COWEN

CANNABIS

COWEN WASHINGTON RESEARCH GROUP

COLLABORATIVE INSIGHTS

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■ Cannabis

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INDUSTRY OVERVIEW

U.S. CBD YEAR 2 - ASSESSING THE PUTS AND TAKES OF AN EMERGING CATEGORY

THE COWEN INSIGHT

Now in year 2 following the 2018 Farm Bill, we revisit the U.S. CBD landscape and initiate coverage of Charlotte's Web (CWEB) with an Outperform rating and $7 PT and also initiate coverage of CV Sciences (CVSI) with a Market Perform rating and $0.75 PT. Early reads on consumer demand / strong margin profile provide basis for optimism; offset by headwinds that fall outside of category's control.

Reasons We Are Optimistic (Pascarelli). CBD is an exciting new industry and there are many early reads that give us conviction in the long-term staying power of this category including: 1) consumer incidence, 2) favorable demographic trends, 3) category stickiness and 4) a strong margin profile.

Headwinds. In addition to COVID-19, a lack of clarity from the FDA regarding the permissibility of ingestible form factors has resulted in a very measured rollout from large food, drug and mass (FDM) retailers, which typically only carry slower velocity topical products. As well, a lack of guidelines on manufacturing has resulted in market saturation within the lower barrier to entry natural products channel.

While there is industry optimism that the FDA will ultimately issue guidelines allowing for ingestible products to be sold, we feel this should not be embedded in a base case scenario and as such, **we are lowering our TAM to $10 bn by 2025 (relative to $16 bn previously). Our Bull Case assumes favorable guidelines, resulting in a ~$16.5 bn TAM by 2025, while our Bear Case assumes unfavorable guidelines, resulting in limited upside and a TAM of ~$4 bn by 2025.**

Keys To Outperforming. In a market that reflects strong consumer demand offset by regulatory pressure, we believe there are three keys to outperforming, which include: 1) brand equity / market leadership, 2) a strong e-commerce platform and 3) taking measures to control what's in your control.

CWEB - Initiate at Outperform. These three keys inform our Outperform rating on CWEB, (OTC: CWBHF; $5.66) where to date they have established themselves as the clear market leader with best in class revenues of almost $100 mm on an LTM basis. As well, CWEB over-indexes to the higher velocity, margin accretive e-commerce channel (66% of sales), and also just closed on the acquisition of Abacus Health Products (ABCS) which will strengthen their topicals portfolio, allowing for incremental distribution gains.

CVSI - Initiate at Market Perform. Currently, CVSI ($0.69) does not have the same favorable positioning as they over-index to the natural products channel (70% of sales) and under-index to e-commerce (24%). CVSI has made e-commerce one of their key priorities in 2020, though more work needs to be done as this segment is in decline and their mix benchmarks meaningfully below peers.

U.S. CBD Year 2 – Assessing the Puts and Takes of an Emerging Category (Pascarelli)

Now in year two following the passage of the 2018 Farm Bill, we revisit the U.S. CBD landscape and initiate coverage of Charlotte's Web (CWEB) with an Outperform rating and $7 PT, and CV Sciences (CVSI) with a Market Perform rating and $0.75 PT.

As it stands today, there have been some headwinds that are impacting the industry's ability to scale, most of which fall outside its control. We are less than two years into CBD being recognized as legal and there are many early reads that give us conviction on the long-term staying power of this category, which include:

1) Overall Consumer Incidence
2) Favorable Demographic Trends
3) Category Stickiness
4) A Very Strong Margin Profile

On the flip side, in addition to the unforeseen impacts of the COVID-19 pandemic, a lack of clarity on the permissibility of ingestible CBD form factors from the FDA has resulted in a very measured rollout from large food, drug and mass (FDM) retailers, that are impacting the industry's ability to scale to its max potential. In addition to a lack of overall doors, most FDM retailers only carry non-ingestible topical products, which are much slower velocity and do not generate the same turns as ingestibles.

Meanwhile, a lack of clear guidelines has resulted in market saturation within the natural products channel, which has lower barriers to entry and where brands of varying quality and price points have started to fragment the channel.

While there is industry optimism that the FDA will ultimately issue guidelines allowing for ingestible products to be sold, we feel this should not be embedded in a base case scenario over the near-to-medium term and as such, **we are lowering our TAM where we are now looking for the category to generate ~$10 bn in sales by 2025, relative to our previous $16 bn estimate. Our Bull Case scenario assumes ingestibles ultimately get recognized as permissible from the FDA and results in a ~$16.5 bn TAM by 2025, while our Bear Case assumes non-favorable guidelines, resulting in limited upside and a TAM of ~$4 bn by 2025.**

As stated above, assuming the status quo continues, we still believe that ample whitespace exists for the best-positioned companies to thrive in this market. In our minds there are 3 keys to outperforming amid a challenged industry which include:

1) Brand Equity / Market Leadership
2) A Strong e-Commerce Platform
3) Taking Tangible Measures to Control What's in Your Control.

These three key points inform our Outperform rating on CWEB, where to date they have established themselves as the clear market leader with the best brand equity and a strong e-commerce platform (66% of sales). As well, their recently closed acquisition of Abacus Health Products (ABCS) will strengthen their topical portfolio and provide the opportunity for additional distribution gains and cross selling.

As it stands today, CVSI does not have the same favorable positioning. The company over-indexes to the natural products channel, which has been under considerable pressure and accounts for ~70% of total company sales. Over-indexing to B2B naturally implies that the company will under-index to the higher-velocity, margin accretive e-commerce channel, which is accounting for less than a quarter of sales most recently (24%). While CVSI has made e-commerce a priority in 2020, more work needs to be done as their mix meaningfully under-indexes to peers.

Reasons to be Optimistic (Pascarelli)

We think CBD remains an exciting new consumer industry and while data on the overall category remains limited, our proprietary consumer survey points to optimistic trends in terms of consumer incidence, favorable demographics and category stickiness, along with a strong margin profile which we address herein.

Strong Consumer Incidence

When we initiated a question on incidence into our consumer survey in January 2019, we were encouraged to see that ~7% of survey respondents indicated using CBD as a supplement. Over the course of the year incidence climbed fairly steadily, increasing by ~300 bps. While month-to-month trends will be volatile and now be impacted by the COVID-19 pandemic, incidence remains strong at 9% on average over the first five months of 2020. This reflects a 100 bps increase relative to the average seen for the full year 2019 and a 200 bps increase relative to the five-month average seen in the year ago period.

Figure 1 CBD Incidence Has Been Increasing…

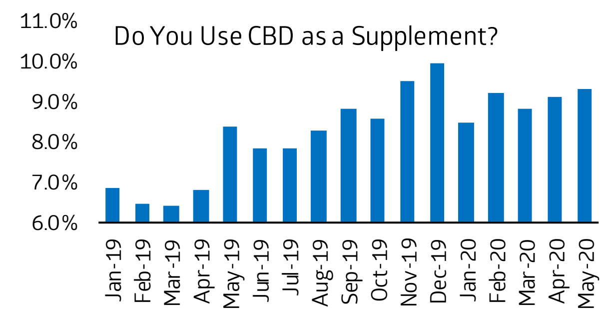
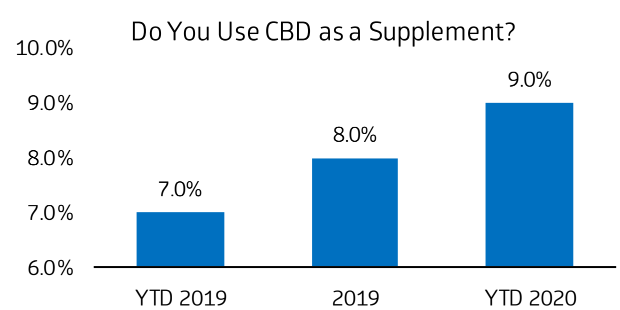


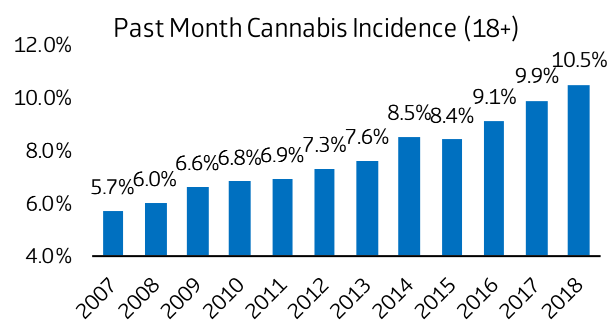
Figure 2 …Running at 9% YTD



Source: Cowen Consumer Survey, May 2020 (n=~2,500)

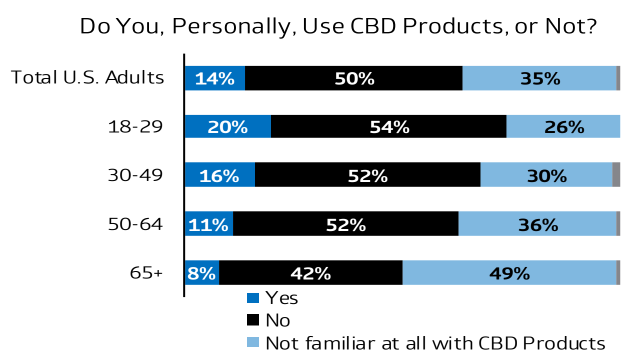
These incidence trends compare to past month THC cannabis incidence of 10.5% as of 2018, which has been steadily increasing and as recent as 2007, incidence levels were indicated at less than 6%. What is more, Gallup survey data supports strong U.S. CBD incidence, where overall, 14% of consumers are using CBD (as of July 2019), which is even higher than our encouraging estimates. Given the early stage of CBD, we remain constructive on these trends as consumer demand for these products is clearly present.

Figure 3 THC Cannabis Was Sub 6% As Recently as 2007



Source: NSDUH and Cowen and Company

Figure 4 Gallup Survey Supports Strong Incidence



Source: Gallup, July 2019

Favorable Demographic Trends

CBD is more popular with younger consumers, where over the past 17 months, incidence for the 18-34 cohort is outpacing all other age groups. When analyzing the demand in any consumer category, favorable demographic trends with younger consumers are what you want to see in terms of assessing longevity, given the natural waterfall effect, which transpires as consumers age and new ones enter into the category. Within the 18-34 year old cohort, incidence is averaging 12.2% YTD which reflects a 130 bps increase relative to the average seen for the full year 2019 and a 230 bps increase relative to the average incidence rate seen in the year-ago period. This reflects the largest magnitude of increases when benchmarking to other age groups and while we are always hesitant to read too much into any given monthly trend, it is worth noting that in the most recent month, CBD incidence of 13.8% for the 18-34 year old demographic was the highest reading in our survey's history. While we remain encouraged by the waterfall opportunity, we would also note that average incidence has been increasing for all age groups.

Figure 5 Encouraging Incidence from Younger Consumers

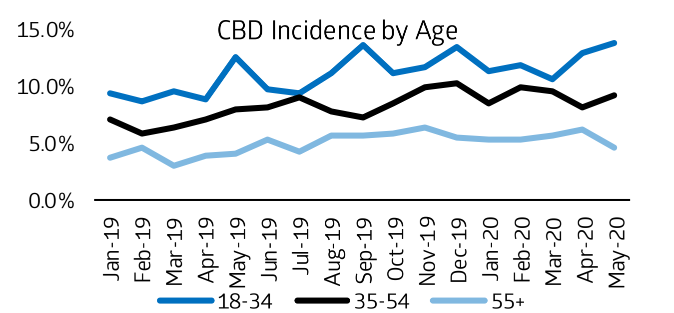
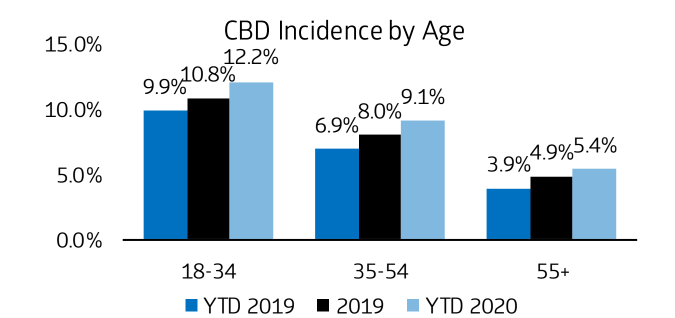


Figure 6 18-34 Outpacing Other Age Groups, Though All Are Growing



Source: Cowen Consumer Survey, May 2020 (n=~2,500)

We would also note that CBD buy-in looks fairly balanced from a gender perspective, where the incidence gap between men and women is less than 100 bps. This is much narrower than the ~5 pt gap seen in THC cannabis, adding to our conviction on the long-term staying power within the category.

Figure 7 Narrower Gap in Terms of Gender Incidence…

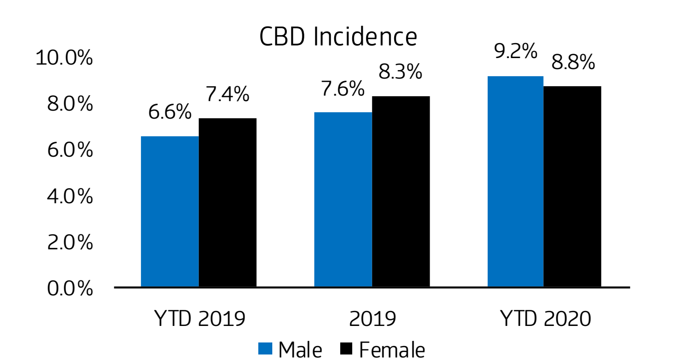
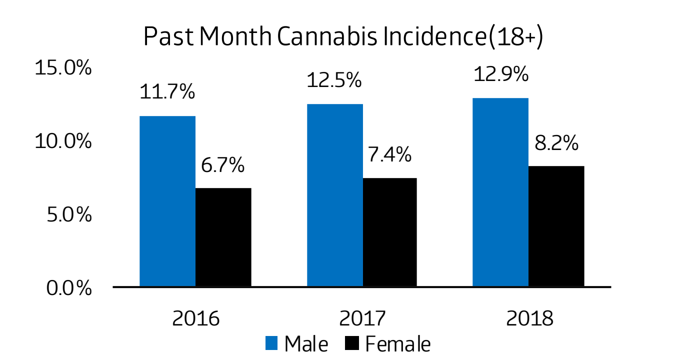


Figure 8 …Relative to THC Cannabis



Source: Cowen Consumer Survey, May 2020 (n=~2,500)

Source: NSDUH and Cowen and Company

Category Stickiness

Perhaps most encouraging and surprising to us is the high per capita demand in CBD. According to our survey, over the past four months, two thirds of CBD consumers have indicated that they use the products on a daily or weekly basis. We classify these consumers as high repeat and the user mix for consumers who have clearly adopted CBD as part of their daily / weekly routine is much higher than we would've expected. This points to the importance of brand equity and for being able to generate consumer trial, as our survey results indicate that the repeat is clearly there. This goes back to our above-mentioned point on brand equity. Category captains with the best brand equity will be able to generate the trial necessary to capture these sticky consumers. Taking into account that the category over-indexes to younger consumers results in the potential for a long-term sustainable revenue stream.

To be sure, CWEB's products are premium. But, in order to become more competitive in the current environment, the company has adopted trial formats for their products and has instituted a 15-20% price reduction on all of their products in order to manage their price gaps relative to competition (with a reduction in COGS offsetting the gross margin impact by two thirds). Being a rational price leader is a responsibility that comes with being a market leader in any consumer category (Coca-Cola (KO) has done this for years with great success). To reiterate, winners in this category will be dictated by their ability to generate trial and repeat, which coupled with an inevitable shakeout in the market will position the best companies very favorably to outperform.

Consumer frequency is one of the main metrics we will continue to monitor on a go forward basis, but after an initial four months of data, the trend is clear that daily and weekly users consistently make up the majority of CBD consumers.

Figure 9 High Frequency CBD Usage Among Consumers

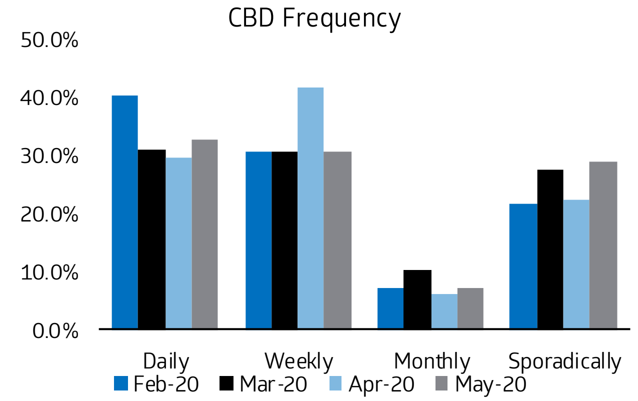
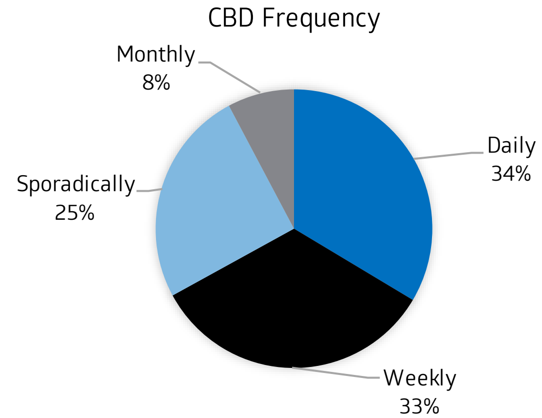


Figure 10 Daily/Weekly Consumers Account for 2/3rds of MIx

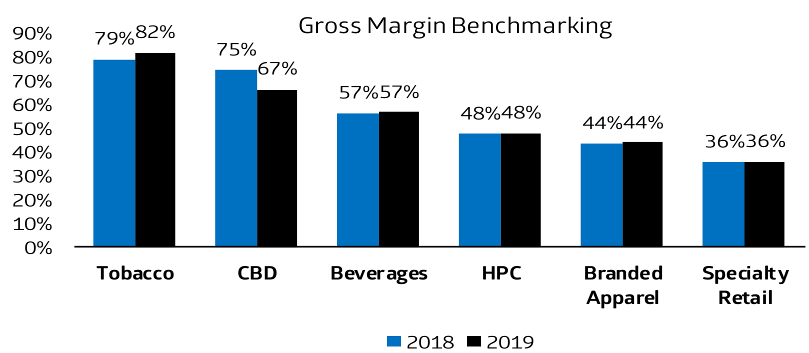


Source: Cowen Consumer Survey, May 2020 (n=~2,500)

Strong Gross Margin Profile

For a finished goods producer, the U.S. CBD category has demonstrated a history of very strong gross margins, which benchmark above almost all other traditional consumer sectors. We can see that outside of tobacco, which we believe will always have the highest gross margins within consumer products given their pricing power, CBD benchmarks meaningfully above beverages, HPC, branded apparel, and specialty retail gross margins. While near-term volume pressure became more pronounced industry-wide in 2H19 and thus has resulted in margin contraction, we would note that CWEB outpaced the industry, delivering 75.5% gross margin in 2018, followed by 68% (adjusted) in 2019. What is more, in the most recent quarter, the company delivered solid 70% gross margin, and while management has indicated normalized margin should shake out in the mid-to-high-60's, that would still outpace all of the categories below (ex-tobacco).

Figure 11 CBD Has a Very Favorable Margin Structure



Source: Company Reports and Cowen and Company

Benchmarking margins to the Canadian LPs and U.S. MSOs shows a similar trend. We would acknowledge that as it relates to the U.S. MSOs, this is not a complete apples-to-apples comparison, given the retail mix of many of these companies, but the key point is that CBD margins are strong, they are expected to stay strong, and that they compare very favorably to traditional consumer sectors as well as cannabis operators.

Figure 12 CBD Margins Benchmark Above Canadian...

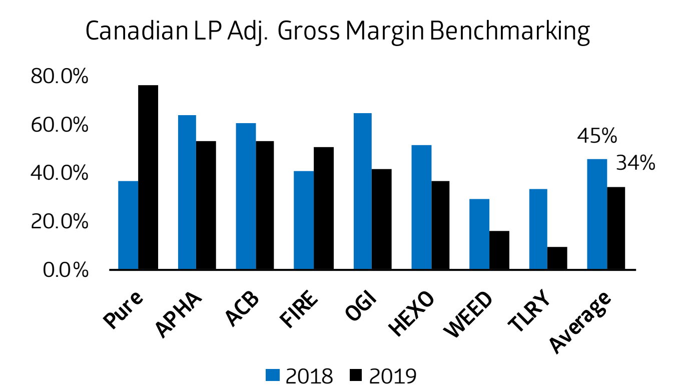
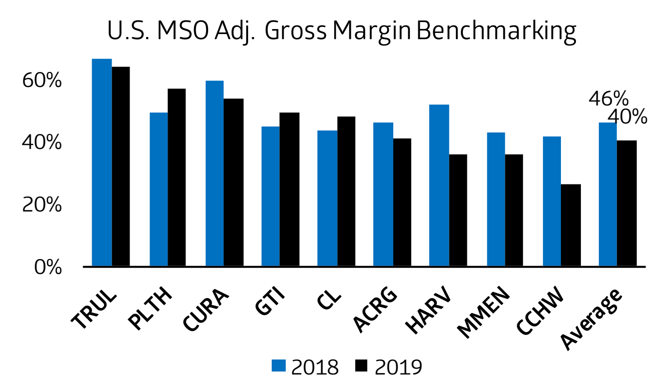


Figure 13 ...and U.S. Cannabis on Average



Source: Company Reports and Cowen and Company

This All Looks Good, Now Let's Get to the Headwinds (Pascarelli)

To level set, the passage of the 2018 Farm Bill resulted in overly optimistic expectations on the category's ability to scale rapidly. While data remains limited to this day, it was even more limited in 2019, where market estimates assumed that the demand for these products would immediately be captured at the point of sale given entry by large big box retailers.

