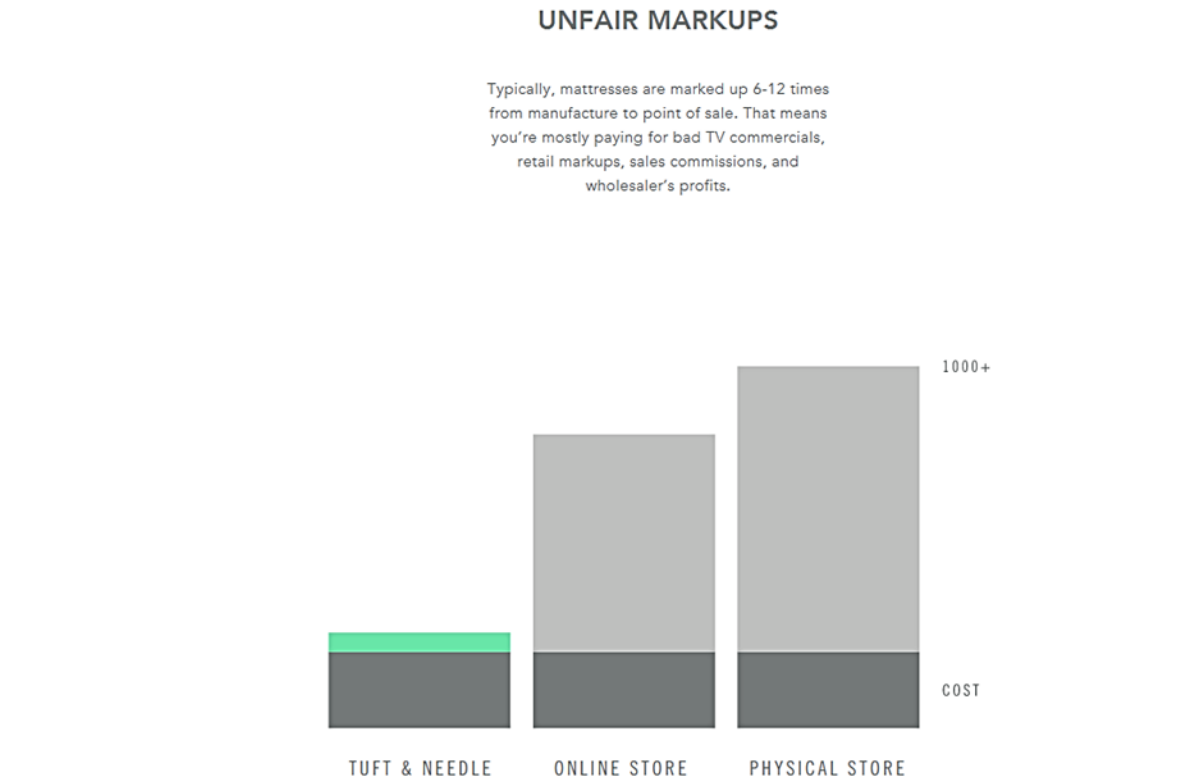
Figure 55 Packaging and Shipping Examples



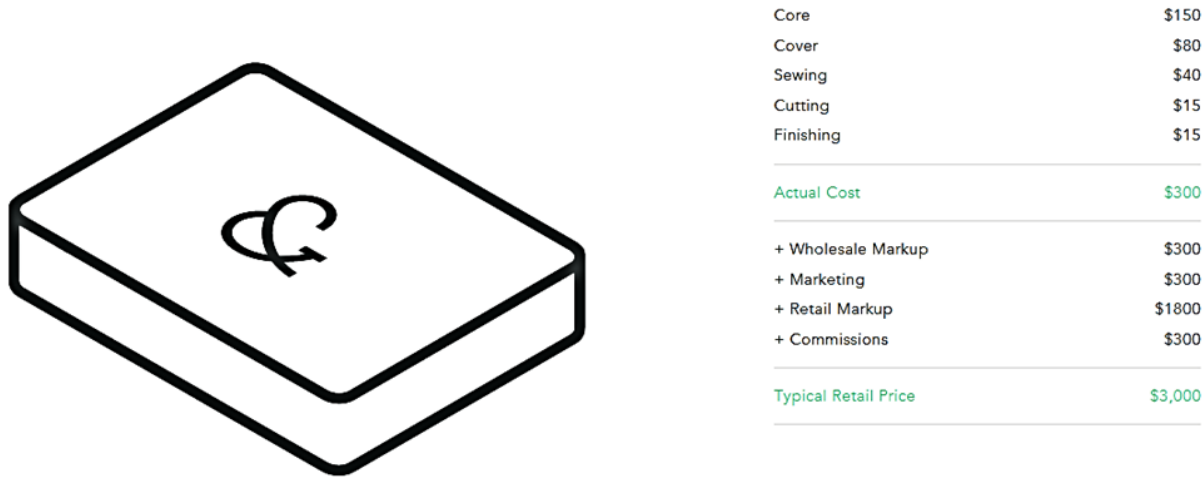
Source: Company websites



Figure 56 Online Mattress Marketing Highlights the Brick-and-Mortar Margin Structure

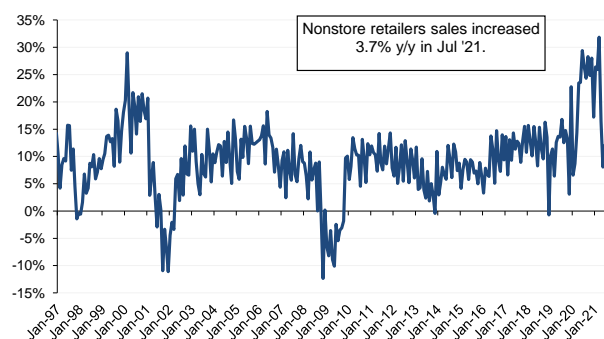


WHAT DOES IT COST TO MAKE THE AVERAGE MATTRESS?



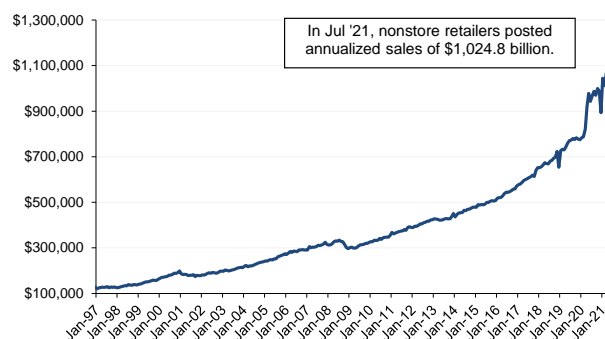
Source: Tuft & Needle website (archive)

**Figure 57 Nonstore Retailers (Y/Y Growth)**



Source: U.S. Census Bureau and KeyBanc Capital Markets Inc.

**Figure 58 Nonstore Retailers (SAAR)**



Source: U.S. Census Bureau and KeyBanc Capital Markets Inc.

Figure 59 Google Trends for Home-Related Spending

	Monthly Google Trends Term Data								
	Absolute Average			y/y Growth			y/y 3M Rolling Avg.		
	Mattress	Sofa	Flooring	Mattress	Sofa	Flooring	Mattress	Sofa	Flooring
January 2015	29	14	8	-14.7%	7.7%	0.0%	5.8%	-4.2%	-7.1%
February 2015	32	12	7	-3.0%	9.1%	0.0%	-2.0%	-2.5%	-4.2%
March 2015	29	9	8	3.6%	-25.0%	-11.1%	-5.3%	-2.8%	-4.2%
April 2015	30	13	8	25.0%	0.0%	-11.1%	7.1%	-5.6%	-8.0%
May 2015	32	12	6	6.7%	9.1%	0.0%	11.0%	-5.6%	-8.3%
June 2015	32	11	9	6.7%	-8.3%	12.5%	11.9%	0.0%	0.0%
July 2015	37	11	9	-14.0%	-15.4%	0.0%	-1.9%	-5.6%	4.3%
August 2015	36	14	11	-5.3%	-6.7%	37.5%	-5.4%	-10.0%	16.0%
September 2015	34	15	9	36.0%	36.4%	50.0%	0.9%	2.6%	26.1%
October 2015	29	12	8	0.0%	9.1%	14.3%	7.6%	10.8%	33.3%
November 2015	62	22	10	5.1%	15.8%	0.0%	10.6%	19.5%	17.4%
December 2015	38	15	7	-2.6%	15.4%	-12.5%	1.6%	14.0%	0.0%
January 2016	35	15	9	20.7%	7.1%	12.5%	6.3%	13.0%	0.0%
February 2016	41	15	9	28.1%	25.0%	28.6%	14.0%	15.4%	8.7%
March 2016	35	13	12	20.7%	44.4%	50.0%	23.3%	22.9%	30.4%
April 2016	34	10	9	13.3%	-23.1%	12.5%	20.9%	11.8%	30.4%
May 2016	37	15	12	15.6%	25.0%	100.0%	16.5%	11.8%	50.0%
June 2016	42	12	9	31.3%	9.1%	0.0%	20.2%	2.8%	30.4%
July 2016	48	16	11	29.7%	45.5%	22.2%	25.7%	26.5%	33.3%
August 2016	46	11	7	27.8%	-21.4%	-36.4%	29.5%	8.3%	-6.9%
September 2016	45	15	10	32.4%	0.0%	11.1%	29.9%	5.0%	-3.4%
October 2016	40	12	9	37.9%	0.0%	12.5%	32.3%	-7.3%	-7.1%
November 2016	79	25	14	27.4%	13.6%	40.0%	31.2%	6.1%	22.2%
December 2016	41	16	10	7.9%	6.7%	42.9%	24.0%	8.2%	32.0%
January 2017	41	14	10	17.1%	-6.7%	11.1%	19.3%	5.8%	30.8%
February 2017	45	15	11	9.8%	0.0%	22.2%	11.4%	0.0%	24.0%
March 2017	37	16	13	5.7%	23.1%	8.3%	10.8%	4.7%	13.3%
April 2017	37	13	10	8.8%	30.0%	11.1%	8.2%	15.8%	13.3%
May 2017	41	17	10	10.8%	13.3%	-16.7%	8.5%	21.1%	0.0%
June 2017	42	19	9	0.0%	58.3%	0.0%	6.2%	32.4%	-3.3%
July 2017	56	18	11	16.7%	12.5%	0.0%	9.4%	25.6%	-6.3%
August 2017	49	14	11	6.5%	27.3%	57.1%	8.1%	30.8%	14.8%
September 2017	44	16	12	-2.2%	6.7%	20.0%	7.2%	14.3%	21.4%
October 2017	38	17	12	-5.0%	41.7%	33.3%	0.0%	23.7%	34.6%
November 2017	89	27	13	12.7%	8.0%	-7.1%	4.3%	15.4%	12.1%
December 2017	45	15	9	9.8%	-6.3%	-10.0%	7.5%	11.3%	3.0%
January 2018	40	16	9	-2.4%	14.3%	-10.0%	8.1%	5.5%	-8.8%
February 2018	47	14	11	4.4%	-6.7%	0.0%	3.9%	0.0%	-6.5%
March 2018	43	14	10	16.2%	-12.5%	-23.1%	5.7%	-2.2%	-11.8%
April 2018	42	13	11	13.5%	0.0%	10.0%	10.9%	-6.8%	-5.9%
May 2018	40	14	11	-2.4%	-17.6%	10.0%	8.7%	-10.9%	-3.0%
June 2018	45	14	11	7.1%	-26.3%	22.2%	5.8%	-16.3%	13.8%
July 2018	50	14	12	-10.7%	-22.2%	9.1%	-2.9%	-22.2%	13.3%
August 2018	56	15	12	14.3%	7.1%	9.1%	2.7%	-15.7%	12.9%
September 2018	44	13	10	0.0%	-18.8%	-16.7%	0.7%	-12.5%	0.0%
October 2018	46	15	11	21.1%	-11.8%	-8.3%	11.5%	-8.5%	-5.7%
November 2018	100	27	13	12.4%	0.0%	0.0%	11.1%	-8.3%	-8.1%
December 2018	42	18	9	-6.7%	20.0%	0.0%	9.3%	1.7%	-2.9%
January 2019	41	15	8	2.5%	-6.3%	-11.1%	5.2%	3.4%	-3.2%
February 2019	38	14	11	-19.1%	0.0%	0.0%	-8.3%	4.4%	-3.4%
March 2019	43	12	13	0.0%	-14.3%	30.0%	-6.2%	-6.8%	6.7%
April 2019	35	11	10	-16.7%	-15.4%	-9.1%	-12.1%	-9.8%	6.3%
May 2019	47	13	9	17.5%	-7.1%	-18.2%	0.0%	-12.2%	0.0%
June 2019	48	13	10	6.7%	-7.1%	-9.1%	2.4%	-9.8%	-12.1%
July 2019	49	14	9	-2.0%	0.0%	-25.0%	6.7%	-4.8%	-17.6%
August 2019	49	13	9	-12.5%	-13.3%	-25.0%	-3.3%	-7.0%	-20.0%
September 2019	43	12	9	-2.3%	-7.7%	-10.0%	-6.0%	-7.1%	-20.6%
October 2019	44	14	8	-4.3%	-6.7%	-27.3%	-6.8%	-9.3%	-21.2%
November 2019	95	27	14	-5.0%	0.0%	7.7%	-4.2%	-3.6%	-8.8%
December 2019	57	17	11	35.7%	-5.6%	22.2%	4.3%	-3.3%	0.0%
January 2020	46	12	9	12.2%	-20.0%	12.5%	8.2%	-6.7%	13.3%
February 2020	50	13	10	31.6%	-7.1%	-9.1%	26.4%	-10.6%	7.1%
March 2020	40	12	8	-7.0%	0.0%	-38.5%	11.5%	-9.8%	-15.6%
April 2020	43	13	10	22.9%	18.2%	0.0%	14.7%	2.7%	-17.6%
May 2020	58	18	11	23.4%	38.5%	22.2%	12.8%	19.4%	-9.4%
June 2020	57	16	12	18.8%	23.1%	20.0%	21.5%	27.0%	13.8%
July 2020	60	18	11	22.4%	28.6%	22.2%	21.5%	30.0%	21.4%
August 2020	58	19	11	18.4%	46.2%	22.2%	19.9%	32.5%	21.4%
September 2020	55	18	10	27.9%	50.0%	11.1%	22.7%	41.0%	18.5%
October 2020	55	15	11	25.0%	7.1%	37.5%	23.5%	33.3%	23.1%
November 2020	91	27	13	-4.2%	0.0%	-7.1%	10.4%	13.2%	9.7%
December 2020	56	17	13	-1.8%	0.0%	18.2%	3.1%	1.7%	12.1%
January 2021	52	18	10	13.0%	50.0%	11.1%	0.5%	10.7%	5.9%
February 2021	52	17	12	4.0%	30.8%	20.0%	4.6%	23.8%	16.7%
March 2021	50	18	10	25.0%	50.0%	25.0%	13.2%	43.2%	18.5%
April 2021	50	19	12	16.3%	46.2%	20.0%	14.3%	42.1%	21.4%
May 2021	62	18	13	6.9%	0.0%	18.2%	14.9%	27.9%	20.7%
June 2021	60	16	14	5.3%	0.0%	16.7%	8.9%	12.8%	18.2%
July 2021	71	18	12	18.3%	0.0%	9.1%	10.3%	0.0%	14.7%
August 2021	61	15	12	5.2%	-21.1%	9.1%	9.7%	-7.5%	11.8%