As of today, this has not come to pass and **the largest headwind impacting the category's ability to scale to its max potential stems from a lack of clarity from the FDA regarding ingestible form factor permissibility.** This lack of clarity has resulted in three direct issues which include:

1) **A Lack of Doors.** While on the surface, there are a few notable FDM retailers who started carrying CBD products in 2019, the store rollout has been measured, not reaching anywhere near the capacity of its full potential. As an example, last year CVSI announced an 800-store distribution agreement with CVS, which while encouraging, only accounts for ~8% of its overall footprint of almost 10,000 stores across the U.S. Similar, limited rollouts have been taken with other FDM retailers including Walgreens and Rite-Aid, but as of today, companies such as Walmart, Costco and Target have not entered into the category at all.

2) **A Lack of Higher Velocity Products (Ingestibles).** While the rollout of large FDM channels has remained limited, the bigger issue is that these stores typically do not carry ingestible products (topicals only). Ingestible products, which include tinctures, capsules and gummies, among others, are much faster turning than topicals and thus represent a major loss of a potential revenue stream. FDM has a higher barrier to entry than other retail outlets (natural products in particular) and so until there are clear guidelines that will provide comfort for these stores to carry ingestibles, we expect the status quo to hold.

3) **Market Saturation Within the Natural Products Channel.** With lower barriers to entry, natural products channels will typically carry the higher velocity ingestible products. But, a lack of guidelines on manufacturing requirements and QA/QC has resulted in a rapid increase in the number of products being offered in these channels, which will vary greatly in terms of quality and price point. This has resulted in fragmentation of the category and has been reflected in CVSI's recent quarterly revenue performance which really started to deteriorate in the back half of 2019.

   It should be noted that this is presumably well understood by the investment community, especially when looking at a stock price chart, where CBD companies are trading meaningfully below the highs seen less than a year ago. The category is not in vogue, and as it stands, the biggest catalysts for the category are going to fall outside of its control and be dictated by the FDA.

CBD Policy: COVID-19 Likely Keeps FDA Stalled (Assaraf – Washington Research Group)

We believe COVID-19 gives FDA cover to continue its slow and deliberate approach on CBD and perhaps punt responsibility to Congress or the next Administration.

The FDA has remained relatively quiet on cannabidiol (CBD) regulation since its March report to Congress on potential pathways for allowing CBD in food and dietary supplements. This is not surprising given the emergence of COVID-19 soon after, which made CBD a lower priority for the agency.

On the other hand, we believe the pandemic also gives FDA cover to continue its slow and deliberate approach on CBD and perhaps punt responsibility to Congress or the next Administration.

As we wrote in our March 5 Bulletin, FDA's report to Congress didn't offer any new guidelines on CBD and instead repeated the agency's concerns over potential safety risks of currently marketed CBD products and other problems with mislabeling and potential contamination.

The FDA previously published a Consumer Update detailing safety concerns about CBD products and noted that it cannot conclude that CBD is generally recognized as safe (GRAS) for use in human or animal food, based on the lack of scientific information.

The FDA did indicate it was still working on an action plan for CBD and planned to deliver another report to Congress this summer on performing a sampling study of the current CBD marketplace to determine the extent to which products are mislabeled or adulterated. The FDA is also due to release a draft guidance on quality considerations for clinical research around cannabis.

A bill introduced Jan. 13 by House Agriculture Chairman Collin Peterson (D-Minn), H.R. 5587, would require the FDA to regulate CBD as a dietary supplement, but likely faces an uphill battle in the Senate. (For details on the federal landscape for marijuana legislation see our colleague Jaret Seiberg's most recent note).

FDA and FTC Continue Enforcement Activity on CBD

While there has been a lack of urgency at FDA on developing new guidelines for CBD, there has been no slowdown of enforcement actions against unscrupulous manufacturers.

On March 31, the FDA and FTC issued a joint warning letter to NeuroXPF, for making unsubstantiated claims that its CBD products could treat or prevent COVID-19. On May 7, joint warning letters were also sent to AgroTerra for making similar claims.

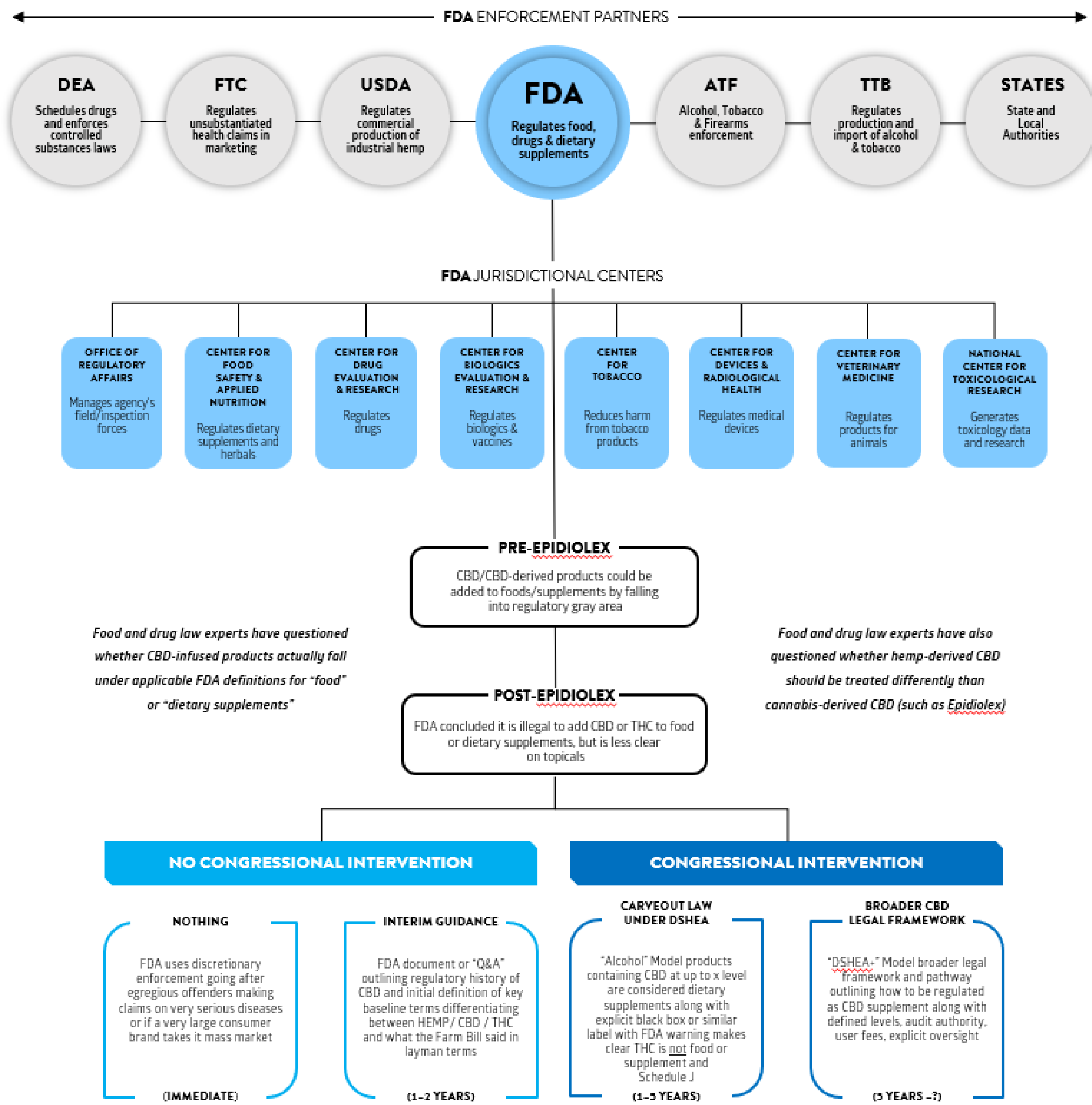
As we wrote in our Nov. 26 Bulletin, the FDA has issued warning letters to dozens of companies for illegally selling products containing CBD with unsubstantiated health claims.

CBD companies, consumer groups, and members of Congress remain frustrated with FDA's lack of guidance on CBD products. While the FDA has made clear what is not permissible in regards to selling CBD, the agency has not provided an update on how CBD could be legally sold through new regulatory pathways. This is not surprising to us as even a middle-ground approach would likely still take several months or years to develop and may require additional legislation (see our August 2 Bulletin for details).

Recall that the 2018 Farm Bill did not change FDA's authority over CBD and since there is now an FDA-approved drug with CBD as an active ingredient (**GW Pharma's** *Epidiolex*), the FDA determined that CBD cannot be added to food products sold across state lines or marketed as a dietary supplement.

The attached chart includes Cowen's FDA Cannabis Framework, which describes FDA's enforcement partners, jurisdictional centers, and potential regulatory pathways for CBD with or without congressional intervention (please contact your Cowen sales rep for a mini-poster version).

Figure 14 FDA Cannabis Framework



Source: Cowen and Company

So Consumers Like CBD, But The Category is Challenged; How Do You Pick Winners? (Pascarelli)

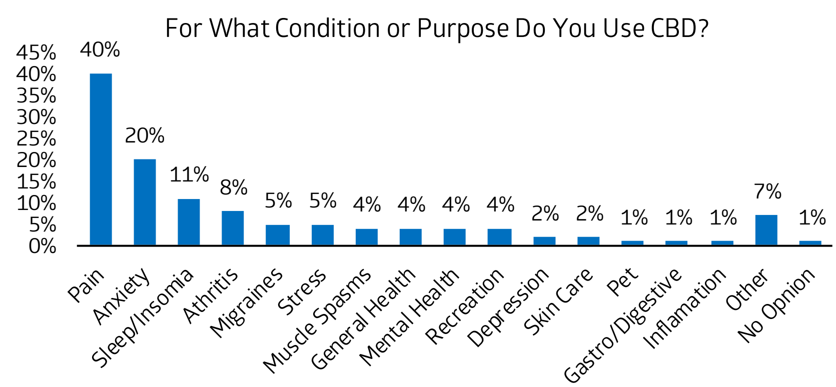
In our minds there are three keys to picking winners in this category which include favoring companies with established brand equity and market leadership, a strong e-commerce platform and a history of taking tangible actions to control what's in their control.

Established Brand Equity and Market Leadership

We should address from the outset that in order to build brand equity, you need to have a story to tell. Many of the 3,500+ brands saturating the CBD market today are low quality and looking to capitalize on a fast money opportunity, with limited visibility into their quality controls.

A strong argument can be made that no company operating in U.S. CBD today has a more compelling and authentic story than Charlotte's Web, which is the namesake of Charlotte Figi, a girl who suffered from severe epilepsy and who was able to substantially improve her quality of life after she started taking CBD specifically grown by the Stanley Brothers (the company's founders). Unfortunately, Charlotte Figi passed away earlier this year, but her story which became known across the U.S. has elevated Charlotte's Web and has resulted in brand loyalty and trust from consumers, the overwhelming majority of which are using CBD products to help cope with some kind of ailment.

Figure 15 Pain, Anxiety and Sleep Make Up the Majority of Reasons for Using CBD



Source: Gallup, July 2019

Brand equity and market leadership are necessary in a new emerging category because it provides a first mover advantage in being able to reach a wide consumer base long before competition starts to become more pronounced. In a sticky category, this is particularly important in times of increased competition which is shaking out in the category now.

Charlotte's Web's reach, market leadership and brand equity is reflected when benchmarking revenues to other publicly traded CBD companies, where to date, they are generating by far the largest amount of revenues in the category, with LTM sales approaching $100 mm ($21.5 mm in the most recent quarter). These revenues are 25% higher than their next leading publicly traded competitor and almost 120% higher than their peer group average. What is more, the company is guiding for organic revenue growth of 15% at the midpoint this year, at a time where most companies will experience outsized declines due to COVID-19 and market saturation, which should further cement their positioning as a best in class operator.

Figure 16 CWEB Leads in Terms Of Revenues...

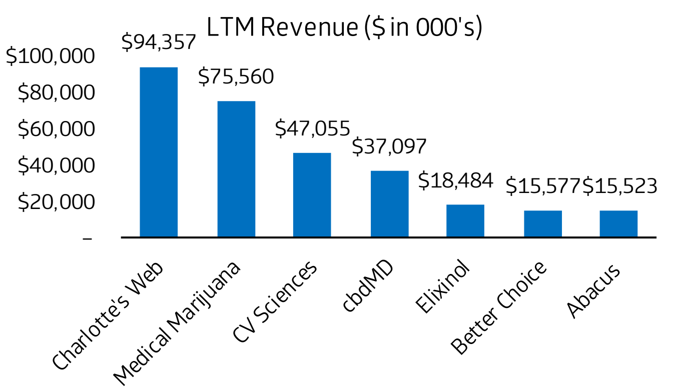
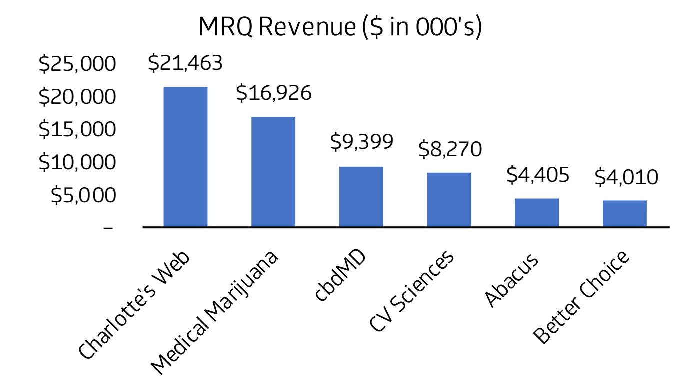


Figure 17 ...By a Fairly Wide Margin



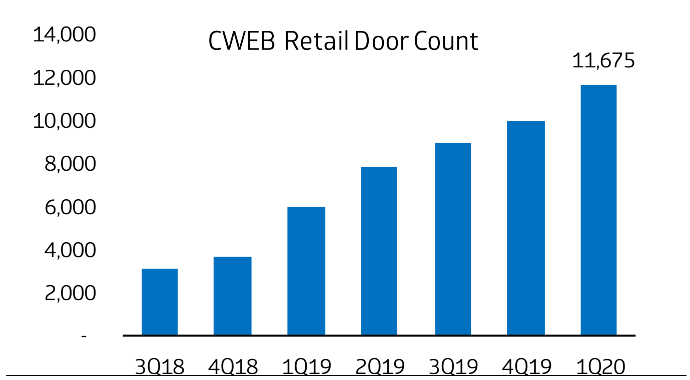
Source: Company Reports and Cowen and Company

Brand equity and market leadership should be reflected in a history of solid door penetration but more importantly puts the best companies at the top of the list for potential new retail entrants into the category. To date, CWEB has entered into distribution agreements with five key FDM retailers and recently entered into a distribution agreement with a national pet retailer, which will capture an incremental 700 stores.

Figure 18 Solid Traction with FDM

Source: Cowen and Company

Figure 19 ~12,000 Door Count



Finally, brand equity and market leadership help to protect against market fragmentation, which is currently taking place in the natural products channel. Ultimately, we believe there is an inevitable shakeout in the market, which is a catalyst that would benefit CWEB (as well as CVSI), given their good manufacturing processes.

But in its current capacity, we're confident CWEB will be able to best weather to storm within natural products because we have seen this this happen before, most recently within craft beer, where after experiencing a resurgence in growth back in the 2014-2015 timeframe, many retail outlets built out their refrigeration space to accommodate numerous craft SKUs, which in the end resulted in market fragmentation and consumer confusion. As such, consumers looking to buy a premium product went with the more established, premium Mexican imports in the form of the market leading Corona and Modelo brands, which was a clear tailwind to STZ. We can see below, that while the craft beer category (which had been growing faster than STZ) started to deteriorate, STZ started to meaningfully outperform as evidenced by the delta in sales growth. STZ was able to deliver this outperformance while being priced at a premium to the category and importantly, holding their gaps to the category relatively consistent. Since at least 2013 STZ has managed their price gaps diligently, averaging a ~37% premium to the category with a range of +34.5%–38.5% in any given month. The key takeaway here is that we anticipate consumers ultimately go with popular, premium products, and as a result, CWEB should stand to be the beneficiary.

Figure 20 STZ Benefitted From Fragmentation in Craft Beer…

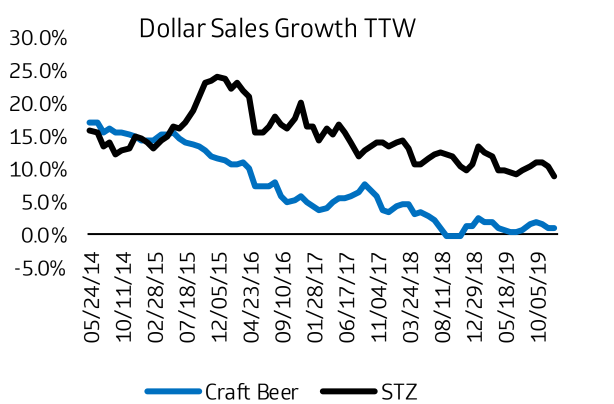
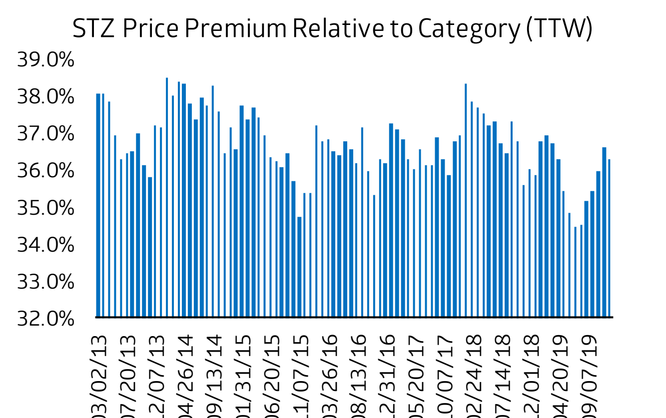


Figure 21 …All the While Holding Their Price Gaps Relatively Steady



Source: The Nielsen Company and Cowen and Company

STZ is priced at a premium to the market. As is Brown Forman (BF/B), The Boston Beer Company (SAM) and most consumer staples brands that have established themselves as clear market leaders. This is a long-term dynamic and is perhaps most evident with KO, which trades at a consistent premium to the market, while also commanding a revenue multiple in the 7-8x range.

Figure 22 KO Trades at a Premium to the Market

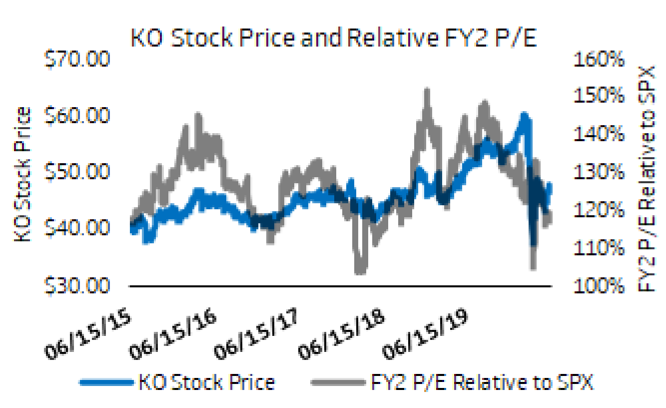
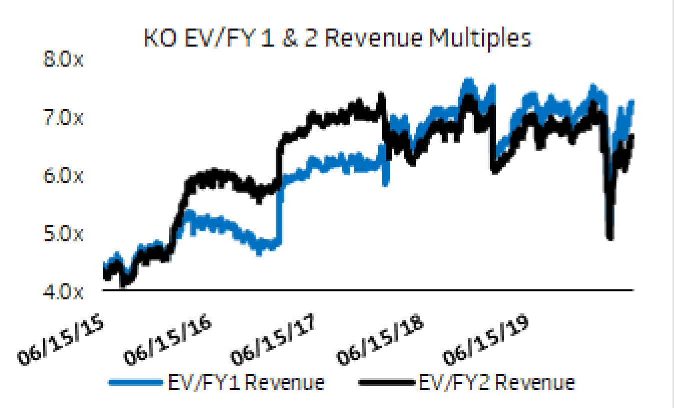


Figure 23 7-8x EV/Revs



Source: Thomson and Cowen and Company

Like STZ, KO manages its price gaps diligently, keeping pricing at a 3-10% premium to the total category, while continuing to gain share of the market. CWEB's recent price gap management announcement while necessary, more importantly reflects that management understands how to navigate an environment as the market leader, which is indicative of a long-term outlook and an encouraging sign for what is still to come.

Figure 24 Price Gap Management ...

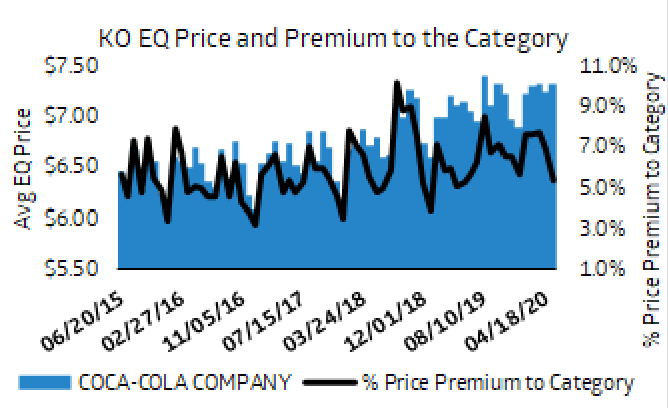
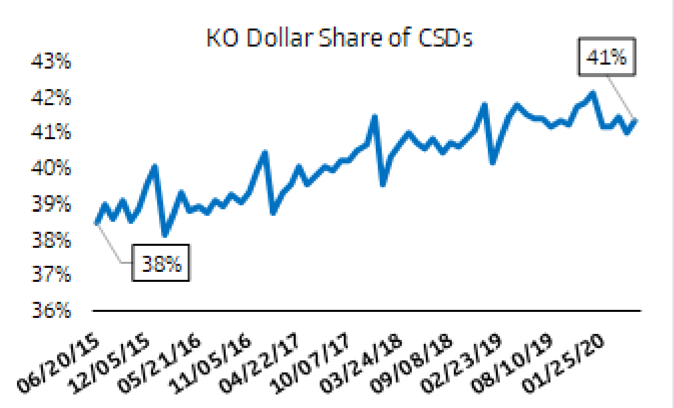


Figure 25 ...Has Resulted in Market Share Gains



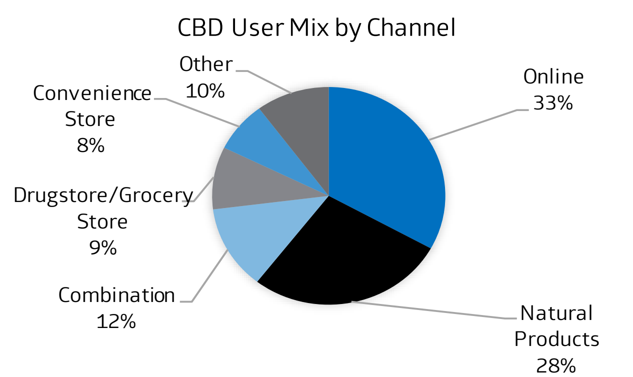
Source: The Nielsen Company and Cowen and Company

Have a Strong E-Commerce Platform

In the current environment, having a strong e-commerce business is an absolute must for two reasons. 1) It provides a platform for companies to sell their entire suite of products, including ingestibles, which are much higher velocity and 2) it is gross margin accretive.