Note: Per our report on August 2, 2015, over 10 years of data, the term "mattress" had a 71% correlation with quarterly mattress sales (with a one-quarter lag).

Source: Google Trends and KeyBanc Capital Markets Inc.

## MATTRESS INDUSTRY OVERVIEW

**Figure 60 Top 25 U.S. Bedding Retailers**

<u>Rank</u>		<u>Company</u>	<u>Est. Furniture and Bedding Sales in \$ (M)</u>			<u>Total Number of Units</u>	
2019	2018		2019	2018	% Change	2019	2018
1	1	Mattress Firm	\$2,825.1	\$2,943.2	-4.0%	2,500	3,300
2	2	Sleep Number	\$1,413.0	\$1,255.0	12.6%	611	579
3	3	Ashley HomeStore	\$900.0	\$835.9	7.7%	722	658
4	5	Sam's Club	\$415.0	\$378.8	9.6%	513	599
5	6	Rooms To Go	\$410.0	\$377.7	8.6%	151	151
6	7	Bershsire Hathaway Furniture Division	\$383.0	\$373.0	2.7%	34	34
7	4	Macy's	\$376.5	\$398.0	-5.4%	775	649
8	8	Raymour & Flanigan	\$325.0	\$306.0	6.2%	136	128
9	10	Bob's Discount Furniture	\$303.1	\$260.5	16.4%	122	104
10	9	Art Van	\$242.7	\$261.3	-7.1%	192	193
11	11	Costco	\$238.5	\$220.1	8.4%	543	527
12	23	Tempur Sealy International	\$226.0	\$99.0	128.3%	153	40
13	12	Big Lots	\$223.0	\$198.8	12.2%	1,404	1,401
14	14	Badcock Home Furniture & More	\$210.0	\$189.4	10.9%	365	348
15	18	Mattress Warehouse	\$150.8	\$132.1	14.2%	281	255
16	15	America's Mattress	\$150.0	\$155.7	-3.7%	321	327
17	16	Slumberland	\$143.4	\$155.4	-7.7%	123	127
18	19	American Signature	\$118.0	\$114.4	3.1%	114	115
19	20	Original Mattress Factory	\$113.1	\$108.0	4.7%	111	110
20	21	Mathis Brothers	\$109.0	\$104.0	4.8%	32	30
21	22	Sit'n Sleep	\$104.4	\$101.7	2.7%	38	37
22	13	Sears	\$102.6	\$192.7	-46.8%	200	223
23	25	American Furniture Warehouse	\$95.0	\$88.4	7.5%	14	14
24	24	Conn's	\$93.0	\$93.0	0.0%	137	123
25	17	Mattress1One	\$70.0	\$139.5	-49.8%	70	215

Source: Furniture Today and KeyBanc Capital Markets Inc.

Figure 61 Top 50 U.S. Furniture Retailers

Rank		Company	Est. Furniture, Bedding, Accessory Sales in \$			Total Number of Units			Selling Space, All Stores	
2020	2019		2020	2019	% Change	2020	2019	% Change	Sq. Ft. (000's)	
1	1	Ashley Furniture HomeStores	\$5,060	\$4,961	2.0%	752	722	4.2%	NA	
2	3	Williams-Sonoma	\$3,749	\$3,260	15.0%	581	614	-5.4%	NA	
3	2	Ikea	\$3,178	\$3,310	-4.0%	51	51	0.0%	NA	
4	4	Mattress Firm	\$2,976	\$2,686	10.8%	2,419	2,500	-3.2%	NA	
5	5	Rooms To Go	\$2,850	\$2,560	11.3%	151	151	0.0%	NA	
6	6	RH	\$2,676	\$2,355	13.6%	101	100	1.0%	NA	
7	7	Berkshire Hathaway furniture division	\$1,933	\$2,069	-6.6%	34	34	0.0%	NA	
8	9	Big Lots	\$1,881	\$1,636	15.0%	1,410	1,404	0.4%	32,676	
9	8	Sleep Number	\$1,851	\$1,688	9.6%	602	611	-1.5%	1,762	
10	10	Bob's Discount Furniture	\$1,713	\$1,612	6.2%	135	122	10.7%	NA	
11	11	Raymour & Flanigan	\$1,436	\$1,478	-2.8%	135	136	-0.7%	NA	
12	12	La-Z-Boy Furniture Galleries	\$1,392	\$1,304	6.8%	318	320	-0.6%	NA	
13	13	Crate & Barrel	\$1,318	\$1,053	25.2%	110	110	0.0%	NA	
14	15	American Signature	\$1,024	\$973	5.3%	120	114	5.3%	NA	
15	17	Dufresne Spencer Group	\$803	\$887	-9.5%	115	124	-7.3%	NA	
16	20	American Furniture Warehouse	\$796	\$731	8.8%	14	12	16.7%	1,889	
17	18	Havertys	\$748	\$802	-6.7%	120	121	-0.8%	4,400	
18	19	Ethan Allen	\$600	\$741	-19.1%	173	178	-2.8%	NA	
19	28	American Freight Furniture & Mattress	\$592	\$390	51.8%	350	176	98.9%	NA	
20	NR	At Home Group	\$573	\$501	14.4%	219	180	21.7%	NA	
21	22	Living Spaces	\$552	\$525	5.1%	27	24	12.5%	NA	
22	21	Badcock Home Furniture & more	\$542	\$537	0.9%	379	365	3.8%	6,117	
23	23	City Furniture	\$532	\$508	4.7%	34	32	6.3%	NA	
24	25	Room & Board	\$493	\$448	10.0%	20	17	17.6%	489	
25	24	Mathis Brothers	\$480	\$486	-1.2%	31	32	-3.1%	NA	
26	27	Arhaus Furniture	\$435	\$395	10.0%	75	70	7.1%	NA	
27	26	Slumberland	\$400	\$400	0.0%	122	123	-0.8%	NA	
28	31	Bassett Home Furnishings	\$386	\$358	7.9%	97	103	-5.8%	NA	
29	40	Herman Miller	\$386	\$389	-0.7%	39	44	-11.4%	NA	
30	32	Regency Furniture	\$377	\$339	11.2%	51	51	0.0%	NA	
31	39	Tempur Sealy International	\$367	\$240	53.0%	198	153	29.4%	NA	
32	30	Conn's	\$340	\$371	-8.3%	146	137	6.6%	NA	
33	29	Cost Plus World Market	\$338	\$385	-12.2%	243	261	-6.9%	NA	
34	33	Mor Furniture for Less	\$322	\$316	2.0%	38	37	2.7%	NA	
35	42	Lovesac	\$321	\$233	37.4%	108	91	18.7%	98	
36	NR	Casper Sleep	\$320	\$298	7.5%	66	54	22.2%	NA	
37	35	Furniture Mart USA	\$277	\$258	7.4%	48	46	4.3%	NA	
38	34	Haynes Furniture	\$274	\$274	0.0%	14	14	0.0%	NA	
39	36	Farmers Home Furniture	\$270	\$253	6.7%	244	237	3.0%	NA	
40	38	HOM Furniture	\$243	\$242	0.6%	22	20	10.0%	NA	
41	37	Jerome's	\$240	\$246	-2.5%	25	24	4.2%	NA	
42	43	Mattress Warehouse	\$230	\$225	2.2%	288	281	2.5%	NA	
43	44	Kane's Furniture	\$220	\$215	2.3%	18	18	0.0%	1,170	
44	41	El Dorado Furniture	\$196	\$239	-17.7%	17	17	0.0%	1,095	
45	57	Gardner-White	\$188	\$134	40.3%	12	11	9.1%	390	
46	62	Big Sandy Superstore	\$184	\$124	48.4%	31	23	34.8%	NA	
47	47	Broad River Retail	\$181	\$184	-1.7%	24	21	14.3%	NA	
48	50	The RoomPlace	\$180	\$172	5.0%	29	32	-9.4%	NA	
49	50	Gallery Furniture	\$179	\$174	2.6%	3	3	0.0%	230	
50	46	Baer's	\$178	\$192	-7.4%	17	16	6.3%	935	