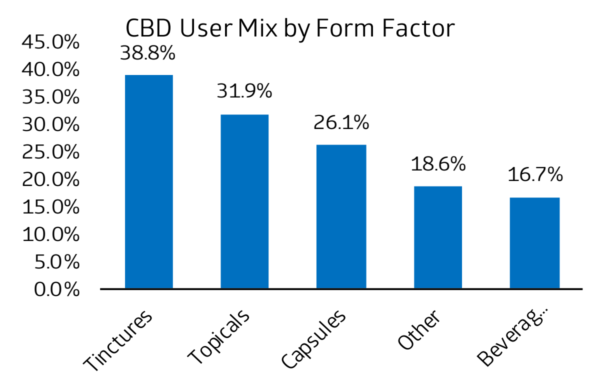
According to our proprietary consumer survey, the online channel is the most utilized method for getting CBD. As well, we know that ingestibles are the most popular form factors in terms of consumer demand, with tinctures leading the way, though capsules, beverages, and other, which we assume is made up predominately of gummies also demand strong traction.

Figure 26 E-Commerce Channel Utilized Most



Source: Cowen Consumer Survey, May '20 (n=~2,500); Note: avg taken from 2-5/20

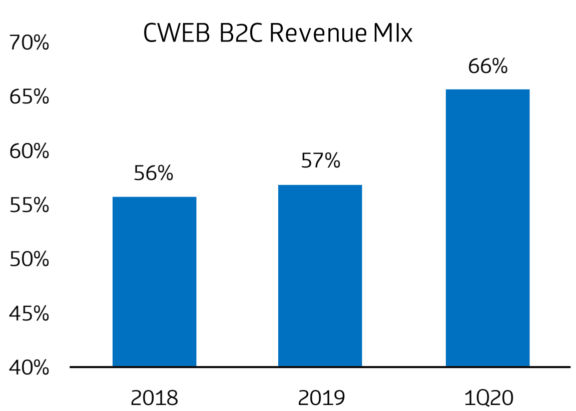
Figure 27 Ingestibles Are Most Popular Form Factor



Note: average taken from 1/19-5/20

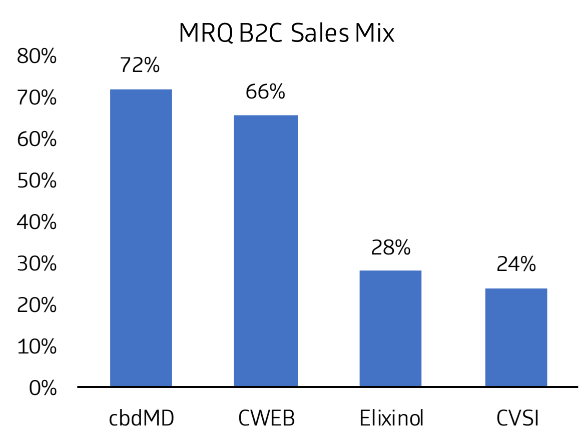
At 66% most recently, CWEBs e-commerce mix is among the highest relative to peers (outside of cbdMD) and encouragingly, this mix has been increasing, up 100 bps in 2019 and 900 bps in the most recent quarter. Importantly, while B2B remains under pressure, the increase in mix was not just a function of mix shift, as e-commerce sales were up 29% YoY, suggesting continued strength of the platform.

Figure 28 CWEB's e-Comm Mix Increasing...



Source: Company Reports and Cowen and Company

Figure 29 ...And Benchmarking Well to Competition



We would highlight that while a strong e-commerce presence is a must in this environment, it is still very important to have B2B exposure, given the current restrictions on advertising. Winning business models ideally will utilize their B2B presence as an indirect form of advertising at brick and mortar, where consumers would presumably be more apt to initiate trial (as they would be able to speak in person with sales representatives, be able to compare and contrast brands on the shelf and tangibly access these products). After trial has been initiated, conversion to repeat via the e-commerce platform would be most ideal.

Strong e-commerce results in better margins in a normalized environment and importantly, helps safeguard profitability amid a deflationary environment which the category is currently experiencing. Given their e-commerce exposure, CWEB not surprisingly, benchmarks very favorably in their gross margin, relative to competition

Figure 30 CWEBs Gross Margin…

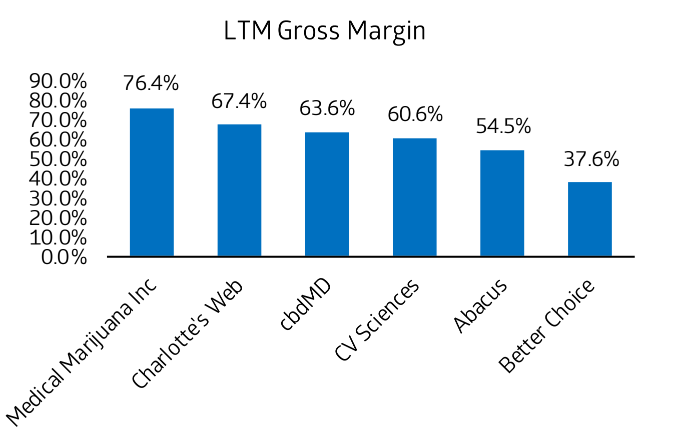
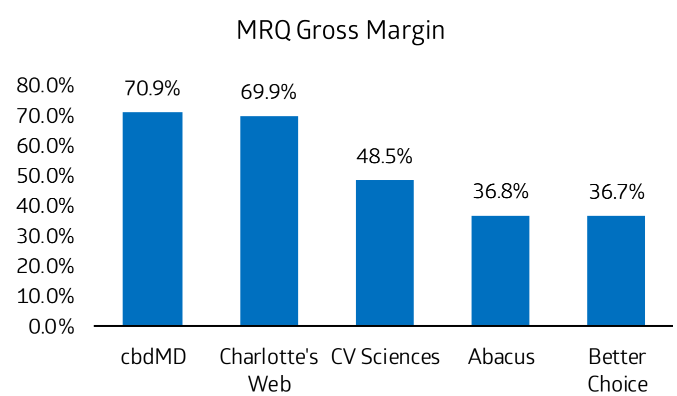


Figure 31 …Is Favorable to Most Peers

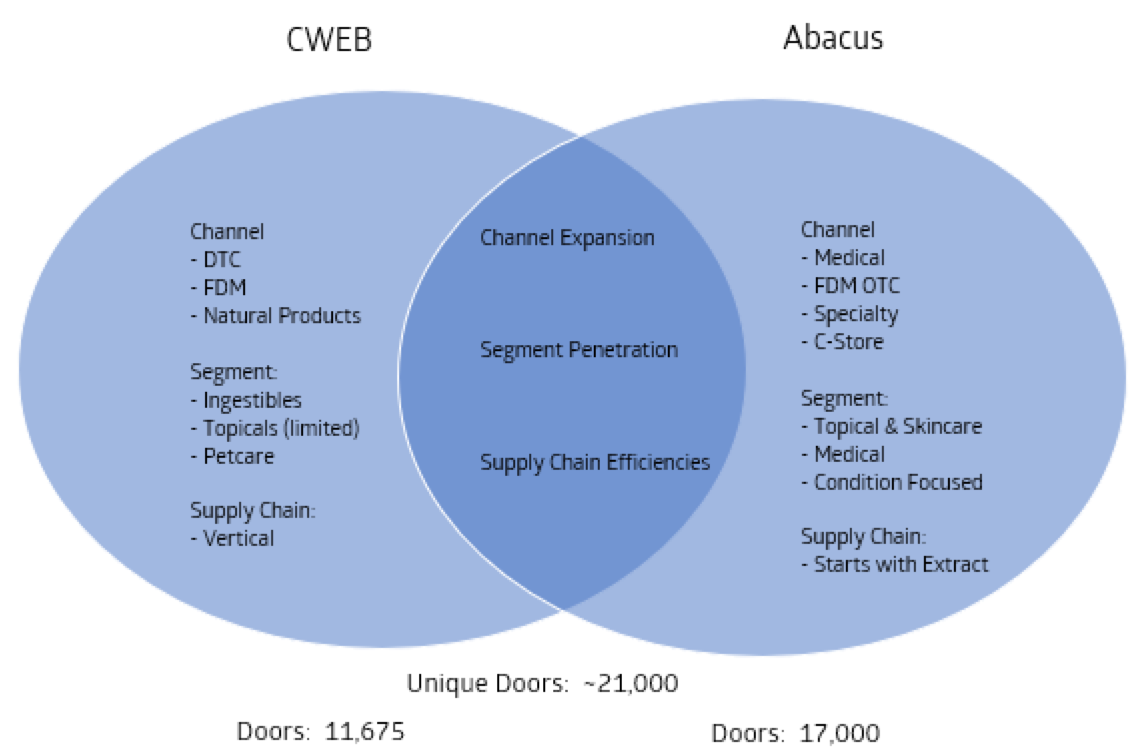


Source: Company Reports and Cowen and Company

Take Steps to Control What's Actually in Your Control

Assuming a lack of guidelines from the FDA persists over the near-to-medium term, CWEB should further benefit following their recently closed acquisition of Abacus Health Products. On a standalone basis, CWEB essentially had two topical products historically, which consisted of a cream and a balm. With just two products, they have been able to make among the most FDM distribution gains over the course of 2019. More recently, the company rolled out seven new full spectrum topical products which while early days, have received initial positive feedback from their retail partners and consumers. Abacus specializes in topical products, both in the form of medical and OTC consumer and the acquisition should result in a much stronger topical portfolio with ample whitespace opportunities. The deal should ultimately result in distribution expansion, penetration and create supply chain efficiencies. As it stands, the merger of both companies will immediately result in a total 21,000 unique doors and provide the company will a sustainable form of revenue streams on a go-forward basis. Abacus will be able to utilize CWEB's e-commerce platform, while at the same time, both brands will benefit from incremental distribution gains as well as the ability to cross sell into their respective channels.

Figure 32 CWEB's Acquisition of Abacus Should Round Out Their Portfolio and Create Ample Synergies



Source: Company Reports and Cowen and Company

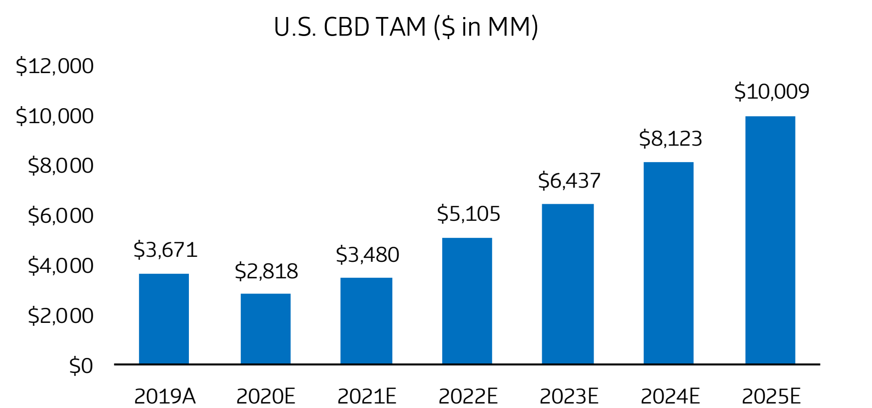
Level Setting Our U.S. Outlook (Pascarelli)

As a result of where the industry stands today, we are revising down our U.S. base case TAM to ~$10 bn, from $16 bn previously, informed by more data points stemming from our proprietary consumer survey which we discuss herein. Our updated TAM assumes no near-term clarity from the FDA regarding ingestible form factors, implying continued constraint on the ability of large FDM channels to 1) enter into the category and 2) roll out a full suite of products, ultimately limiting the scale potential of the total CBD category.

Additionally, our revised model factors in the impact of COVID-19, which we expect to result in outsized pressure this year, with a recovery starting to take hold in 2021. Overall, we expect the next two years to be volatile, but we feel we are taking an appropriately conservative approach evidenced by our estimates which assume the category only surpasses where it was in 2019, by calendar 2022.

We would note that while our market sizing revision clearly reflects tempered growth prospects for the industry, this still is, and has the potential to be a high growth category with ample whitespace for the best positioned companies to thrive and capture share of the market. Of note, a ~$3.7 bn category today compares to CWEB's industry leading sales of just less than $100 mm. The consumer demand is there though near-term impacts will result in industry wide pressure, providing the opportunity for the best management teams to navigate the landscape and position their respective companies for success.

Figure 33 Our $10 BN TAM Offers a More Realistic Outlook on Market Expectations

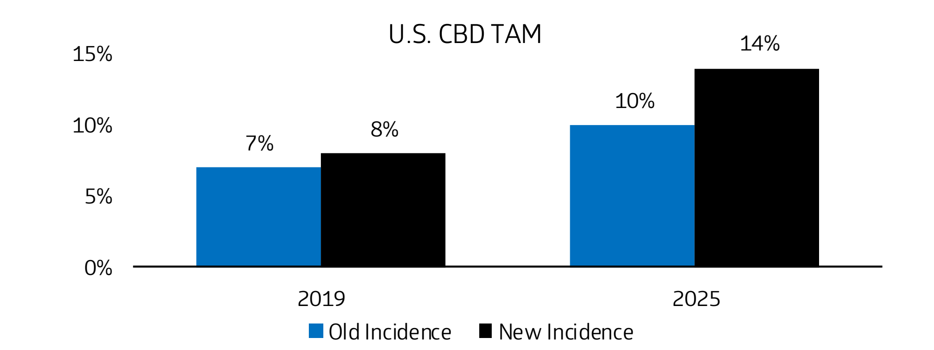


Source: Cowen and Company

Drivers Behind Our Estimates Relative to 2019 (Better Incidence, Offset by Lower Price)

In our collaborative CBD report that published last year (here), we had articulated that we believed U.S. CBD could represent a ~$16 bn revenue opportunity by 2025. With no historical data or context to establish reference points, our analysis was driven by a top down perspective with more limited incidence data from our proprietary consumer survey, which showed ~7% CBD incidence in January 2019. In order to be conservative in our framework, we had assumed that CBD incidence would grow a modest 3 pts to 10% of the total U.S. population which equated to ~25 mm, 18+ consumers by 2025. In this respect, we believe we were conservative, as our new modeling assumes an overall incidence rate of 14% by 2025.

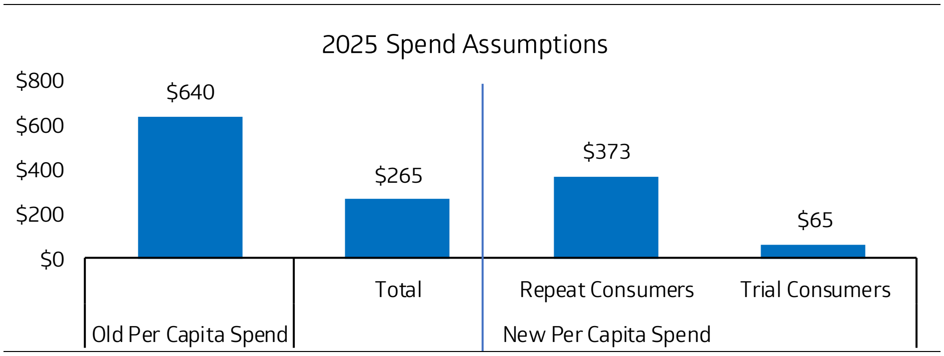
Figure 34 We Were Too Conservative on Incidence...



Source: Cowen and Company

While we believe we were conservative on incidence, we were too aggressive on our spend per consumer assumptions, which was in part driven by overly optimistic expectations on an efficient rollout with no overhang from federal regulators, following the passage of the Farm Bill, as well as overly optimistic expectations on price deflation. Our new model contemplates far more conservative assumptions on price, given that the market has not scaled to where we thought it would be at this point, and we are expecting rapid price deflation to have an outsized impact on annual spend over the near-term. Our previous estimates on annual spend contemplated $640 per consumer, which equates to less than $2 per day, but does not address consumer frequency of purchase (which our new model addresses). Based on our updated TAM, we expect overall levels of annual spend to equate to ~$265 per capita by 2025, which assumes $373 in spend for high velocity repeat consumers and just $65 in annual spend for low velocity trial consumers only.

Figure 35 ...But Far Too High on Spend



Source: Cowen and Company

A Word on Establishing a CBD TAM

The passage of the 2018 Farm Bill resulted in overly optimistic expectations across the industry, heavily premised on big CPG immediately scaling the category to significant levels, which has not yet come to fruition, nor is there any guarantee that it ever will. Additionally, the CBD market has seen a glut of hemp supply from the 2019 harvest, which has resulted in considerable price deflation at the wholesale level, which occurred much faster than previously anticipated. While our channel checks are already showing price deflation at the retail level, we believe this is likely to become more pronounced over the course of the year and persist over the near-term.

Before diving into our overall addressable market segments and assumptions, we would like to start by caveating that at this moment in time, there is no reliable point of sale data within the U.S. CBD marketplace to get an accurate read on the overall size of the industry in its current capacity. Based on available data, channel checks and our conversations with industry executives, we estimate that in 2019, U.S. CBD retail sales ranged anywhere from $2.5 bn to $4 bn in total. Our analysis implies that the U.S. market delivered ~$3.7 bn in sales in 2019, which comes in at the higher end of the estimated range.

With a total 18+ U.S. population of ~256 mm people, we estimate that 2019 incidence averaged 8%, implying roughly 21 mm, 18+ CBD consumers over the course of the year. As stated above, we segment the consumer base into two buckets, which include high velocity repeat consumers and low velocity trial consumers. We estimate that 60% (12.3 mm) of the consumer base are high velocity repeat consumers, who will consistently purchase CBD products across multiple categories. We estimate that the balance or 40% of the user base will purchase on a trial basis only. Our spend assumptions for repeat consumers imply ~$247 in annual spend in 2019, while our assumptions for trial consumers, imply just $77 in annual spend (or a little more than the price of a quality tincture).

Figure 36 We Estimate That U.S. CBD Delivered ~$3.7 BN in 2019 Retail Sales

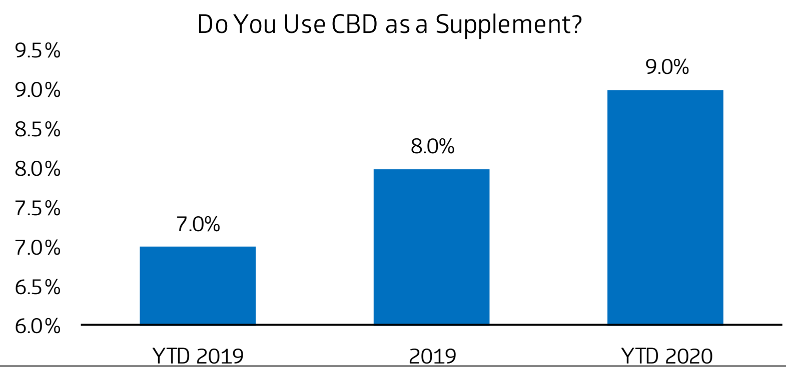
2019 CBD Sales Breakdown	
18+ U.S. Population (in MM)	256.4
CBD Incidence	8%
Implied CBD Consumers (in MM)	20.5
Repeat Consumer User Base %	60%
Trial Consumer User Base %	40%
Implied Repeat Consumers (in MM)	12.3
Implied Trial Consumers (in MM)	8.2
Average Spend per Repeat Consumer	$247
Average Spend per Trial Consumer	$77
Implied Retail Sales - Repeat Consumers ($ in MM)	$3,038
Implied Retail Sales - Trial Consumers ($ in MM)	$633
Total Retail Sales - 2019 ($ in MM)	**$3,671**

Source: Cowen Consumer Survey, n-~2,500 and Cowen and Company

Updated Incidence / Consumer Base Assumptions

Based on our proprietary consumer survey, we can see that CBD incidence climbed steadily over the course of 2019, starting at ~7% in January. The average incidence for the year was ~8%, which we use as our consumer proxy for 2019. With a U.S. population of ~256 mm, 18+ consumers, 8% incidence implies ~21 mm CBD users over the course of the year.