Note: Dollars in millions

Source: Furniture Today

**Figure 62 Top 15 U.S. Bedding Producers**

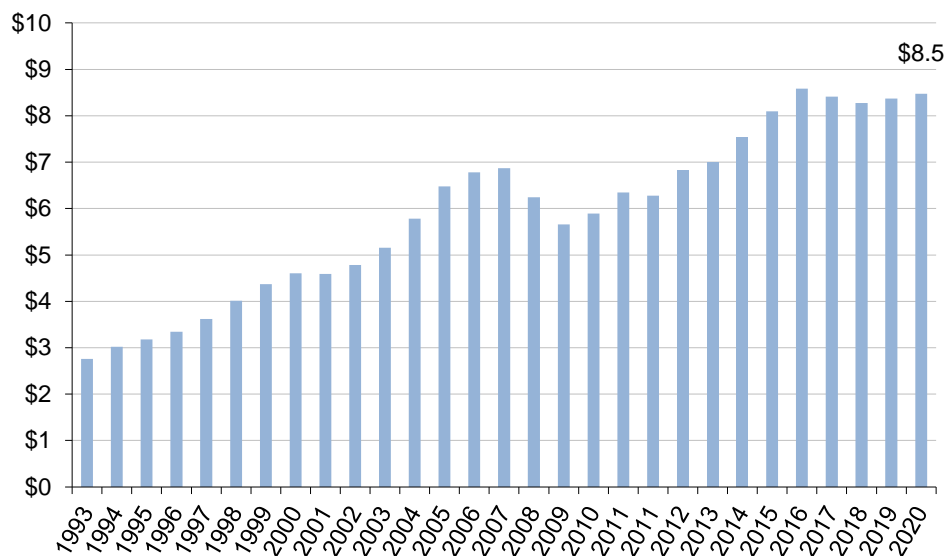
Rank							Estimated U.S.				Market Share*
2014	2015	2016	2017	2018	2019	2020	Company	2020	2019	% Change	2020
3	3	2	3	3	1	1	Sealy	\$1,646	\$1,436	14.6%	14.7%
4	4	4	4	4	4	2	Tempur-Pedic	\$1,378	\$1,115	23.6%	12.3%
2	2	3	2	2	2	3	Simmons	\$1,094	\$1,229	-11.0%	9.7%
1	1	1	1	1	3	4	Serta	\$974	\$1,205	-19.2%	8.7%
5	5	5	5	5	5	5	Sleep Number	\$669	\$660	1.4%	6.0%
7	11	8	8	7	6	6	Ashley Furniture	\$425	\$367	15.8%	3.8%
6	6	6	6	6	7	7	Corsicana	\$320	\$297	7.7%	2.8%
8	7	7	7	9	8	8	Therapedic	\$184	\$170	8.2%	1.6%
14	8	10	11	10	11	9	Restonic	\$149	\$129	15.5%	1.3%
10	10	14	10	8	9	10	Sherwood	\$140	\$155	-9.7%	1.2%
12	12	12	12	11	10	11	Symbol	\$125	\$138	-9.4%	1.1%
13	NR	13	14	14	14	12	Kingsdown	\$98	\$103	-4.9%	0.9%
9	9	9	9	12	13	13	Engledeer	\$95	\$111	-14.4%	0.8%
11	11	15	13	13	12	14	E.S. Kluff	\$94	\$115	-18.3%	0.8%
15	13	11	15	15	15	15	King Koil	\$91	\$91	0.0%	0.8%
Top 15 Total								\$7,482	\$7,321	2.2%	69.9%

Source: Furniture Today and KeyBanc Capital Markets Inc.

\*Market share estimates are calculated using ISPA's estimate for 2020 wholesale bedding dollars of \$11.231B.

**Figure 63 ISPA Wholesale Bedding Shipments (Including Foundations)**

According to ISPA, domestically produced wholesale shipments totaled \$8.5B in 2020.



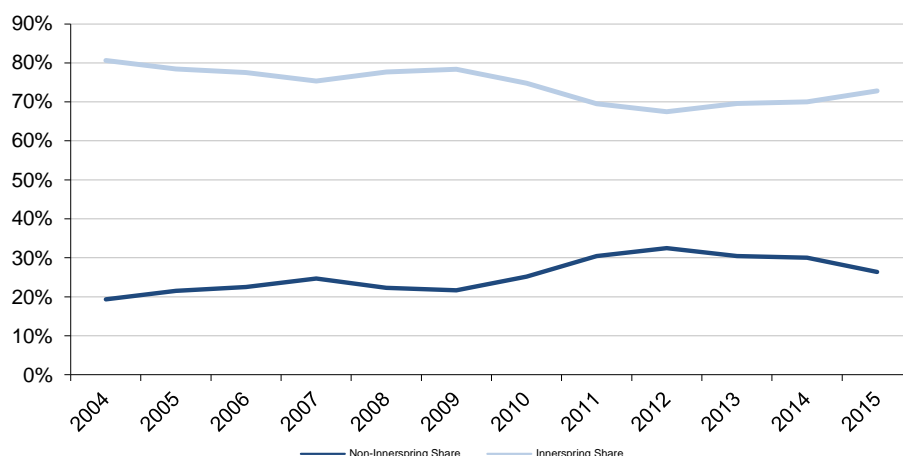
Note: Dollars in billions.

Note: Excludes imports.

Source: International Sleep Products Association and KeyBanc Capital Markets Inc.

**Figure 64 Innerspring vs. Specialty Market Share (in Dollars)**

Initially, online competition was primarily in the specialty category: foam, latex, and gel. Specialty bedding represented 26% of mattress dollars and 14% of mattress units in 2015. More recently, we are seeing an increased presence from online innerspring brands.



Note: This data is no longer updated and provided by ISPA.

Source: International Sleep Products Association and KeyBanc Capital Markets Inc.

**Figure 65 Mattress Industry Market Share by Price Point**

Emerging brands in this report primarily target the \$500-\$1K price tier, citing the same product quality/construction as the \$1K-\$2K beds in a traditional retail store. However, several brands are targeting \$1K+ price points.

Import brands, like Zinus, have broadened the competition with <\$600 price points.

Value	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	1Q 2021	2Q 2021
<\$500	22.1%	19.1%	19.1%	17.9%	16.8%	17.5%	16.8%	16.2%	15.7%	14.3%	14.1%	14.4%	14.3%
\$500-\$1,000	32.4%	33.6%	28.3%	32.5%	29.2%	30.1%	27.7%	29.1%	27.8%	27.4%	27.3%	27.6%	27.4%
\$1,000-\$2,000	26.7%	29.2%	35.2%	30.3%	33.3%	28.5%	28.4%	29.6%	31.3%	29.4%	29.6%	29.2%	29.3%
\$2,000+	18.8%	18.1%	17.4%	19.3%	20.7%	23.9%	27.1%	25.1%	25.2%	28.9%	29.0%	28.8%	29.0%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Units	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	1Q 2021	2Q 2021
<\$500	46.2%	42.5%	41.2%	40.7%	36.9%	36.1%	38.4%	37.1%	41.2%	34.1%	33.6%	33.6%	33.4%
\$500-\$1,000	33.9%	36.7%	33.1%	35.5%	36.1%	40.9%	35.1%	36.1%	31.7%	35.9%	35.4%	35.4%	35.1%
\$1,000-\$2,000	14.7%	15.8%	20.1%	17.7%	20.3%	16.5%	19.4%	19.5%	19.0%	21.6%	22.3%	22.3%	22.5%
\$2,000+	5.2%	5.0%	5.6%	6.1%	6.7%	6.5%	7.1%	7.3%	8.1%	8.4%	8.7%	8.7%	9.0%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: International Sleep Products Association and KeyBanc Capital Markets Inc.

Figure 66 Mattress Industry Sales Trends

% Change YOY	1Q17	2Q17	3Q17	4Q17	1Q18	2Q18	3Q18	4Q18	1Q19	2Q19	3Q19	4Q19	1Q20	2Q20	3Q20	4Q20	1Q21	2Q21
<b>ISPA U.S. Produced + Imports</b>																		
ISPA Total Dollars									2.1%	(6.4%)	(3.9%)	12.0%	6.2%	(10.5%)	13.7%	8.0%	7.0%	51.3%
ISPA Total Units									2.1%	(7.0%)	(4.2%)	6.0%	6.2%	2.0%	6.8%	5.0%	-4.9%	16.2%
ISPA Total AUP									(0.0%)	0.7%	0.3%	5.6%	(0.1%)	(12.3%)	6.5%	2.9%	12.5%	30.3%
ISPA Mattress Dollars									7.0%	(2.6%)	(1.9%)	11.0%	2.2%	(9.7%)	13.8%	4.2%	5.6%	48.2%
ISPA Mattress Units									7.7%	(3.3%)	(4.6%)	5.1%	6.5%	9.9%	14.7%	3.6%	-12.9%	11.1%
ISPA Mattress AUP									(0.6%)	0.6%	2.8%	5.6%	(4.1%)	(17.9%)	(0.8%)	0.6%	21.2%	33.5%
<b>ISPA U.S. Produced</b>																		
ISPA Total Dollars	(0.1%)	(6.8%)	(6.4%)	(10.6%)	(2.4%)	(3.5%)	(2.0%)	(9.2%)	(2.6%)	(5.8%)	(3.4%)	7.2%	(5.0%)	(19.5%)	9.3%	4.1%	14.0%	57.8%
ISPA Total Units	(4.4%)	(8.0%)	(10.3%)	(4.2%)	(9.3%)	(7.9%)	(6.9%)	(15.5%)	(15.3%)	(14.6%)	(11.3%)	(4.1%)	(11.4%)	(10.8%)	1.9%	(1.7%)	2.6%	14.4%
ISPA Total AUP	4.5%	1.3%	4.4%	7.1%	7.6%	4.7%	5.3%	7.5%	15.0%	10.3%	8.9%	11.8%	7.2%	(9.8%)	7.2%	6.0%	11.1%	37.9%
ISPA Mattress Dollars	2.7%	(2.0%)	(2.1%)	2.7%	(5.8%)	(3.1%)	(0.5%)	(8.8%)	(0.7%)	(5.0%)	(2.3%)	9.8%	(3.1%)	(18.9%)	10.9%	5.4%	15.8%	57.3%
ISPA Mattress Units	(3.1%)	(4.9%)	(7.1%)	(1.8%)	(6.8%)	(2.6%)	(0.4%)	(10.4%)	(9.8%)	(10.5%)	(6.7%)	2.2%	(4.7%)	(6.1%)	4.9%	0.0%	5.8%	14.7%
ISPA Mattress AUP	6.0%	3.0%	5.4%	4.5%	1.1%	(0.4%)	(0.1%)	1.8%	10.1%	6.2%	4.7%	7.5%	1.7%	(13.7%)	5.7%	5.4%	9.4%	37.2%
<b>Company Specific Trends</b>																		
TPX North America Sales	7.0%	(21.4%)	(16.9%)	(22.1%)	(16.7%)	0.5%	2.6%	8.7%	12.2%	11.4%	14.5%	36.3%	24.5%	(3.0%)	43.2%	20.6%	27.6%	75.2%
TPX NA Sales excl. MFRM	13.0%	10.0%	9.8%	4.0%	(0.8%)	0.7%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
SNBR Comparable Sales	3.0%	(4.0%)	5.0%	12.0%	(3.0%)	9.0%	0.0%	10.0%	5.0%	8.0%	10.0%	2.0%	7.0%	(21.0%)	11.0%	19.0%	20.0%	65.0%
LEG Bedding Products Organic Sales								8.0%	4.0%	(8.0%)	(9.0%)	(10.0%)	(15.4%)	(27.8%)	(1.3%)	5.0%	11.9%	50.0%
Raw Material-related Selling Price Increases													(4.0%)	Down		3.0%	9.0%	26.0%
Volume Growth (Decline)													(11.0%)	(25.0%)	(1.0%)	2.0%	2.0%	22.0%
MFRM Same-Store Sales	(9.0%)	(18.0%)	n/a	(10.0%)	(6.0%)	2.6%	+	17.0%	n/a	n/a	3.6%	17.0%	13.0%	(11.0%)	21.0%	25.3%	23.6%	41.0%
MFRM LFL (Ex Transfer)								3.6%	10.0%	8.0%	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
ZZZ Total Sales								4.2%	4.2%	10.4%	15.9%	14.2%	16.5%	1.5%	(31.0%)	15.4%	33.4%	20.7%
ZZZ Comparable Sales								0.2%	(2.7%)	(3.4%)	1.9%	0.5%	1.9%	(0.9%)	N/A	14.5%	32.4%	19.6%
PRPL Total Sales								26.4%	24.5%	37.2%	36.6%	65.8%	58.4%	46.3%	60.3%	59.4%	39.9%	52.3%
PRPL Wholesale								716.8%	373.8%	336.5%	125.9%	39.5%	(49.3%)	6.9%	9.0%	47.6%	233.2%	
PRPL DTC								(13.0%)	(5.0%)	10.0%	29.0%	50.1%	127.9%	97.6%	56.9%	54.8%		-19.9%
CSPR Total Sales									19.3%	16.6%	23.8%	29.3%	26.4%	15.7%	(3.3%)	18.4%	12.9%	37.7%
Continuing Operations (North America) Sales															1.8%	25.8%	20.0%	44.6%
CSPR DTC												13.1%	12.8%	5.0%	(6.3%)	19.1%	11.1%	31.3%
CSPR Retail Partnerships												106.5%	142.8%	61.1%	32.6%	42.8%	53.7%	78.9%
CULP Mattress Fabrics	-0.1%	-4.2%	6.8%	6.8%	-4.7%	-23.6%	-13.6%	-27.1%	-18.9%	12.5%	-4.7%	-7.4%	-38.5%	-7.1%	12.2%	15.1%	83.9%	19.3%