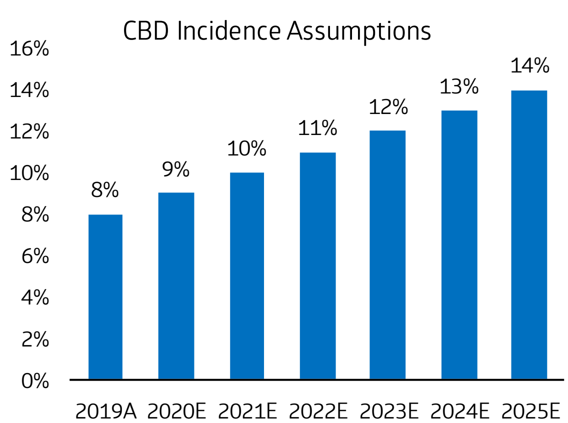
Figure 37 Incidence in 2019 Climbed Steadily and Averaged 8% for the Full Year



Source: Cowen Consumer Survey; n=~2,500

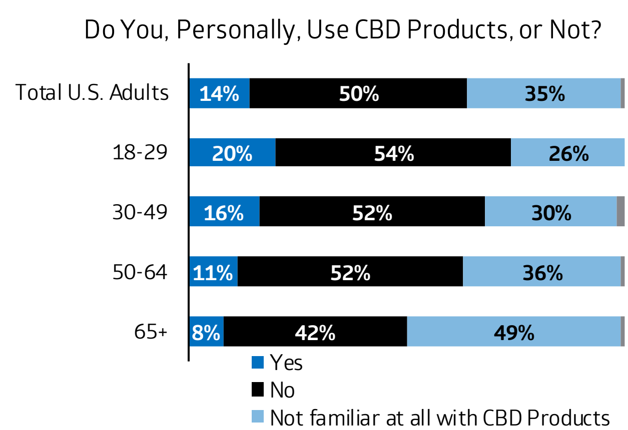
The increases in consumer incidence are encouraging, better than we would've anticipated, and are useful in informing our cadence on incidence through 2025, where from a top down perspective, we are modeling for annual increases of 100 bps through 2025, which ultimately results in total incidence of 14%. Based on 270 mm 18+ consumers in 2025, our incidence implies ~38 mm, 18+ CBD consumers. We feel that our future incidence assumptions are reasonable, in particular given that Gallup previously released a poll (July, 2019) which pointed to 14% of consumers already using CBD products in the U.S, notably ahead of our survey and in line with our outlook over the next six years.

Figure 38 We Model for Incidence to Increase to 14% by 2025...



Source: Cowen and Company

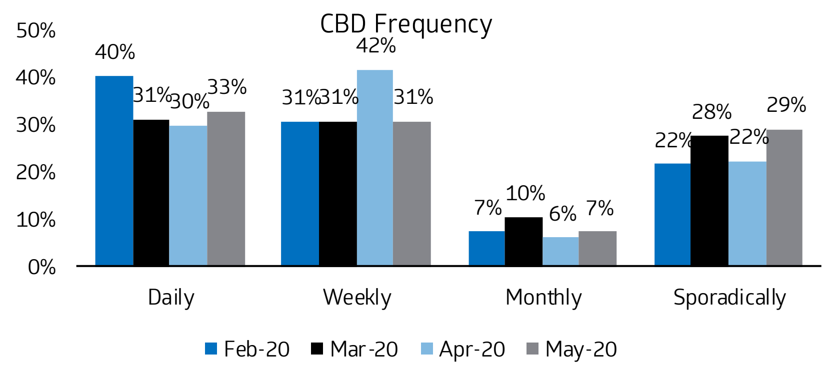
Figure 39 ...Reasonable When Benchmarking to Gallup CBD Poll



Source: Gallup (July, 2019)

From a user mix perspective, our TAM is premised on 60% of the base consisting of high velocity repeat consumers in 2019, with the balance (40%) consisting of lower-velocity trial consumers. Our assumptions are premised on our Cowen consumer survey where we recently initiated a question on consumer frequency, which encouragingly shows much higher levels of daily and weekly use than we would have anticipated. While month to month, these numbers will remain volatile, in particular in light of the COVID-19 situation, we nonetheless remain optimistic on this current trend.

Figure 40 High Frequency Consumers Make Up Large Percentage of CBD Users



Source: Cowen Consumer Survey, n=~2,500

We can see below that our outlook calls for repeat consumers to hold constant from 2020-2021, getting to 65% by 2025. We feel these assumptions are appropriately conservative and reasonable, given that in our consumer survey, both daily and weekly users are collectively accounting for ~67% of the mix on average over the past four months. To reiterate our stance, given these high levels of repeat, the ability for CBD companies to gain traction with initial consumer trial is a must and will dictate the long-term winners.

Figure 41 We Expect Repeat Consumer Mix to Increase Modestly

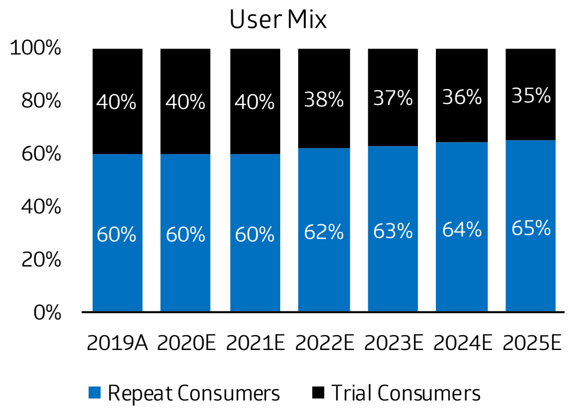
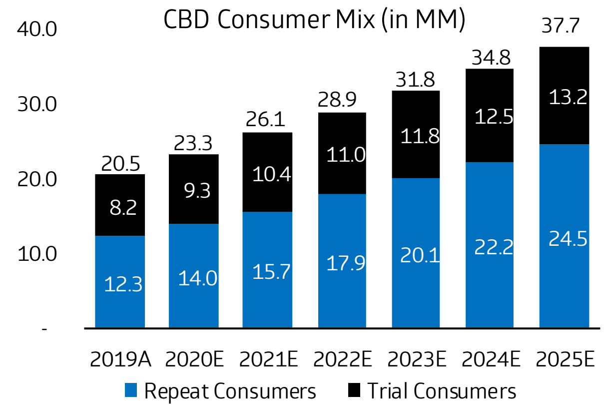


Figure 42 By 2025, We Anticipate ~38 MM CBD Consumers Nationally



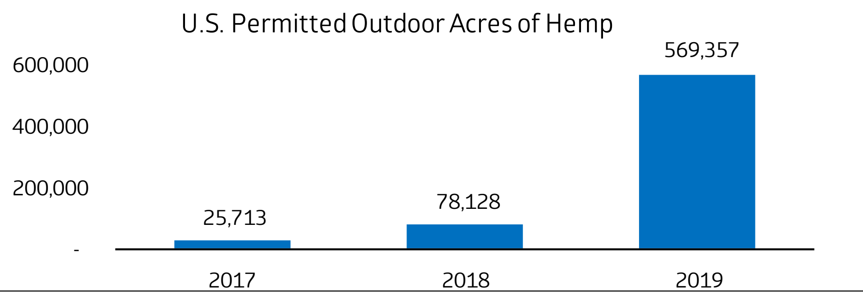
Source: Cowen and Company

Updated Consumer Spend Assumptions

Now that we have established our user base above, the next step is to make our assumptions on annual spend per consumer, which will vary greatly, depending on whether they are classified as a repeat or trial customer. Before analyzing our outlook on retail spend, we need to address the current wholesale market for hemp, where spot prices have been plummeting, given the notable increase in supply.

Since the passage of the 2018 Farm Bill, we have seen a considerable increase in the number of licensed acres permitted to grow outdoor hemp across the U.S. In 2019, the amount of outdoor licensed acres increased to almost 570K, a roughly 7x increase relative to the levels seen in 2018.

Figure 43 Licensed Hemp Acres Increased ~7X in 2019



Source: Hemp Benchmarks, a Division of New Leaf Data Services and Cowen and Company

As it currently stands, the ~570K licensed acres are comprised of the below 31 states. Colorado leads the way in terms of licensed acres at a 15% share, which is followed by Oregon (11%), Kentucky (11%), Tennessee (8%), and Montana (8%), which collectively account for over half the licensed outdoor acres of hemp.

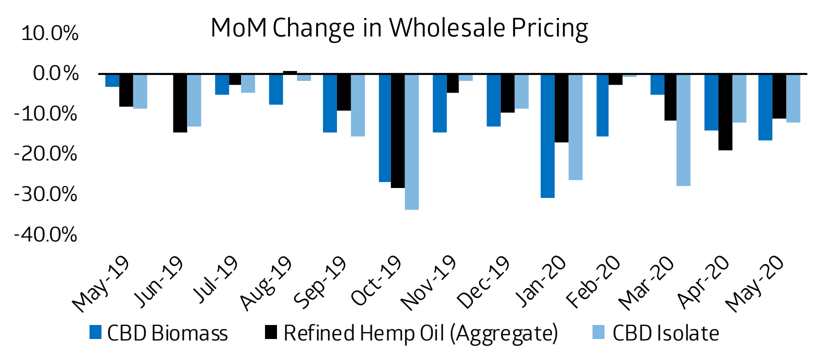
Figure 44 Licensed Acreage Concentrated Among a Few Large States

State	Permitted Outdoor Acres	State	Permitted Outdoor Acres	State	Permitted Outdoor Acres
Alabama	2,000	Maine	3,000	Oklahoma	9,606
Arizona	37,000	Maryland	1,400	Oregon	63,000
Arkansas	3,200	Massachusetts	730	South Carolina	3,300
California	8,862	Michigan	32,243	Tennessee	45,480
Colorado	87,359	Minnesota	13,867	Vermont	7,800
Connecticut	294	Montana	45,000	Virginia	7,000
Hawaii	172	Nevada	14,113	Washington	7,000
Illinois	21,023	New Mexico	7,540	West Virginia	2,531
Indiana	5,300	New York	20,727	Wisconsin	16,958
Kansas	5,732	North Carolina	33,908		
Kentucky	60,000	North Dakota	3,212	**Total**	**569,357**

Source: Hemp Benchmarks, a Division of New Leaf Data Services and Cowen and Company

As a result of increased supply, we have seen considerable price deflation start to take hold at the wholesale level across multiple segments. For CBD biomass, spot prices have declined every single month sequentially since at least May 2019, with a ~17% decline most recently as of May 2020. Over the past 13 months, price declines have averaged ~13%. Refined hemp oil has declined MoM for 12 out of the past 13 months, with declines averaging ~11% over that time frame. CBD isolate has shown a similar trend where prices have declined sequentially for the past 13 months, with a decline of ~12.5% most recently in May 2020. Over the comparable time frame, price declines within CBD isolate have averaged ~13%.

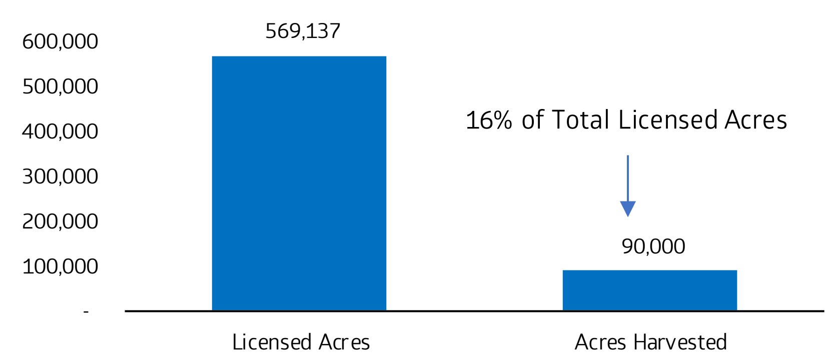
Figure 45 Wholesale Pricing in Under Pressure



Source: Hemp Benchmarks, a Division of New Leaf Data Services and Cowen and Company

We would note that this steep price deflation at the wholesale level could've been even worse if the 2019 harvest happened to be more favorable. According to data provided by Hemp Benchmarks, a division of New Leaf Data Services, they estimate that just 90K of the ~570K licensed acres were successfully harvested as many cultivators had to deal with new growing processes, sun bake and mold issues. Had weather conditions been more favorable, or had cultivation processes been more efficient, these dynamics would've amplified an already saturated market.

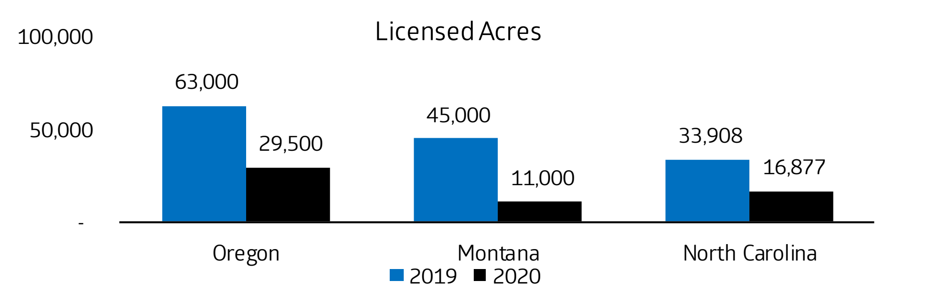
Figure 46 Supply Glut Might Have Been Even Worse Had Weather Conditions Been More Favorable



Source: Source: Hemp Benchmarks, a Division of New Leaf Data Services and Cowen and Company

As we look forward, we ultimately expect the supply / demand equilibrium to come more into balance, and according to Hemp Benchmarks, a Division of New Leaf Data Services, their state checks indicate that some farmers are already pulling back on 2020 growing. Oregon has cut their licensed acres from 63,000 to 29,500, and although they accept registration year-round (implying acres can increase from current levels), as it stands today levels are down 53%. Montana's headline acres number is down ~75% but more importantly, 85% of the 11,000 acres are meant for fiber and grain, with just 15% allocated for CBD (this compares to 80% allocated for CBD in 2019). North Carolina has also cut its headline licensed acre amount by ~50%. A focus on fibers and grains will likely remain a key theme for farmers in the hemp space in 2020, and we are also hearing from our industry contacts that certain farmers are pivoting to growing CBG. As we assess supply, there will likely be less hemp grown and allocated toward CBD this year, though offset by better yields given a more favorable weather forecast.

Figure 47 States Cutting Back on Growing



Source: Cowen and Company

Given the wholesale backdrop, we are expecting this pricing disruption to ultimately flow through to the consumer in the form of lower price points at the retail level starting this year where we expect 20% deflation and a loss of volumes to collectively result in a 30%+ decline. Better volumes and more moderate deflation should result in better ASPs in 2021 and step change in 2022, when we are completely removed from any impacts associated with COVID-19. Of note, growth will be lumpy, over the next few years, with total ASPs in 2022 shaking out relatively in line with the levels seen in 2019.

Figure 48 Increases in Spend Will Likely Be Tempered...

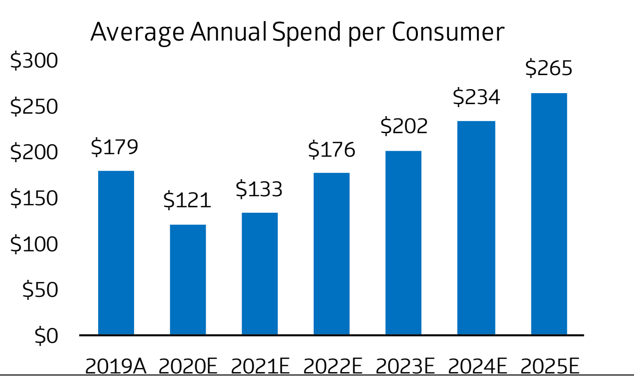
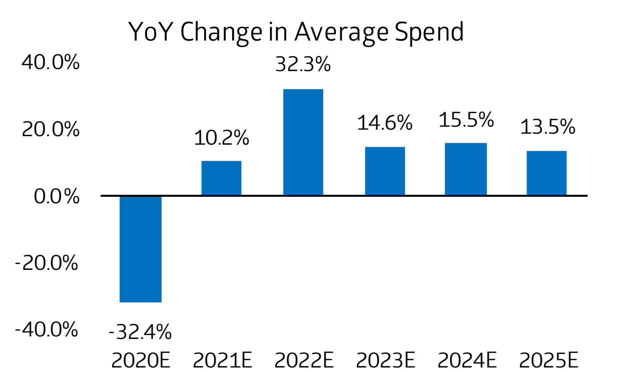


Figure 49 ...With Normalizing Levels of Growth Post 2021



Source: Cowen and Company

We segment our net spend per consumer by changes in ticket and changes in transactions. Below we offer our six-year forward assumptions, which show 20% retail price deflation in 2020, remaining elevated at -10% for 2021 followed by normalized levels from 2022-2025, partially offset by natural U.S. inflation. This results in our assumptions for net ticket prices to decline 17% this year, 7% in 2021 and followed by more moderation starting in 2022. Transactions should be down this year, in large part hampered by stay at home measures, which should bounce back following the natural cycling next year.

Figure 50 Deflation Should Improve Over Time

Change in Average Spend - Overall						
Year	2020E	2021E	2022E	2023E	2024E	2025E
ASP						
Retail Price Deflation	-20.0%	-10.0%	-5.0%	-3.0%	-3.0%	-3.0%
U.S. Annual Inflation	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Net Change in Ticket	-17.0%	-7.0%	-2.0%	0.0%	0.0%	0.0%
Net Change in Transactions	-15.4%	17.2%	34.3%	14.6%	15.5%	13.5%
Change in Average Spend	-32.4%	10.2%	32.3%	14.6%	15.5%	13.5%

Source: Cowen and Company

Figure 51 High Repeat Consumers Should Offset Ticket Declines from Increased Transactions

Change in Average Spend - Repeat Consumers						
Year	2020E	2021E	2022E	2023E	2024E	2025E
ASP						
Retail Price Deflation	-20.0%	-10.0%	-5.0%	-3.0%	-3.0%	-3.0%
U.S. Annual Inflation	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Net Change in Ticket	-17.0%	-7.0%	-2.0%	0.0%	0.0%	0.0%
Net Change in Transactions	-15.5%	17.9%	35.1%	15.5%	15.8%	13.3%
Change in Average Spend	-32.5%	10.9%	33.1%	15.5%	15.8%	13.3%

Source: Cowen and Company

Figure 52 Trial Consumers Will Need to Be Converted to Repeat Consumers to Drive Meaningful Upside

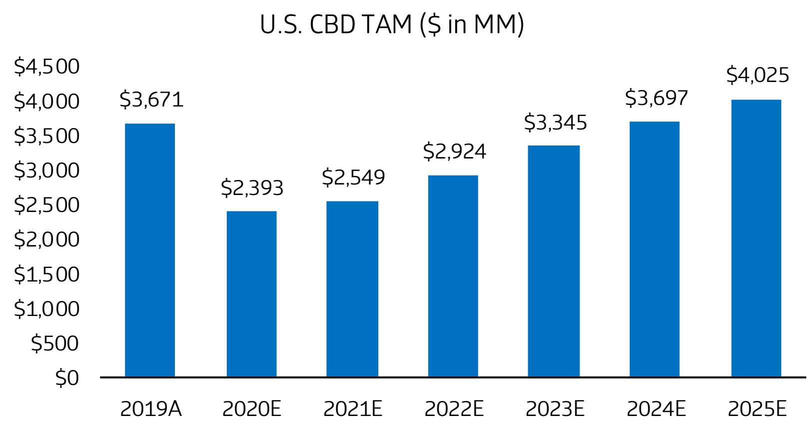
Change in Average Spend - Trial Consumers						
Year	2020E	2021E	2022E	2023E	2024E	2025E
ASP						
Retail Price Deflation	-20.0%	-10.0%	-5.0%	-3.0%	-3.0%	-3.0%
U.S. Annual Inflation	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Net Change in Ticket	-17.0%	-7.0%	-2.0%	0.0%	0.0%	0.0%
Net Change in Transactions	-14.7%	14.0%	13.8%	-0.1%	2.0%	1.9%
Change in Average Spend	-31.7%	7.0%	11.8%	-0.1%	2.0%	1.9%

Source: Cowen and Company

What is the Bear Case Scenario to our Updated TAM? (Pascarelli)

While we believe that our TAM offers appropriately conservative estimates on the current state of the CBD market, we provide a bear case scenario to our addressable market where we expect retail sales could shake out at ~$4 bn by 2025. This model assumes unfavorable FDA rulings, which would presumably have a negative impact on incidence as well as high repeat consumer retention.

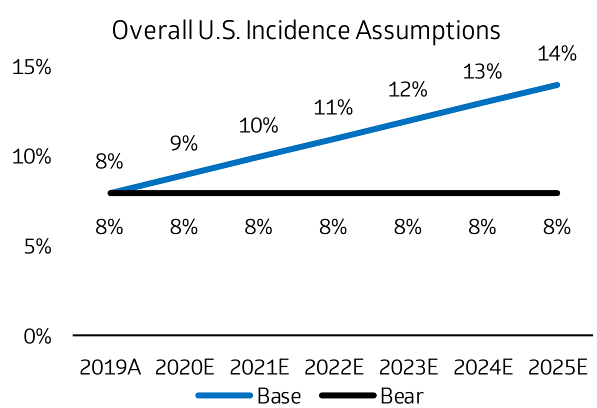
Figure 53 Our Bear Case Points to ~$5 BN CBD Category



Source: Cowen and Company

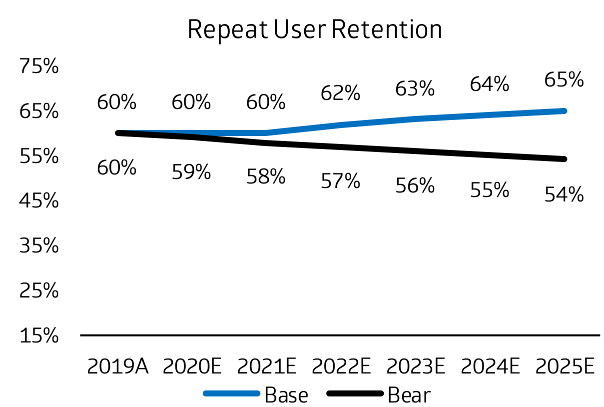
Our bear case contemplates lower levels of overall incidence increase through 2025, as well as decreasing consumer retention for repeat consumers through 2025. Our bear case assumes that overall levels of incidence remain flat through 2025, resulting in consistent 8% U.S. incidence, which is in line with the average seen in 2019. We also temper our outlook for repeat consumer retention, which we are modeling to decrease 100 bps per year through 2025 (in addition to lower volumes and cross category usage).

Figure 54 Bear Case Assumes No Increases in Incidence...



Source: Cowen and Company

Figure 55 ...Coupled with Lower Levels of Repeat Consumer Retention



Source: Cowen and Company

We would note that our outlook on deflation remains consistent across both our base and bear cases and below we sensitize our bear case scenario, based on overall levels of incidence changes as well as repeat consumer retention. All else equal, we can see that assuming a 100 bps contraction in repeat consumer retention per year over the next six years, every 25 bps increase in overall incidence (for the next six years) equates to ~755 mm in revenue by 2025. Conversely, assuming no changes in annual incidence through 2025, every incremental 25 bps of repeat consumer retention is equal to $75 mm in revenue over the next six years.

Figure 56 Incidence and Repeat Consumer Retention Inform Our Bear Case TAM

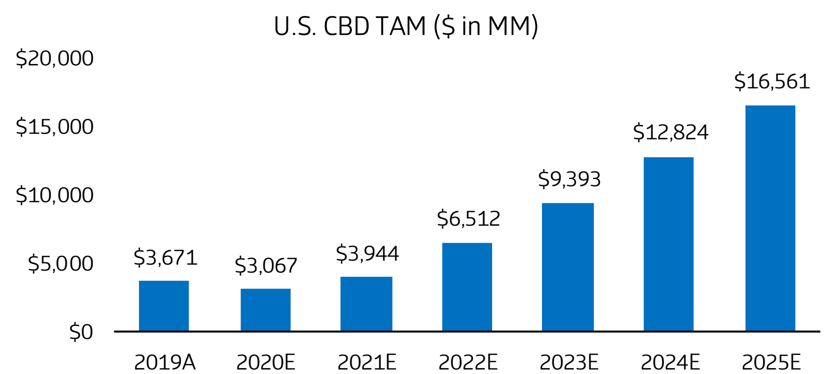
		Annual YoY Changes in Incidence								
		-1.0%	-0.8%	-0.5%	-0.3%	0.0%	0.3%	0.5%	0.8%	1.0%
Repeat Consumer Retention	-3.5%	$820	$1,434	$2,049	$2,664	$3,278	$3,893	$4,508	$5,122	$5,737
	-3.3%	$838	$1,467	$2,096	$2,724	$3,353	$3,982	$4,610	$5,239	$5,868
	-3.0%	$857	$1,500	$2,142	$2,785	$3,428	$4,070	$4,713	$5,356	$5,998
	-2.8%	$876	$1,532	$2,189	$2,846	$3,502	$4,159	$4,816	$5,472	$6,129
	-2.5%	$894	$1,565	$2,236	$2,906	$3,577	$4,248	$4,918	$5,589	$6,260
	-2.3%	$913	$1,598	$2,282	$2,967	$3,652	$4,336	$5,021	$5,706	$6,390
	-2.0%	$932	$1,630	$2,329	$3,028	$3,726	$4,425	$5,124	$5,822	$6,521
	-1.8%	$950	$1,663	$2,376	$3,088	$3,801	$4,514	$5,226	$5,939	$6,652
	-1.5%	$969	$1,696	$2,422	$3,149	$3,876	$4,602	$5,329	$6,056	$6,782
	-1.3%	$988	$1,728	$2,469	$3,210	$3,950	$4,691	$5,432	$6,172	$6,913
	-1.0%	$1,006	$1,761	$2,516	$3,270	$4,025	$4,780	$5,534	$6,289	$7,044
	-0.8%	$1,025	$1,794	$2,562	$3,331	$4,100	$4,868	$5,637	$6,406	$7,174
	-0.5%	$1,044	$1,826	$2,609	$3,392	$4,174	$4,957	$5,740	$6,522	$7,305
	-0.3%	$1,062	$1,859	$2,656	$3,452	$4,249	$5,046	$5,842	$6,639	$7,436
	0.0%	$1,081	$1,892	$2,702	$3,513	$4,324	$5,134	$5,945	$6,756	$7,566
	0.3%	$1,100	$1,924	$2,749	$3,574	$4,398	$5,223	$6,048	$6,872	$7,697
	0.5%	$1,118	$1,957	$2,796	$3,634	$4,473	$5,312	$6,150	$6,989	$7,828
	0.8%	$1,137	$1,990	$2,842	$3,695	$4,548	$5,400	$6,253	$7,106	$7,958
	1.0%	$1,156	$2,022	$2,889	$3,756	$4,622	$5,489	$6,356	$7,222	$8,089
	1.3%	$1,174	$2,055	$2,936	$3,816	$4,697	$5,578	$6,458	$7,339	$8,220
	1.5%	$1,193	$2,088	$2,982	$3,877	$4,772	$5,666	$6,561	$7,456	$8,350

Source: Cowen and Company

What is the Bull Case Scenario to Our Updated TAM? (Pascarelli)

Our bull case scenario assumes that the FDA will ultimately allow for ingestible products to be sold as dietary supplements (effective 2022). As a result, we believe that the upside scenario TAM would result in total retail sales of ~$16.5 bn by 2025, which is slightly higher, though broadly in line with our previous estimate. We would note that all of our cases (bull, bear, base) assume a decline in 2020. Based on 1Q20 data and leading into increased stay at home measures put into place in calendar 2Q, we do not see any scenario where the category grows this year.

Figure 57 Bull Case Points to a $16 BN Market by 2025



Source: Cowen and Company

In a scenario where the FDA allowed for ingestible products to be sold as dietary supplements, this would presumably result in a natural lift to overall levels of consumer incidence, given far more brick and mortar retail touch points. As such, our bull case assumes constant increases in overall consumer incidence of 200 bps starting in 2022, ultimately shaking out at 18% by 2025. Additionally, with more consumers entering into the category, our bull case assumes annual 200 bps increases in repeat consumer retention (starting in 2022), which would ultimately exit 2025 at 69% of the user base (relative to the 65% estimate in our base case scenario).

Figure 58 Annual Incidence Increases of 200 BPS per Year...

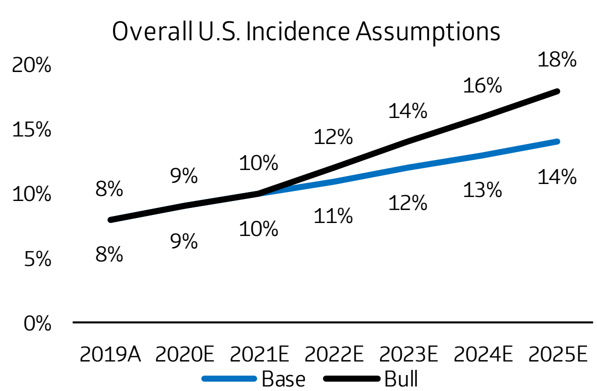
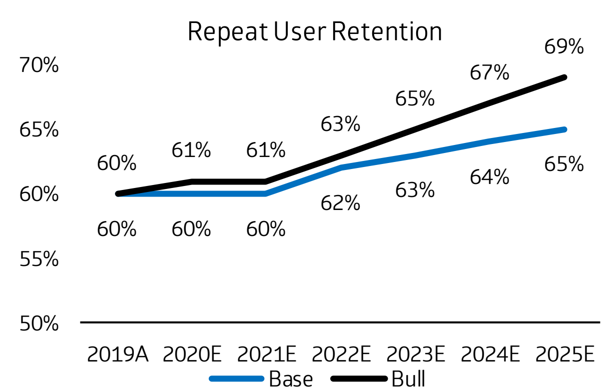


Figure 59 ...As Well As Higher Repeat Consumer Retention



Source: Cowen and Company

In addition to moderately more favorable price deflation in 2022 (-3% vs. -5% for base and bear cases), there are two additional drivers contemplated in our bull case scenario, which are 1) faster transaction growth as well as increases in cross-category usage for consumers. Clarity (and ultimate permissibility) from the FDA as well as big CPG's potential entry into the category would presumably increase the likelihood that consumers would purchase more products across a different form factors, and have an outsized benefit on traditional consumables, resulting in market increases as opposed to contraction (from 2022-2025).

Figure 60 With Favorable FDA Guidelines, We Would Expect to See...

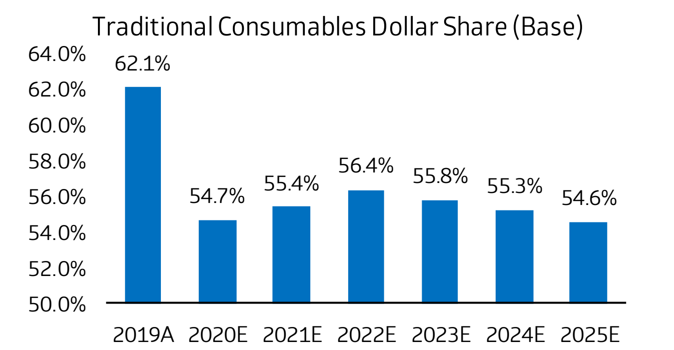
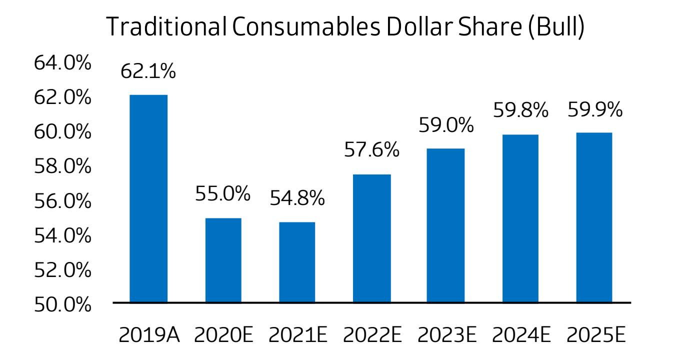


Figure 61 ...Market Share Expansion on Traditional Consumables



Source: Cowen and Company

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Below we sensitize our bull case market opportunity based on changes in consumer CBD incidence and trial consumers.

Figure 62 At Avg 1.5% Annual Increases in Repeat Consumer Retention, Every 25 bps Change in Annual Incidence is Worth ~$1.4 BN in Revenue by 2025

		Annual YoY Changes in Incidence								
		0.7%	0.9%	1.2%	1.4%	1.7%	1.9%	2.2%	2.4%	2.7%
Repeat Consumer Retention	-1.0%	$9,157	$10,302	$11,447	$12,591	$13,736	$14,881	$16,025	$17,170	$18,315
	-0.7%	$9,346	$10,514	$11,682	$12,850	$14,019	$15,187	$16,355	$17,523	$18,691
	-0.5%	$9,534	$10,726	$11,918	$13,109	$14,301	$15,493	$16,685	$17,876	$19,068
	-0.2%	$9,722	$10,938	$12,153	$13,368	$14,584	$15,799	$17,014	$18,229	$19,445
	0.0%	$9,911	$11,150	$12,388	$13,627	$14,866	$16,105	$17,344	$18,583	$19,821
	0.3%	$10,099	$11,361	$12,624	$13,886	$15,149	$16,411	$17,673	$18,936	$20,198
	0.5%	$10,287	$11,573	$12,859	$14,145	$15,431	$16,717	$18,003	$19,289	$20,575
	0.8%	$10,476	$11,785	$13,095	$14,404	$15,714	$17,023	$18,333	$19,642	$20,952
	1.0%	$10,664	$11,997	$13,330	$14,663	$15,996	$17,329	$18,662	$19,995	$21,328
	1.3%	$10,853	$12,209	$13,566	$14,922	$16,279	$17,635	$18,992	$20,348	$21,705
	1.5%	$11,041	$12,421	$13,801	$15,181	$16,561	$17,941	$19,322	$20,702	$22,082
	1.8%	$11,229	$12,633	$14,037	$15,440	$16,844	$18,247	$19,651	$21,055	$22,458
	2.0%	$11,418	$12,845	$14,272	$15,699	$17,126	$18,554	$19,981	$21,408	$22,835
	2.3%	$11,606	$13,057	$14,507	$15,958	$17,409	$18,860	$20,310	$21,761	$23,212
	2.5%	$11,794	$13,269	$14,743	$16,217	$17,691	$19,166	$20,640	$22,114	$23,589
	2.8%	$11,983	$13,480	$14,978	$16,476	$17,974	$19,472	$20,970	$22,467	$23,965
	3.0%	$12,171	$13,692	$15,214	$16,735	$18,256	$19,778	$21,299	$22,821	$24,342
	3.3%	$12,359	$13,904	$15,449	$16,994	$18,539	$20,084	$21,629	$23,174	$24,719
	3.5%	$12,548	$14,116	$15,685	$17,253	$18,822	$20,390	$21,958	$23,527	$25,095
	3.8%	$12,736	$14,328	$15,920	$17,512	$19,104	$20,696	$22,288	$23,880	$25,472
	4.0%	$12,924	$14,540	$16,156	$17,771	$19,387	$21,002	$22,618	$24,233	$25,849

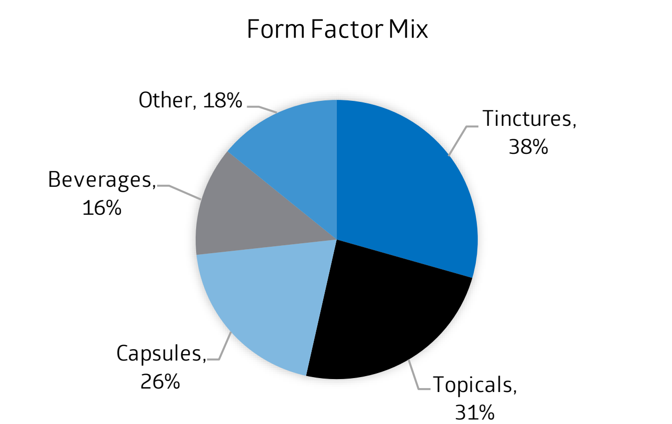
Source: Cowen and Company

CBD Analysis by Product (Pascarelli)

Traditional Consumables

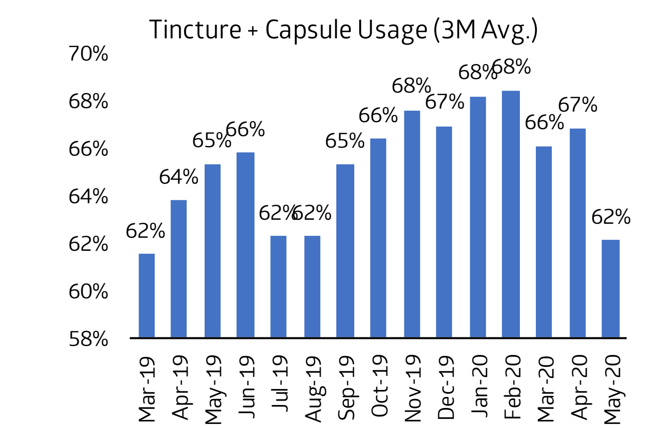
We define traditional consumables as legacy CBD ingestible form factors, which include tinctures, capsules and gummies. We can see that from our proprietary consumer survey, tinctures generate the most usage, with capsules among the top three. While we do not currently segment for gummies in our survey, we would assume that they make up a meaningful portion of the "other" category. Looking to the combined usage of tinctures and capsules on a time series, use has broadly increased, though has started to retrench more recently.

Figure 63 Traditional Consumables Command the Most Use



Source: Cowen Consumer Survey; n=~2,500. Note: reflects avg from 01/19-05/20

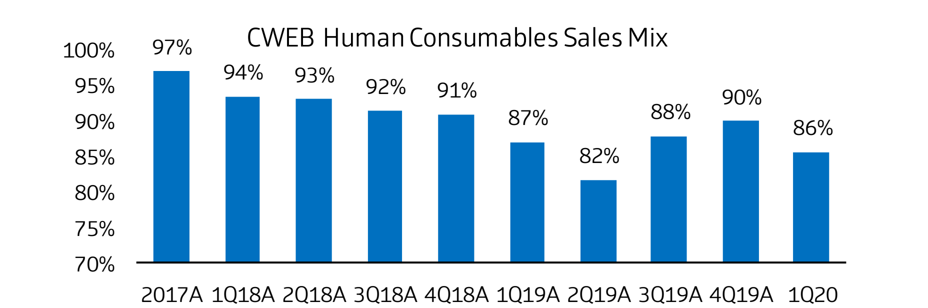
Figure 64 Monthly Usage Volatile, but Broadly Increasing



Competitive Landscape

The overall size and outsized share in consumables are also reflected in CWEB's reported revenues, where human consumables are currently accounting for ~85-90% of the gross sales mix. We would caveat that other categories that CWEB plays in include topicals and petcare only (no beverages, beauty, food, or vapes, etc), which reflects the outsized concentration to consumables, but nonetheless, the key takeaway is that it is by far the largest category within the U.S. CBD marketplace.

Figure 65 CWEB Sales Highly Concentrated in Human Consumables

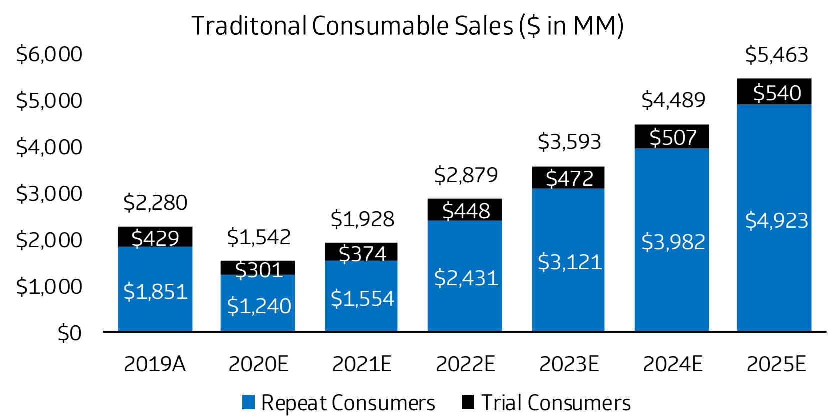


Source: Company Reports and Cowen and Company

Addressable Market Outlook

We estimate that traditional consumable CBD products accounted for ~$2.3 bn in retail sales in 2019, or roughly 62% of the total. Going forward, we expect repeat consumers to drive the bulk of category growth and total sales to approach $5.5 bn in 2025, which implies a ~16% six-year CAGR.

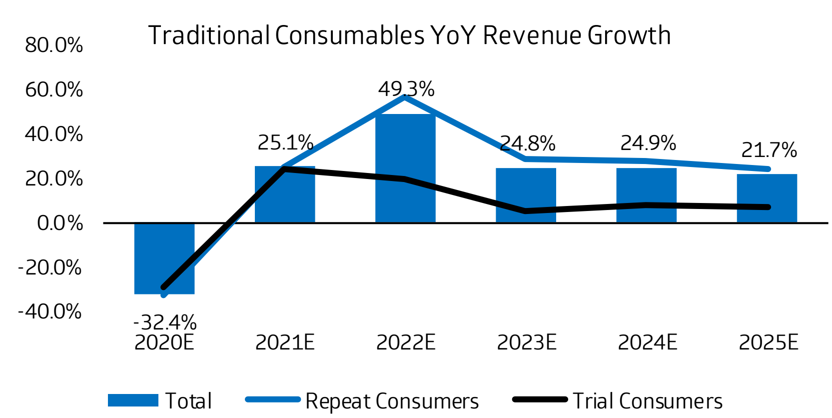
Figure 66 Traditional Consumables Reflect a $5.5 BN Market by 2025



Source: Cowen and Company

We are modeling for overall segment sales to be challenged in 2020 and decline ~32%, in large part hampered by COVID-19 impacts, though we believe trends will experience a modest bounce back in 2021, though still exit the year trailing the absolute dollar amount seen in 2019. We expect 2022 to be a clean year in terms of the COVID-19 impact and result in outsized growth followed by more moderate levels though 2023-2025.

Figure 67 Category Should Decelerate, But Still Grow DD Over the Next Six Years



Source: Cowen and Company

Pricing Analysis – Traditional Consumables

Below we provide an updated pricing analysis of current trends that are taking place within the traditional consumables segment at the retail level, relative to trends seen a year ago.

Tinctures

Of the 25 tincture brands that we analyzed in our report last year, over half (14) are showing lower price points at the retail level. 40% of the brands have remained flat YoY, while one brand has slightly increased overall pricing. On average, the 25 brands analyzed last year showed an average retail price of ~$83, which has since come down by ~$10 (or 12%), resulting in an average category retail price of ~$73 today (as of 2/20).

Figure 68 Over Half of Tincture Brands Analyzed Show Price Deflation...

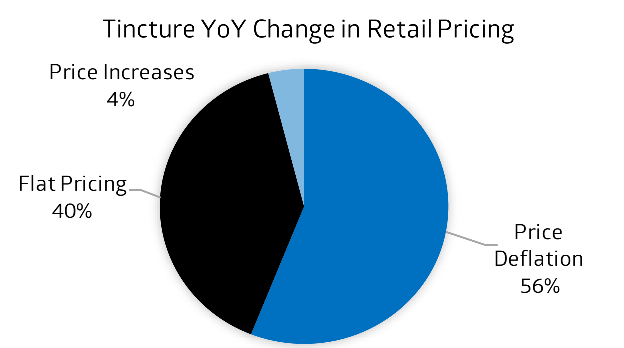
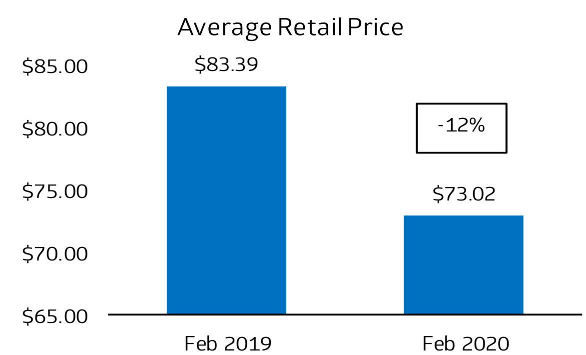


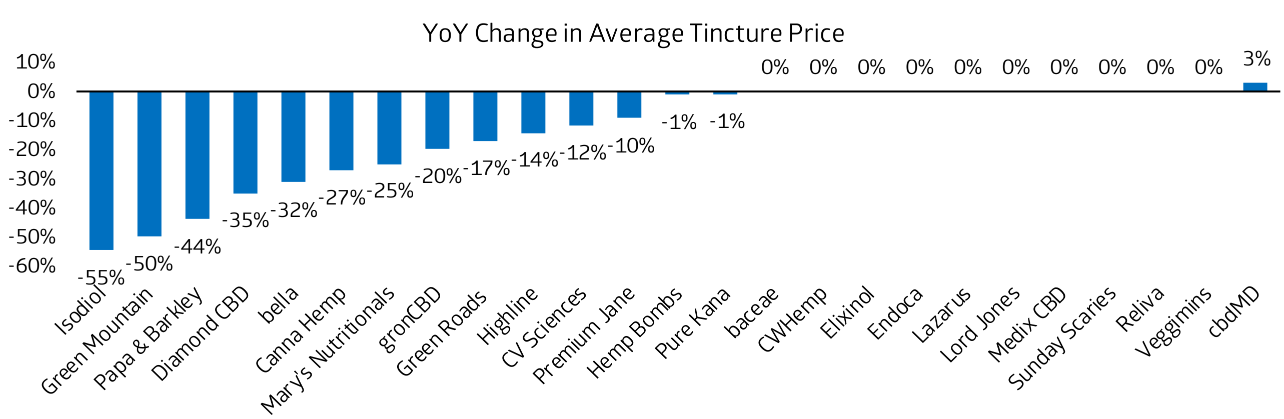
Figure 69 ...Equating to ~12%



Source: Company Reports and Cowen and Company

Specifically, we can see that Isodiol, Green Mountain and Papa & Barkley are showing the largest levels of price decreases, while publicly traded CVSI has shown an average decrease of 12% YoY. Of note, this pricing analysis was conducted in February 2020 to get a like comparison in terms of seasonality relative to our last pricing analysis. CWEB had not cut their tincture pricing as of that time, but as stated above they are in the process of a portfolio pricing reset of 15-20% to manage their price gaps, which speaks to the broad deflation the category has and will likely continue to see.