Note: MFRM results beginning in 4Q16 are derived from YTD commentary made by Steinhoff International.

Source: Company reports, International Sleep Products Association, and KeyBanc Capital Markets Inc. estimates

Figure 67 Select Top Retailers Performance

Company / Segment	1Q20	2Q20	3Q20	4Q20	2020	1Q21	2Q21
Ashley HomeStore Sales Growth					12.9%		
Bershskire Hathaway Home Furnishings Sales Growth	2.3%	-24.7%	8.5%		0.0%	21.0%	
Big Lots Furniture Sales Growth	28.9%	26.7%	31.2%	26.0%	28.0%	29.6%	
Conn's Furniture and Mattress Category Growth	-22.0%	-18.6%	-7.0%	-4.2%	-13.0%	37.2%	34.9%
Costco Hardlines Sales Growth	17.4%	4.0%	26.4%	25.4%	18.9%	39.3%	
Havertys Mattress Category Growth	-11.7%	-53.2%	-6.5%	2.8%	-19.9%	9.2%	134.6%
IKEA Total Revenue Growth					-6.4%		
Macy's Home/Other Sales Growth	-22.3%	-15.1%	1.5%	0.0%	-7.9%	28.9%	124.2%
Mattress Firm SSS				25.3%	13.0%	23.6%	
Sam's Club Home and Apparel Sales Growth	-8.8%	10.8%	10.5%	-22.6%	0.5%	62.7%	12.3%
Sleep Number Comparable Sales Growth	7.0%	-21.0%	11.0%	19.0%	6.0%	20.0%	65.0%
Tempur Sealy International North America Sales Growth	24.5%	-3.0%	43.2%	20.6%	20.7%	27.6%	75.2%

Source: Furniture Today, company reports, and KeyBanc Capital Markets Inc.



## Disclosure Appendix

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### Valuation & Investment Risks

#### Purple Innovation, Inc. (PRPL)

Shares of PRPL trade at 29.6x and 22.6x our 2021 and 2022 EPS estimates of \$0.80 and \$1.05, respectively. This compares with a five-year average forward P/E of 29x, with a range of 2-70x. On an EV/EBITDA basis, shares trade at 18.8x and 13.9x our 2021 and 2022 EBITDA estimates, respectively. This compares with a five-year average EV/EBITDA of 13x, with a range of 2-26x. Shares trade at an EV/sales multiple of 1.8x our 2021 estimate vs. a five-year average of 1.0x. Our 12-month price target of \$40 is based on 38.1x our 2022 EPS estimate. We rate the shares Overweight.

Risks that could impede shares from reaching our price target and/or negatively impact its fundamentals include:

- **Mattress Industry End-Market Performance.** While the mattress industry has benefited from a recovery in consumer spending and housing over the past decade, as a high-ticket discretionary purchase, sales could be negatively affected by a recession or decline in consumer confidence.
- **Competition.** While PRPL has a patented and differentiated offering, the industry is highly competitive with large established companies and many young brands. In 4Q19, Mattress Firm re-added Tempur-Pedic, Stearns & Foster, and Sealy products to its floors. While we believe Purple has a differentiated product and room to continue growing with Mattress Firm, there is risk TPX brands could take share from PRPL.
- **Raw Material Prices Are Correlated with Oil Prices.** Raw materials used by PRPL include chemicals derived from oil. Should the price of oil and/or these chemicals rise, Purple's margins could come under pressure.
- **Large Partnerships.** Mattress Firm and Macy's currently represent a significant portion of PRPL's sales. Should these partnerships weaken, PRPL's revenue could come under pressure.

### Important Disclosures

#### Purple Innovation, Inc. - PRPL

We have managed or co-managed a public offering of securities for Purple Innovation, Inc. within the past 12 months.

Purple Innovation, Inc. is an investment banking client of ours.

We have received compensation for investment banking services from Purple Innovation, Inc. during the past 12 months.

We expect to receive or intend to seek compensation for investment banking services from Purple Innovation, Inc. within the next three months.

As of the date of this report, we make a market in Purple Innovation, Inc..

#### Sleep Number Corporation - SNBR

We have received compensation for non-investment banking securities related services from Sleep Number Corporation during the past 12 months.

We expect to receive or intend to seek compensation for investment banking services from Sleep Number Corporation within the next three months.

During the past 12 months, Sleep Number Corporation has been a client of the firm or its affiliates for non-securities related services.