Figure 70 Certain Brands Have Cut Tincture Pricing by 50%+ Following Year 1



Source: Company Reports and Cowen and Company

Capsules

Capsules have not experienced the same level of price compression as seen in tinctures though on an average brand basis, net pricing is still down. Specifically, of the 14 brands we analyzed, half are showing flat pricing, relative to last year, while 36% of the brands are showing some form of price compression. Last year, the average pricing seen for all 14 brands was ~$69, which has subsequently declined by 6%, now showing an average price of ~$64 per capsule brand.

Figure 71 Half of Capsule Brands Analyzed Showed Flat Pricing

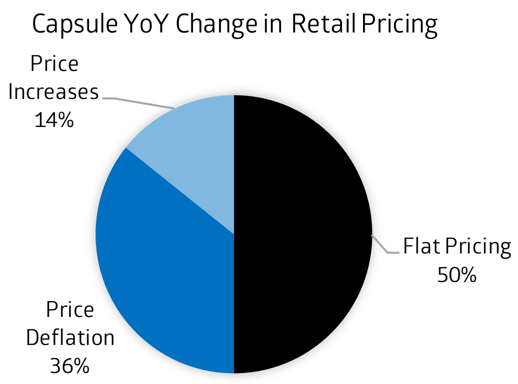
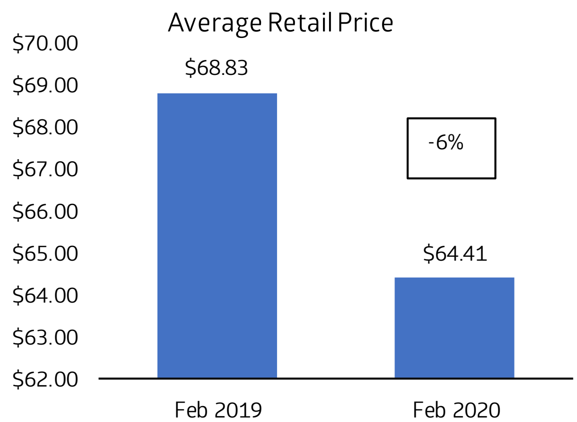


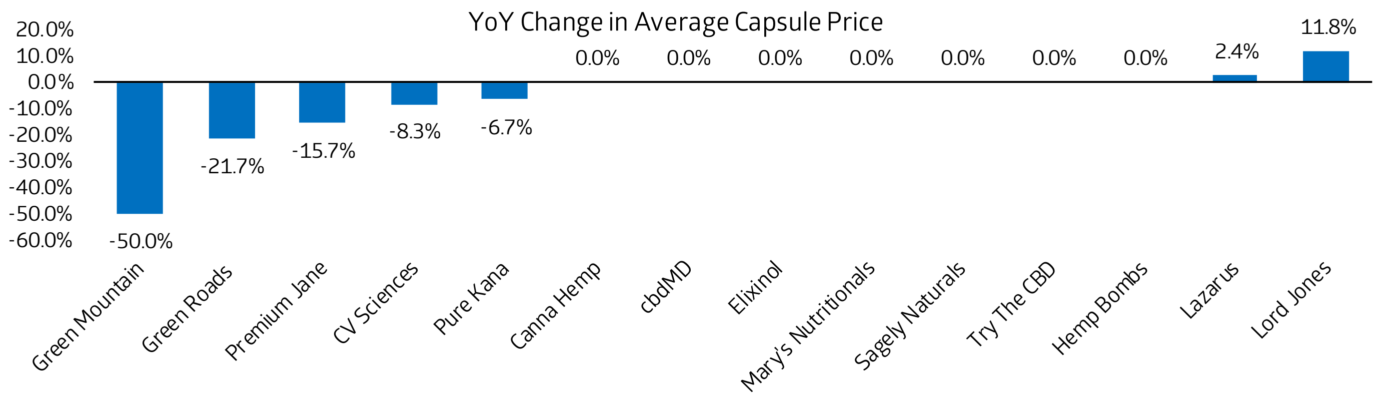
Figure 72 Overall Brand Pricing Declined by 6% YoY



Source: Company Reports and Cowen and Company

All five of the brands showing price compression for capsules also reported price compression within tinctures, with Green Mountain leading the way at a 50% cut in pricing (in line with tinctures), followed by Green Roads with 22% compression. We would note that value brand Lazarus and premium brand Lord Jones have shown increases in their capsule pricing, relative to last year.

Figure 73 All Brands Showing Price Compression in Capsules Are Also Showing Compression in Tinctures



Source: Company Reports and Cowen and Company

Gummies

For gummies, we analyzed 13 brands, four of which have shown price compression at the retail level, while pricing for eight (or 61%) of the brands remain flat. Overall, the 13 gummy brands showed an average retail price of ~$44 last year, which has compressed ~7% to just under $41 per offering currently.

Figure 74 31% of Gummy Brands Have Shown Price Compression

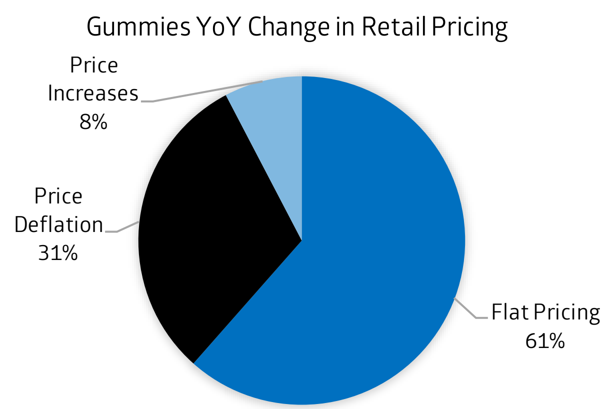
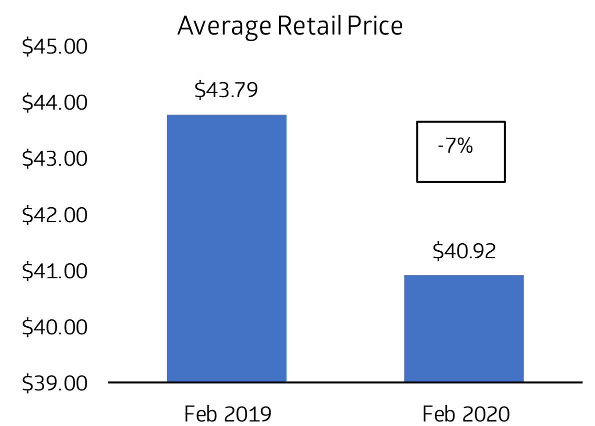


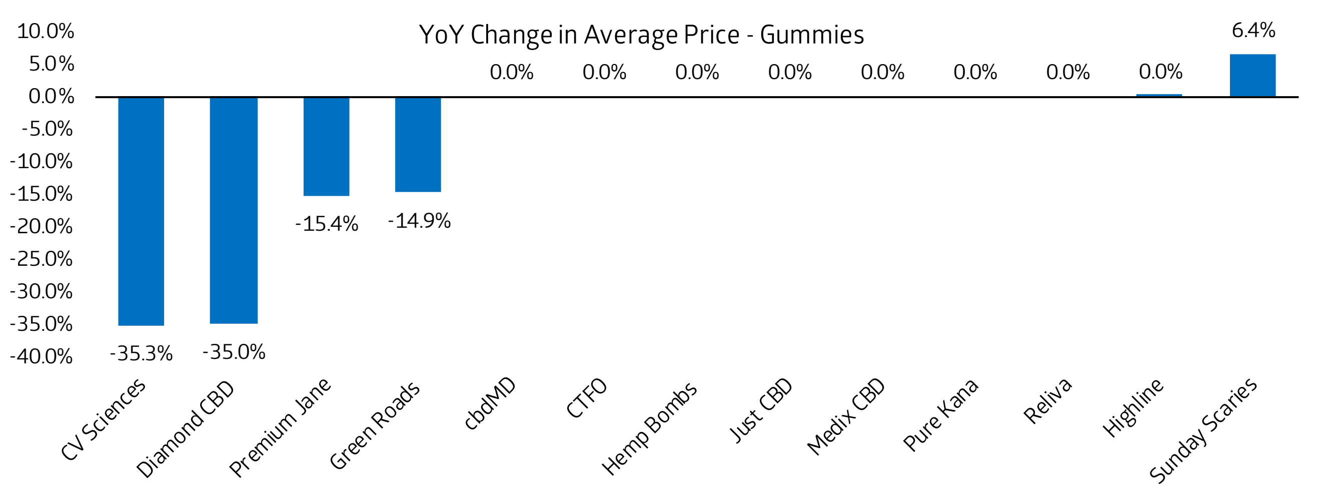
Figure 75 Overall Compression Equates to 7% For Our Sample



Source: Company Reports and Cowen and Company

On a brand specific basis, overall levels of pricing have not crossed the 50% barrier as of yet, but we would note that CVSI and Green Diamond have shown price decreases of ~35%, while Premium Jane and Green Roads are showing declines in the mid-teens range.

Figure 76 CVSI Has Shown Price Compression Across All Traditional Consumable Form Factors

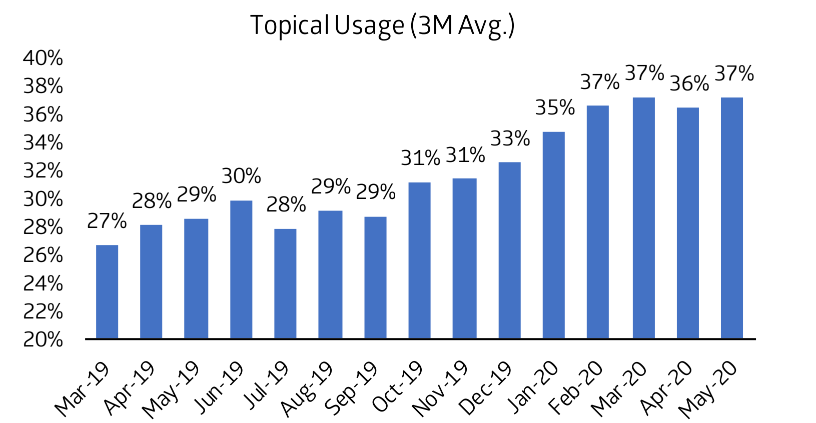


Source: Company Report and Cowen and Company

Topicals

Based on our proprietary consumer survey, topical usage has increased fairly consistently. This makes good sense, as we have seen many big box retailers such as CVS, Walgreens, Kroger, and Rite-Aid, among others, enter into the CBD space carrying topical products only.

Figure 77 User Mix for Topicals Has Increase, Which Makes Sense Given the Entrance...



Source: Cowen Consumer Survey, N= ~2,500

Figure 78 ...Of FDM

Retailer	Carrying CBD
CVS	✓
Walgreens	✓
Kroger	✓
Rite-Aid	✓
Bed Bath & Beyond	✓
Vitamin Shoppe	✓
GNC	✓
Abercrombie & Fitch	✓
Costco	✗
Walmart	✗
Target	✗

Source: Cowen and Company

Competitive Landscape

The ability of FDM retailers to provide scale to the category can be reflected from disclosures provided by CWEB and CVSI. For CWEB, we have seen revenue mix for topicals increase to 9% in 2019, which reflects almost 5 pts of mix shift relative to 2018 and has been driven by the FDM channels offering their topical products to consumers. For CVSI, we have seen their FDM door mix go from zero to over 40% in just three quarters. To the extent that current FDM retailers expand geographically, or new retailers enter the category, we would expect topicals to increase as a percentage of overall sales, and for door mix to ultimately trump the natural products channel.

Figure 79 Topical Sales Mix Increasing

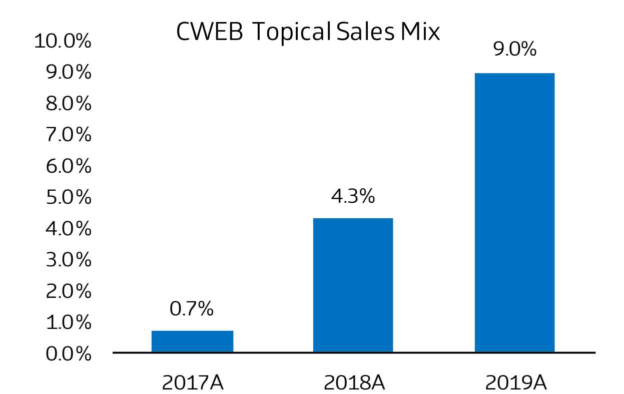
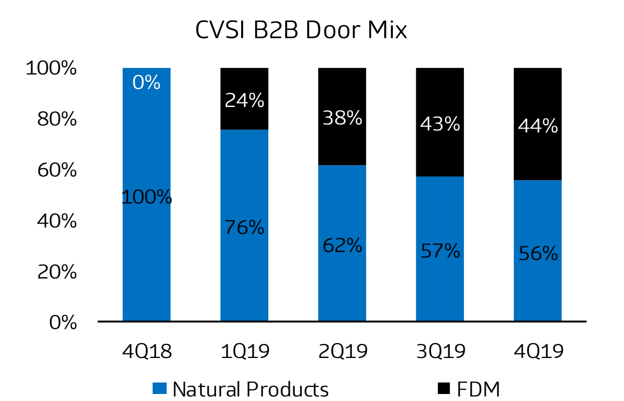


Figure 80 FDM Door Mix Increasing

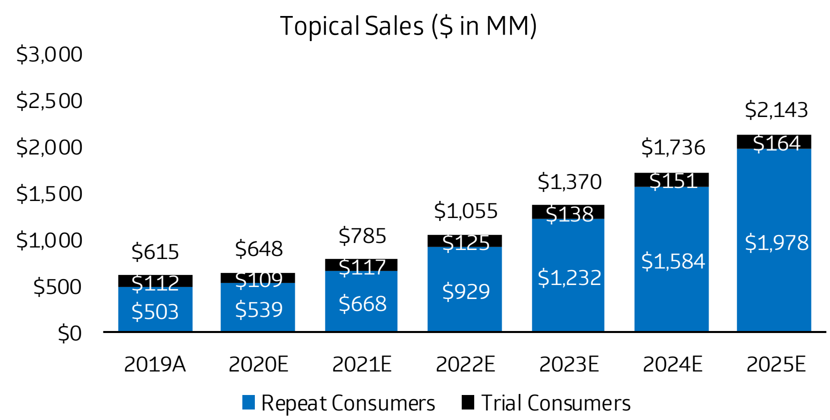


Source: Company Report and Cowen and Company

Addressable Market Outlook

In 2019, we estimate that topicals accounted for over $600 mm in annual retail sales, reflecting over 17% of the total category. We expect topical CBD sales to eclipse $2 bn by 2025, which reflects a ~23% CAGR over the next six years. By 2025, we expect topicals to contribute over 21% to the category, reflecting share expansion. FDM expansion and product innovation should drive the increases. We believe there is upside to this estimate, in particular if more big box retailers come online, or when current category participants expand their presence geographically.

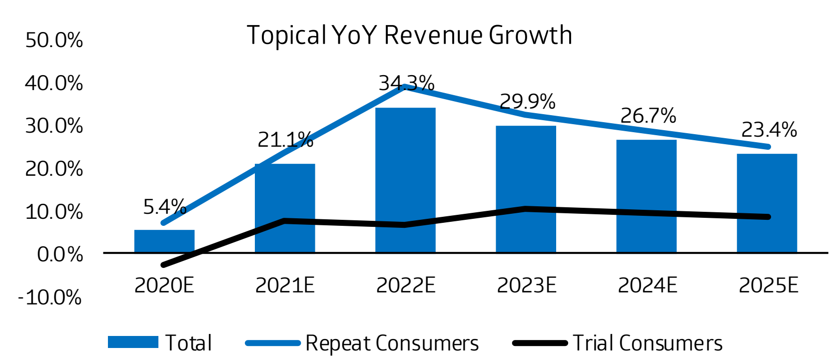
Figure 81 Topical Mix Should Eclipse $2 BN by 2025



Source: Cowen and Company

Given the current state of the market, our outlook assumes that topical growth will tick up modestly this year and accelerate during 2021-2022, followed by natural deceleration thereafter. While the products are slower moving, innovation within topicals will be a necessary driver to sustain growth, which we are already seeing signs of from CWEB, which has increased its offerings by 7 SKUs, as well as CVSI, which is in the middle of a broad brand refresh.

Figure 82 In the Current Environment, Topicals Should Grow Faster Than Ingestibles



Source: Cowen and Company

Pricing Analysis – Topicals

Over the past year, our pricing analysis indicates that topicals fared better than traditional consumables from a deflation perspective. Specifically, we analyzed 33 brands spanning traditional pain relief to standard balms. Of the brands analyzed, 25, or ~75%, are showing flat pricing, while 7, or just over 20%, are showing price deflation in some form. Last year, average brand pricing for topicals was ~$49, which has since come down by ~5% to just over $46.50 on average. We would note that this MSD level of price compression is better than for all of the traditional consumable sub-categories.

Figure 83 75% of Brands Analyzed Have Held Pricing

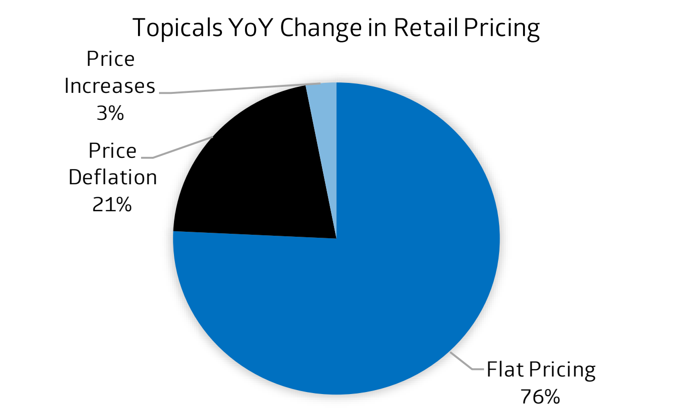
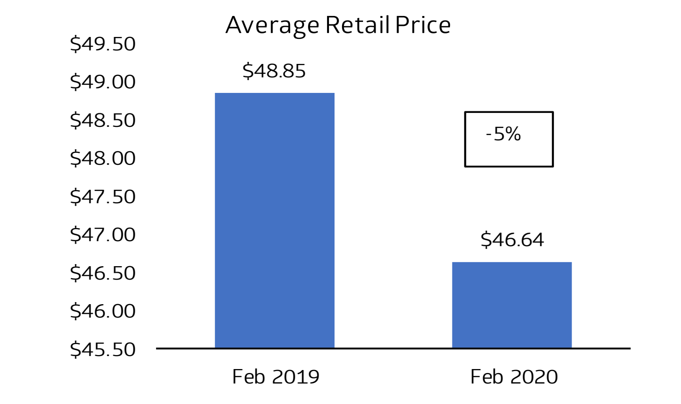


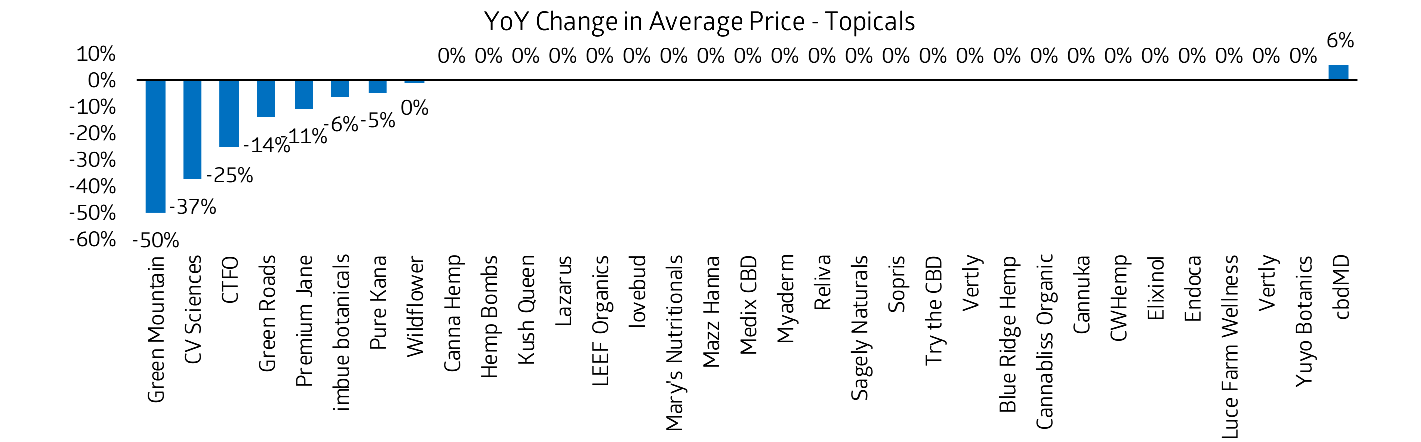
Figure 84 On Average Prices Have Declined 5% YoY



Source: Company Reports and Cowen and Company

Based on the below figure, on a brand-specific basis, the pricing strategy starts to become clear, as many of the same brands cutting topical pricing also showed similar levels of price cuts across traditional consumables. Green Mountain in particular looks to have reset their price strategy across the entire space, as every category analyzed has indicated price decreases of ~50%. Similar to tinctures, cbdMD has actually increased their pricing relative to last year.

Figure 85 Brand-Specific Price Cuts in Topicals Consistent Across Traditional Consumables

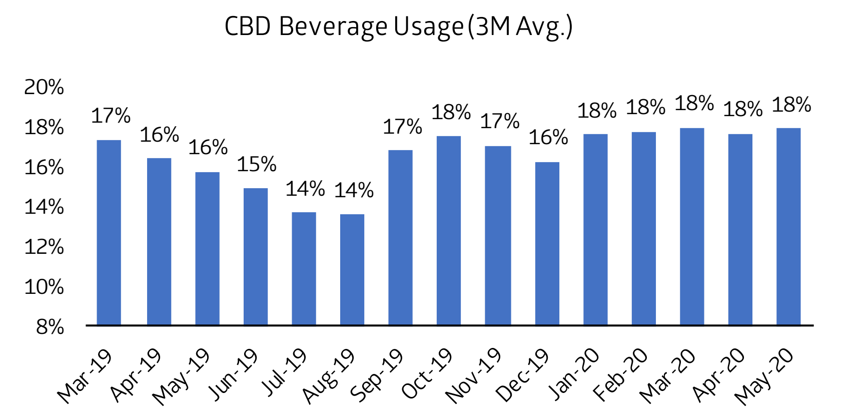


Source: Company Reports and Cowen and Company

Beverages

Consumer usage for CBD beverages falls below that for the more traditional CBD form factors, though usage is admittedly much higher than we would've anticipated. Over the last 13 months, we can see that usage has been fairly volatile, though has remained in the DD range every single month, which points to strong consumer demand.

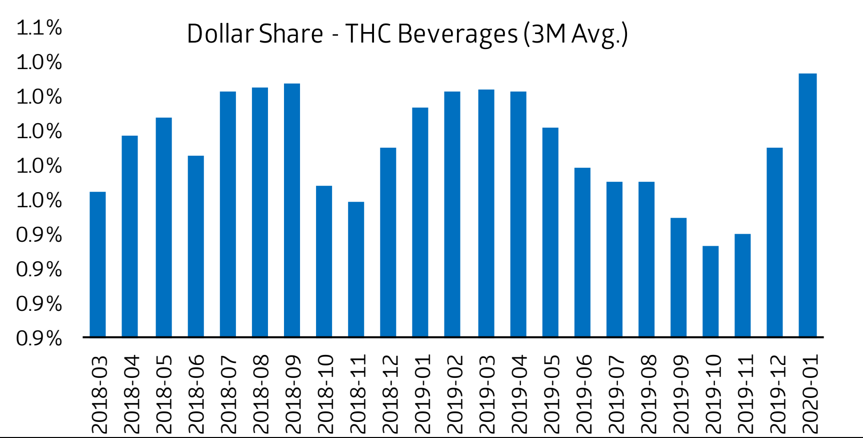
Figure 86 Consistent DD CBD Beverage Usage Points to Strong Consumer Pull...



Source: Cowen Consumer Survey, n= ~2,500

These high levels of CBD beverage usage are particularly telling when juxtaposed against trends we are seeing in THC beverages across the U.S. Utilizing our proprietary data relationship with Headset, we can see that across all four states analyzed (including CA, CO, WA, and NV), collective beverage dollar share has not eclipsed ~1%.

Figure 87 ...Which is Notably Ahead of the Demand Seen for THC Beverages

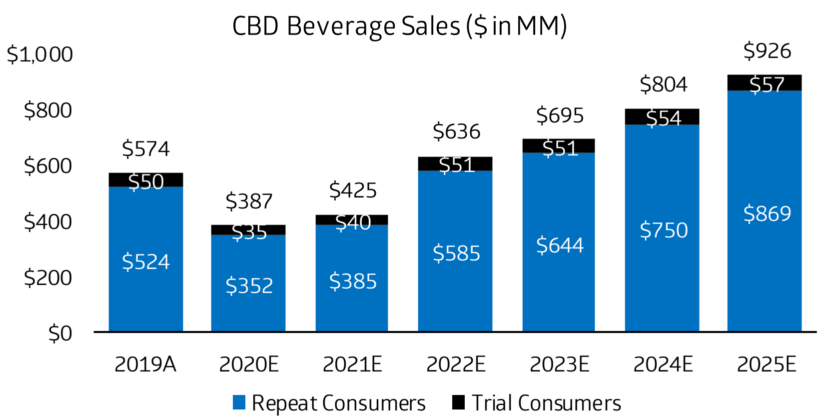


Source: Headset and Cowen and Company

Addressable Market Outlook – CBD Beverages

Despite solid consumer demand, our outlook on the potential beverage opportunity remains tempered given that this category represents a very large grey area for the FDA and therefore a limited opportunity in comparison to other beverage subsegments across the U.S. Our outlook assumes category pressure this year, with sales not surpassing the levels seen in 2019 until 2022. In 2025, we model beverage sales approaching $1 bn.

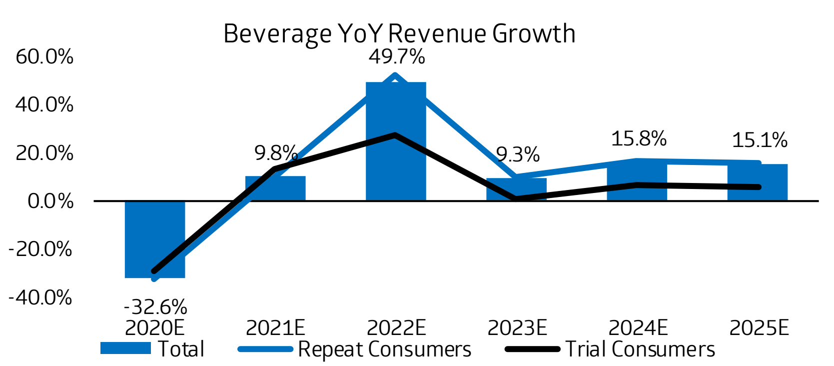
Figure 88 Beverage Sales Should Approach $1 BN by 2025



Source: Cowen and Company

Inclusive of near-term volatility, we model for beverages to grow at an ~8% CAGR over the next six years. The biggest outstanding question from the FDA is whether they will classify traditional ingestibles as dietary supplements, and allow for sales, which if passed, would likely require a warning label be attached to the package. Beverages come with an additional layer of complexity as they are technically classified as a food and to date, the FDA has not allowed any food products to be sold with a warning label attached. As such, this category's ability to scale will be almost entirely driven by the small, independent brick-and-mortar channels and e-commerce, with no near-term potential from FDM.

Figure 89 No Meaningful Share Shift Expected for the Category



Source: Cowen and Company

Pricing Analysis – CBD Beverages

We would caveat that CBD beverages span a very wide array of categories including, water, sparking water, tonic, soda, shots, and coffee among others, which results in a wide variance in average selling prices. For our analysis, we analyzed 15 brands at the retail level, nine of which showed flat pricing relative to last year (60%), while 40% of the brands showed some level of price compression. On an average basis, retail pricing of ~$36 last year is down by ~11% to ~$32 this past February at the time of our analysis. This 11% compression is the highest level we have seen across all form factors analyzed outside of tinctures (-12%).

Figure 90 40% of Brands Analyzed Showed Price Deflation

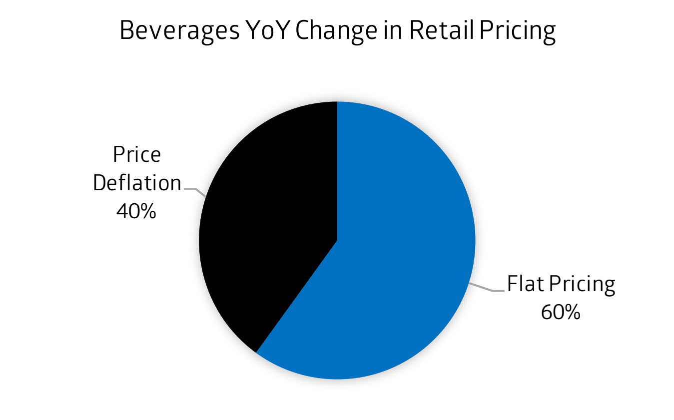
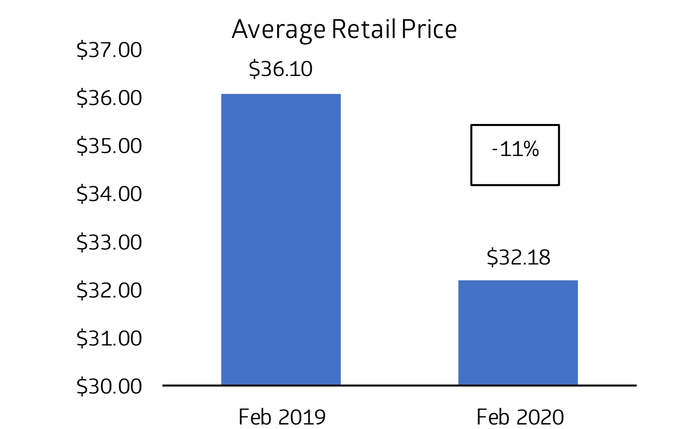


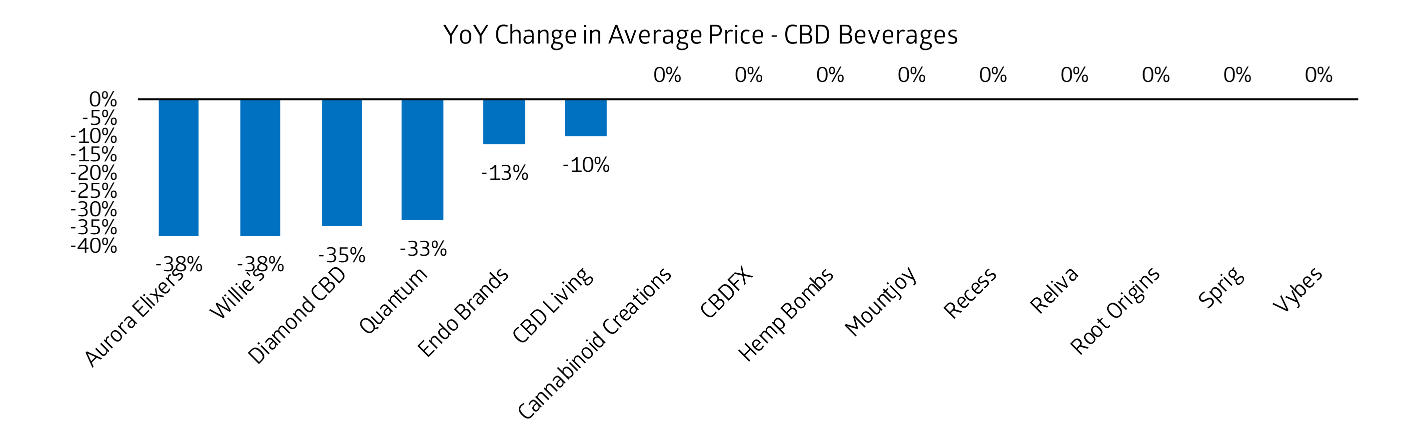
Figure 91 11% Average Deflation for Beverages Seen on a YoY Basis



Source: Company Report and Cowen and Company

Of the six brands that are showing price compression, four of them look to have decreased their pricing by over 30%, though all six are down DD. We would note that pricing for premium brand Recess has held flat. Additionally, Sprig, which is another well-known brand, has held its pricing, as has Reliva, which makes sense as the brand plays largely in the B2C and C-Store channels and already comes with a naturally lower level of pricing, relative to peers.

Figure 92 All Price Declines in CBD Beverages Have Been in the DD Range

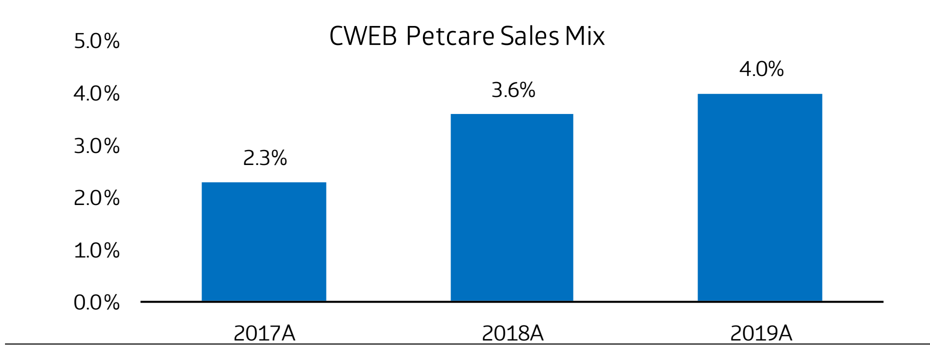


Source: Company Report and Cowen and Company

Petcare

Petcare is an emerging category within CBD that has become increasingly popular, given the overall market size and growth for petcare across the U.S. in general, which is estimated to have generated over $75 bn in sales in 2019. CBD market leader CWEB has indicated that this category is a key area of focus for them, which has been reflected in the increased sales mix seen over the past two years. Most recently the company signed a 4,000-store deal with a national pet retailer. Along with gummies and topicals, petcare remains one of the largest growth opportunities in the CBD category assuming the status quo. As it currently stands, CWEB's petcare business accounts for 4% of total company gross sales mix, which reflects a 170 bps increase in mix relative to 2017 and a 40 bps increase relative to 2018.

Figure 93 Petcare is a Focus for CWEB

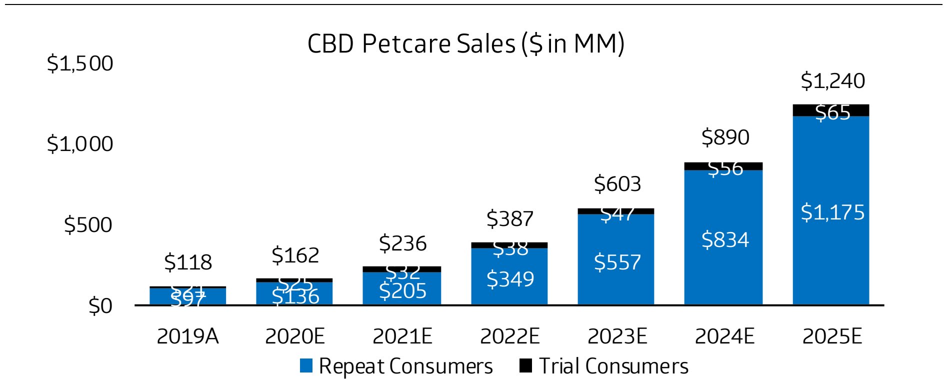


Source: Company reports and Cowen and Company

Addressable Market Outlook – Petcare

Based on limited disclosure and using CWEB's dollar mix as a proxy, we estimate that CBD petcare products accounted for just over 3% of category sales mix in 2019, which we are expecting to consistently increase through 2025, resulting in our outlook for the category to increase by over 10x, to over $1 bn+ over the next six years, reflecting a 48% CAGR.

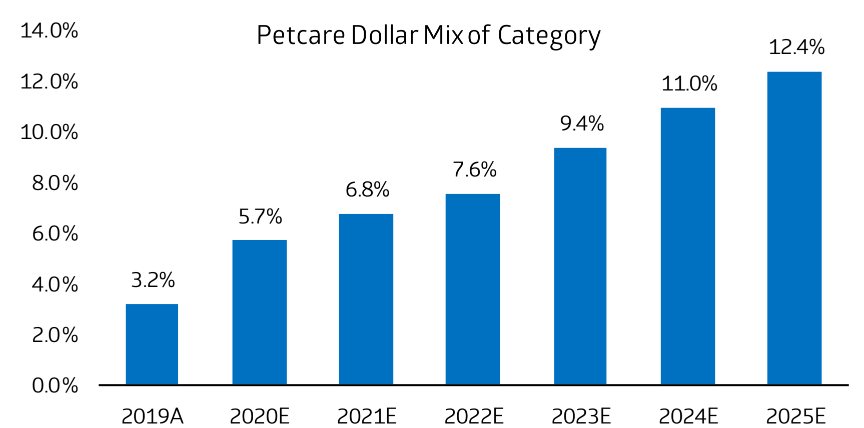
Figure 94 Petcare Will be a Key Growth Category Within CBD



Source: Cowen and Company

Our sales outlook implies a six-year CAGR of 48%, which far outpaces our estimates for the CBD category in total. As a result, we expect a meaningful increase in petcare's contribution to revenue. By 2025, we suspect the category can reach a DD market share.

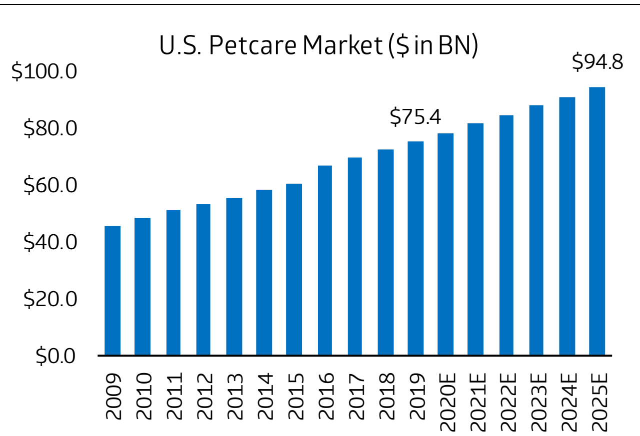
Figure 95 Petcare Expected to Grow Rapidly



Source: Cowen and Company

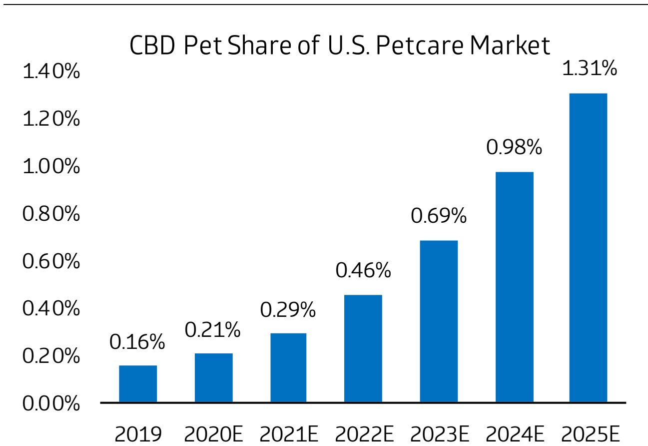
Given that CBD petcare is a relatively emerging category, we analyzed the total size of the overall petcare market in the U.S., which according to the American Pet Products Association (APPA) is estimated to have generated over $75 bn in revenues in 2019. The implied category growth last year was ~3.9%, which if we model forward, suggests that the total U.S. petcare category could be worth ~$95 bn by 2025. Our market estimates for the CBD subsegment of this category indicate that share could essentially reach 1% of the category.

Figure 96 U.S. Petcare Industry Could Approach $95 BN by 2025



Source: APPA and Cowen and Company

Figure 97 Faster Growth in CBD Petcare Should Drive Increasing Share



Source: Cowen and Company

To the extent our market assumptions prove conservative, we offer the below scenario analysis on the potential revenue opportunity within this vertical given the very robust U.S. petcare market. Assuming total category sales of $95 bn by 2025, each 25 bps change in market share results in an incremental ~$237 mm in revenue. At just over 1% of the market, the implied revenues within CBD petcare would surpass $1 bn.

Figure 98 Every Incremental 25 bps of Dollar Share is Worth An Estimated $237 MM

2025 Market Share Scenario Analysis											
Market Share	0.6%	0.8%	1.1%	1.3%	1.6%	1.8%	2.1%	2.3%	2.6%	2.8%	3.1%
Absolute Sales ($ in MM)	$529.7	$766.5	$1,003.4	$1,240.3	$1,477.2	$1,714.1	$1,951.0	$2,187.9	$2,424.8	$2,661.7	$2,898.6

Source: Cowen and Company

In a bull case scenario, we provide incremental share shifts of 50 bps, which imply ~$475 mm in revenue. Top the extent CBD petcare is able to meaningfully increase its revenue mix, the overall opportunity could be notably above our estimates.

Figure 99 To the Extent CBD Petcare Takes Off, Category Revenues Could be in the Billions

2025 Market Share Scenario Analysis									
Market Share	0.0%	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%
Absolute Sales ($ in MM)	$0.0	$473.8	$947.6	$1,421.3	$1,895.1	$2,368.9	$2,842.7	$3,316.5	$3,790.3

Source: Cowen and Company

Below we provide a juxtaposition of the pricing delta between human tinctures and petcare tinctures using market leader CWEB as a proxy. Overall, we can see on a like basis (same serving size and mg of CBD per offering) petcare tinctures are priced at an average 14% discount, which informs our bottom-up ASP analysis by product type. Based on an average human tincture price of ~$73 per offering, currently, we estimate that petcare tinctures would shake out at ~$63 per offering.

Figure 100 Petcare Tinctures are ~14% Lower than Human Tinctures...