As of the date of this report, we make a market in Sleep Number Corporation.

For the three-year history represented in this chart, this stock has been rated Sector Weight.

#### Tempur Sealy International, Inc. - TPX

We expect to receive or intend to seek compensation for investment banking services from Tempur Sealy International, Inc. within the next three months.

As of the date of this report, we make a market in Tempur Sealy International, Inc..

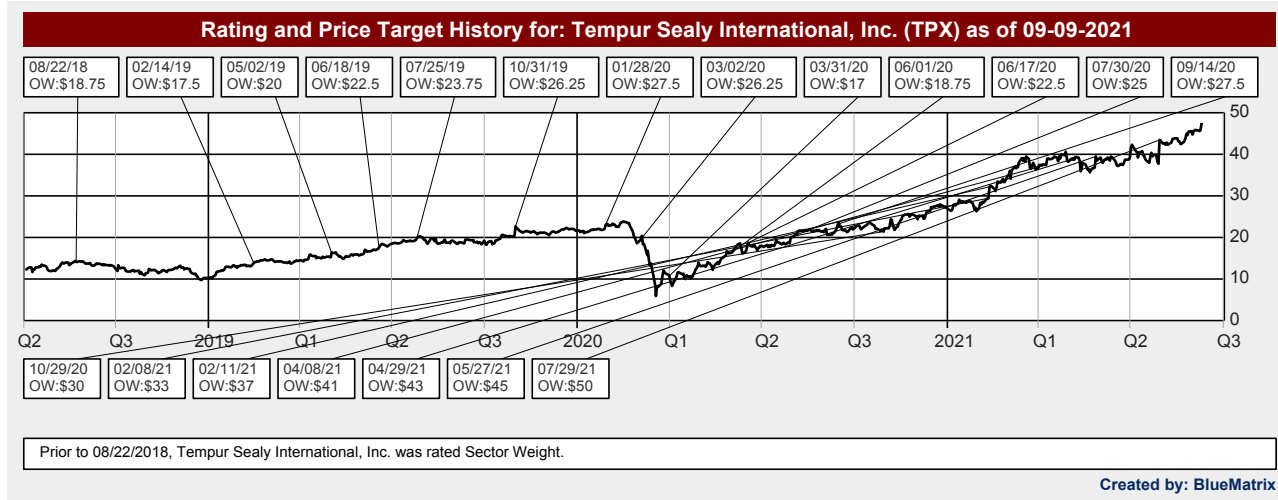
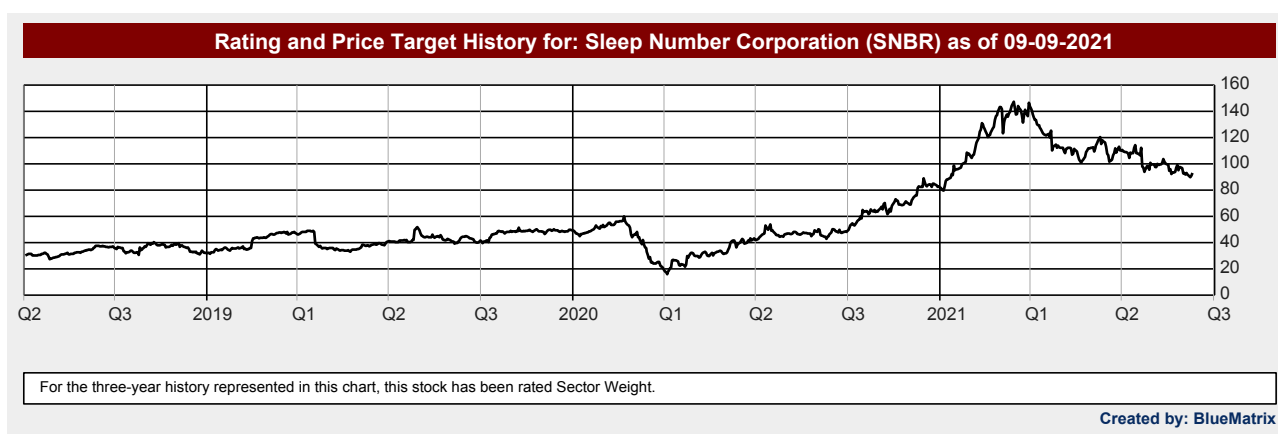
Prior to 08/22/2018, Tempur Sealy International, Inc. was rated Sector Weight.

### Reg A/C Certification

The research analyst(s) responsible for the preparation of this research report certifies that: (1) all the views expressed in this research report accurately reflect the research analyst's personal views about any and all of the subject securities or issuers; and (2) no part of the research analyst's compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed by the research analyst(s) in this research report.

## Disclosure Appendix (cont'd)

### Three-Year Rating and Price Target History



### Rating Disclosures

## Disclosure Appendix (cont'd)

Distribution of Ratings/IB Services Firmwide and by Sector									
KeyBanc Capital Markets					Consumer				
Rating	Count	Percent	IB Serv/Past 12 Mos.		Rating	Count	Percent	IB Serv/Past 12 Mos.	
			Count	Percent				Count	Percent
Overweight [OW]	337	53.75	103	30.56	Overweight [OW]	45	53.57	13	28.89
Sector Weight [SW]	280	44.66	62	22.14	Sector Weight [SW]	38	45.24	2	5.26
Underweight [UW]	10	1.59	2	20.00	Underweight [UW]	1	1.19	0	0.00

### **Rating System**

**Overweight** - We expect the stock to outperform the analyst's coverage sector over the coming 6-12 months.

**Sector Weight** - We expect the stock to perform in line with the analyst's coverage sector over the coming 6-12 months.

**Underweight** - We expect the stock to underperform the analyst's coverage sector over the coming 6-12 months.

## Disclosure Appendix (cont'd)

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Important disclosures for the companies mentioned in this report can be found at [https://key2.bluematrix.com/sellside/ Disclosures.action](https://key2.bluematrix.com/sellside/Disclosures.action).

Please refer to the analysts' recently published reports for company-specific valuation and risks.

### **Other Disclosures**

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