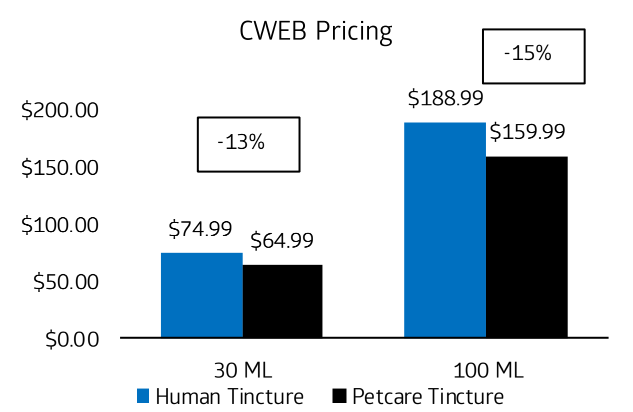
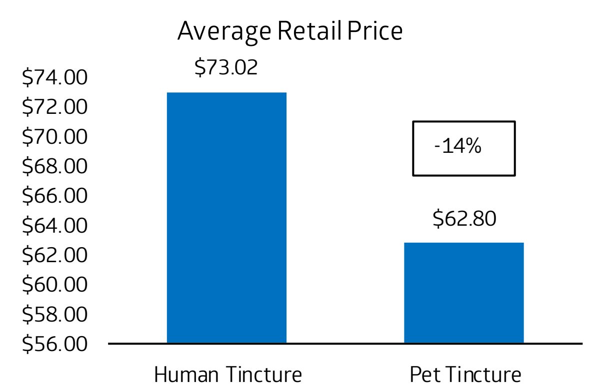


Figure 101 ...Implying ASPs of ~$63 per Offering

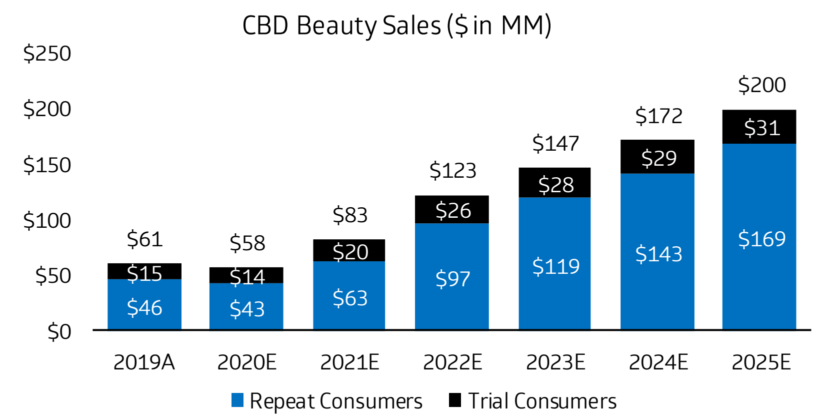


Source: Company Reports and Cowen and Company

CBD Beauty

Similar to petcare, we would classify CBD beauty as an emerging category with large potential upside based on the overall size of addressable prestige beauty market alone. That said, beauty products generally will over-index to topicals and therefore the velocity on these brands will not be to the same levels as seen for some of the more traditional form factors. Our outlook is for the total CBD beauty category to triple by 2025, which we believe would equate to $200 mm in revenue, reflecting a ~22% six-year CAGR.

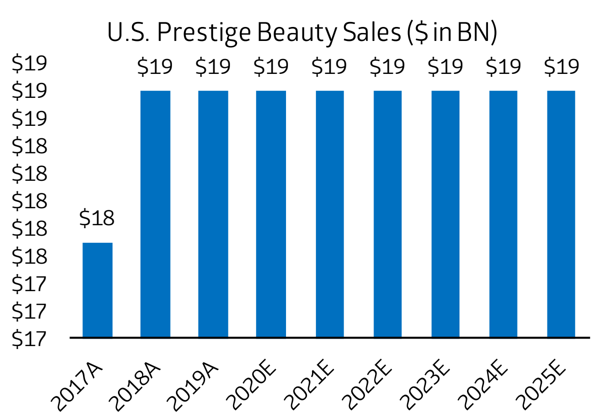
Figure 102 We Believe Beauty Sales Can Reach $200 MM by 2025



Source: Cowen and Company

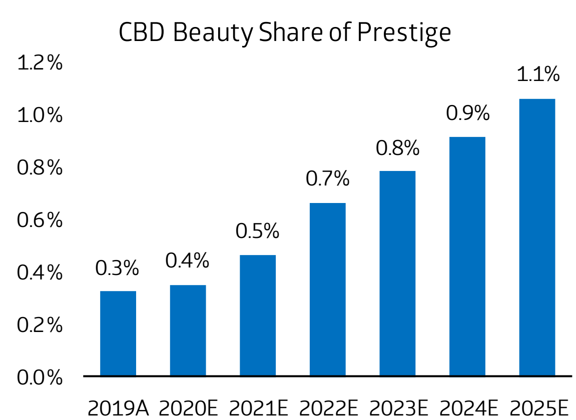
According to NPD, the size of the prestige beauty market was ~$19 bn in 2019, reflecting flat YoY growth. Using this as our go-forward run-rate implies that our market estimates would generate ~80 bps of share capture within the category, exiting 2025 with ~1% market share of prestige beauty.

Figure 103 ~$19 BN U.S. Prestige Beauty Market



Source: NPD and Cowen and Company

Figure 104 Our Estimates Indicate CBD Beauty Can Capture 80 bps of Share

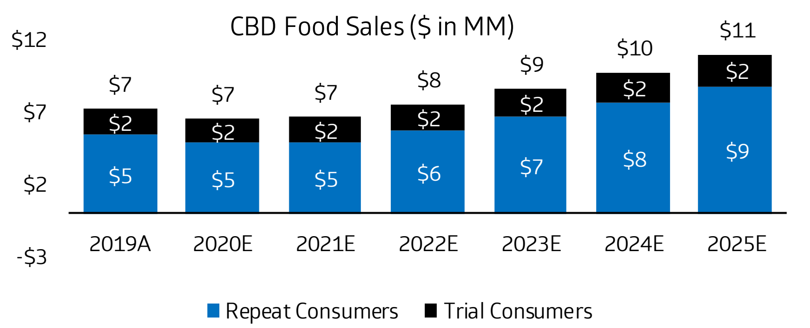


Source: Cowen and Company

Food/Vapes

Food and vapes within the CBD market are fringe categories that we estimate make up the lowest percentage of overall sales. As such we expect the outlook for these two sub-categories to remain tempered. For food, we do not see a ton of upside to where the CBD portion of the category can scale as the sub-segment will be prone to the same headwinds currently seen for beverages, in that there are no warning labels currently permitted on any food products throughout the U.S. Assuming the FDA does not provide clarity on food products limits the potential upside to the category and as such, we expect sales to reach just over ~$10 mm by 2025, reflecting a negligible contribution to the overall market.

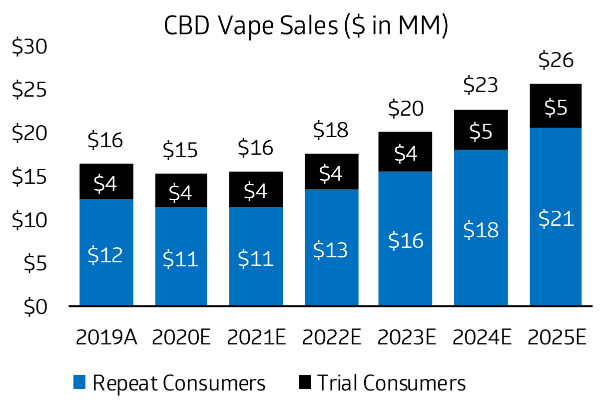
Figure 105 Food Outlook Tempered



Source: Cowen and Company

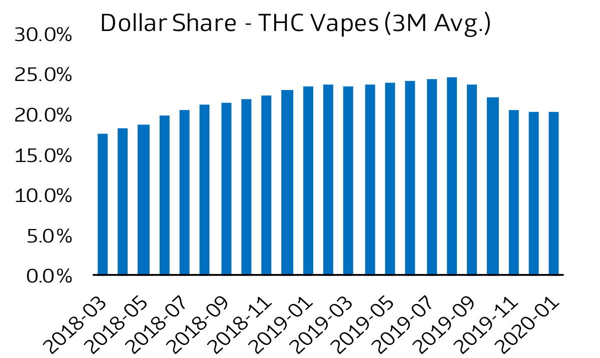
We expect CBD vapes to contribute more than food, but at just $26 mm in total by 2025, our estimates assume about a quarter point of share for the total category. We would note that the opportunity for CBD vapes contrasts starkly with the overall opportunity for THC vapes, which account for over 20% of the total THC category, even after the recent EVALI crisis. Many of the largest players within the CBD category, including CWEB and CVSI, do not even carry vapes, and we see the larger opportunity for CBD vapes to be combined as a blend with THC. Of course, these products would fall outside the purview of traditional CBD and therefore are not embedded in our outlook.

Figure 106 Vapes Should Not Gain Same Traction...



Source: Cowen and Company

Figure 107 ...As Seen in THC



Source: Headset and Cowen and Company

Charlotte's Web – Initiate at Outperform – Positioning a Key Advantage (Pascarelli)

We initiate coverage of Charlotte's Web (CWEB) with an Outperform rating and a $7 PT. CWEB is the clear market leader in U.S. CBD, with the best brand equity, which we expect to sustain over the long-term and ultimately position the company to thrive amid a competitive category. While the category has not scaled to the levels previously anticipated and is being saturated with competition of varying degrees, we believe that CWEB stands to make outsized benefits, given their positioning in the current environment, where we expect them to benefit from **(1) having the best brand equity, (2) having a strong e-commerce platform, and (3) taking measures to control what's in their control.**

Investment Highlights

1) **Current Market Leader Within the Category.** CWEB has established itself as the market leading CBD company operating within the U.S., reflected in the highest level of absolute revenues when benchmarking to publicly traded competition.

2) **Brands Resonate with Retailers and Consumers.** CWEB's market leadership and strong brand equity have allowed them to capitalize on large food, drug and mass (FDM) retailers' entrance into the category and best in class loyalty and satisfaction ratings position the company well to generate strong trial and resulting repeat.

3) **Strong B2C Mix.** CWEB over-indexes to e-commerce, relative to most of the other publicly traded companies, which has provided for good velocity and high levels of gross margin.

4) **History of Strong Gross Margins.** Gross margins are currently benchmarking above many other traditional consumer categories; also has demonstrated financial prudence in terms of their ability to deliver positive EBITDA historically.

5) **Abacus Acquisition.** Recently closed acquisition of Abacus Health Products (ABCS) should position the company well assuming the status quo continues to hold; acquisition should be accretive to revenue growth, round out their topical portfolio and provide ample opportunity for further distribution gains, channel penetration, and supply chain synergies.

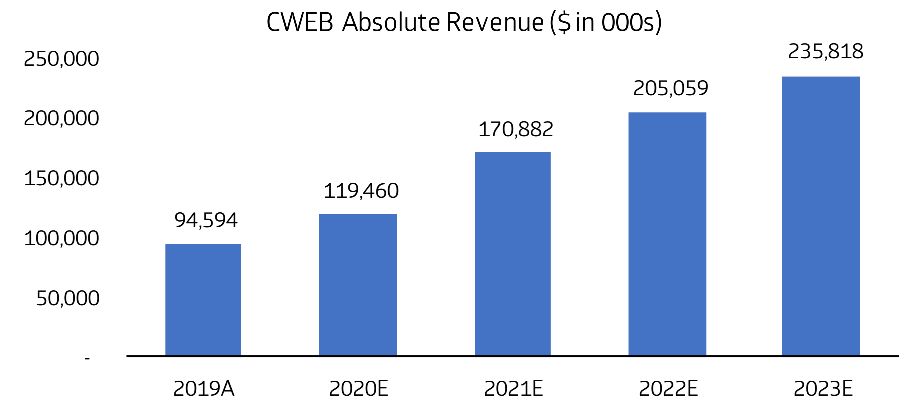
Key Risk Factors

1) **Limited Category Whitespace Without Increased Exposure to Large FDM.** In its current form, the CBD market is not where we expected it to be; CWEB's ability to scale will be capped by the inability for large FDM retailers to enter into the category and carry higher velocity ingestibles; new innovation becomes a key for growth, which can be hampered in the current COVID-19 environment.
2) **Increased Competition in High Velocity Channels / FDM Lower Velocity.** Increased competition results in the potential for market leading brands to get squeezed over the near-to-medium term.
3) **Price Compression.** An abundance of supply and resulting declines in wholesale pricing has resulted in price compression relative to the levels seen last year, which is expected to become more pronounced near-term and result in a gross margin headwind.

Financial Outlook

For 2020, CWEB believes it has good line of sight into its organic revenue streams including e-commerce, a new line of topicals, gummies, and petcare products, which should benefit from a recent 700 store distribution agreement with a national pet retailer. As such, at a time when most companies are withdrawing guidance due to unforeseen impacts associated with the COVID-19 pandemic, (and we are modeling for a 23% decline in our CBD TAM), CWEB is guiding for 2020 revenue growth of 10-20%, organically, and not inclusive of the acquisition of Abacus. Combined, the growth will be higher and start to become more pronounced in the back half of the year, starting with a full quarterly contribution from Abacus effective 3Q20.

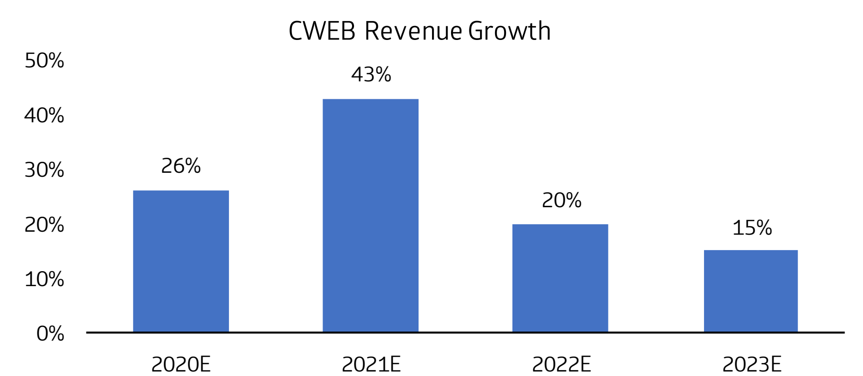
Figure 108 Abacus Combination Should Drive a Solid Topline



Source: Company Reports and Cowen and Company

For the full year, inclusive of Abacus, we are modeling 2020 revenue growth to come in at ~26%, which includes organic revenue growth of 14%, below the midpoint of guidance. Easier 1H comps and the ability for both companies to cross sell into their respective channels, as well as Abacus to utilize CWEB's e-commerce platform as a channel expansion opportunity, should result in over 40% reported sales growth in 2021, followed by natural levels of deceleration in the out years.

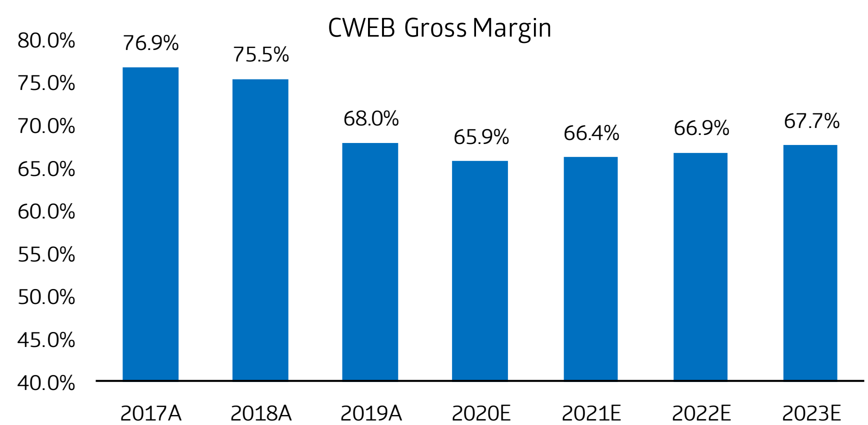
Figure 109 Our Four-Year Outlook Implies a ~26% Revenue CAGR



Source: Cowen and Company

Given increased competition and resulting price compression, gone are the days of mid-to-high 70's gross margin, though encouragingly, the company is expecting gross margin to normalize in the mid-to-high 60's. As a reminder, this still puts CWEB above most consumer and cannabis companies. After reporting a strong ~70% gross margin to start off the year in 1Q20, our ~66% full year estimate (inclusive of Abacus) implies a mid 60's margin in 2Q20 (64.7%), where CWEB's portfolio reset should drive the sequential contraction, though improve over the back half of the year, with better volume throughput and better margin from Abacus who will benefit from positive mix in e-commerce.

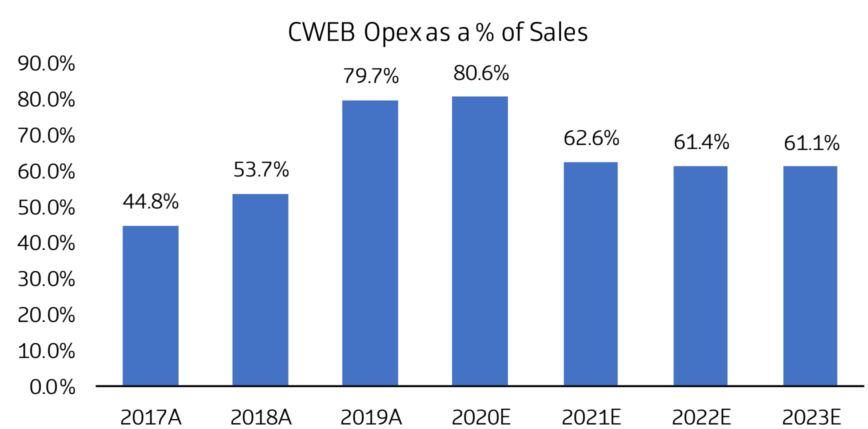
Figure 110 Normalized Margins Are Still Strong, Despite Contraction from 70%+ Levels



Source: Company Reports and Cowen and Company

With margins expected to normalize in the mid-to-high 60's, increased cost controls and prudent investment spend become a larger part of the equation. With better volume throughput expected over the remainder of 2020, CWEB will look to leverage their operating expenses, though even with sequential improvements slated for the last three quarters of the year, outsized operating expenses seen in 1Q20 (109% of sales) will likely drive a full year increase, which should subsequently start to decrease in the out years, through natural leverage and unlocking supply chain synergies with Abacus.

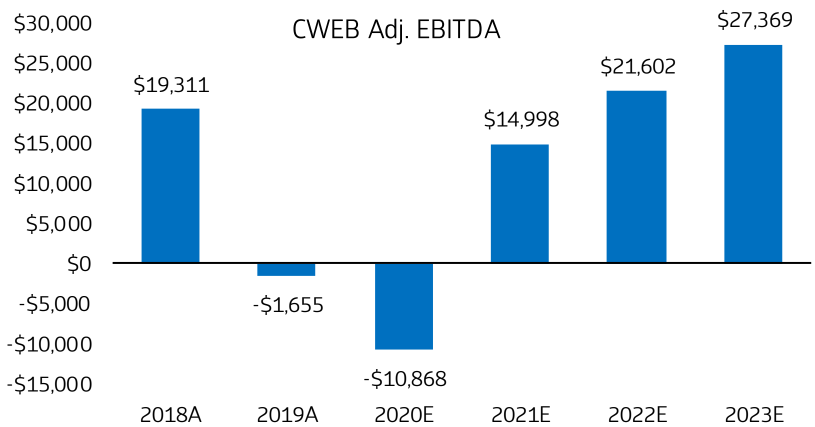
Figure 111 An Expensive 1Q20 Likely Drives Opex Higher for the Year, Even with Leverage in 2H20



Source: Company Reports and Cowen and Company

Gross margin contraction and inflated higher than normal operating expenses should result in an EBITDA loss for the full year, though after posting a ~$5.8 mm loss in 1Q, the magnitude of declines should improve over the next two quarters, with CWEB becoming profitable again in 4Q20 (inclusive of Abacus). This sets the company up to build off the sequential progress this year and deliver positive adjusted EBITDA starting in 2021.

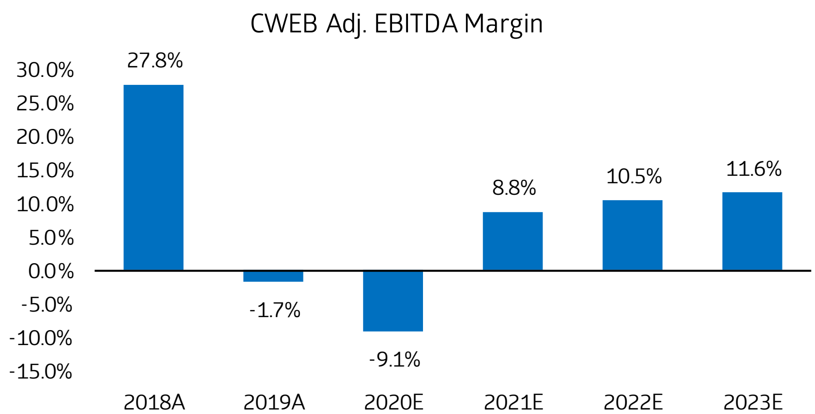
Figure 112 Adj. EBITDA Should Improve Starting in 2021



Source: Company Reports and Cowen and Company

Our outlook implies HSD-LDD adj. EBITDA margin from 2021-2023 with improvements stemming from better gross margins, operating leverage and acquisition synergies. While a HSD-LDD margin structure pales in comparison to the levels seen in 2018, this will represent a notable turnaround relative to the levels seen in 2019 and 2020E and position the company for long-term staying power, with bottom line profitability.

Figure 113 We Expect HSD-LDD Adj. EBITDA Margins from 2021-2023



Source: Company Reports and Cowen and Company

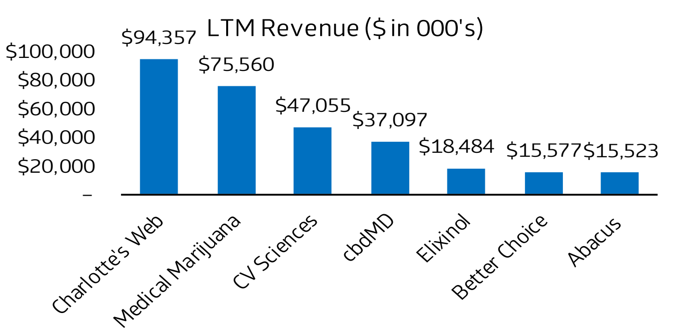
Investment Highlights

As we stated above, we believe there are three keys to outperforming in the current market, assuming the status quo continues to hold. These include: **(1) having the best brand equity, (2) having a strong e-commerce platform, and (3) taking measures to control what's in your control.** These keys inform our Outperform rating on CWEB and are addressed herein.

Current Market Leader Within the Category

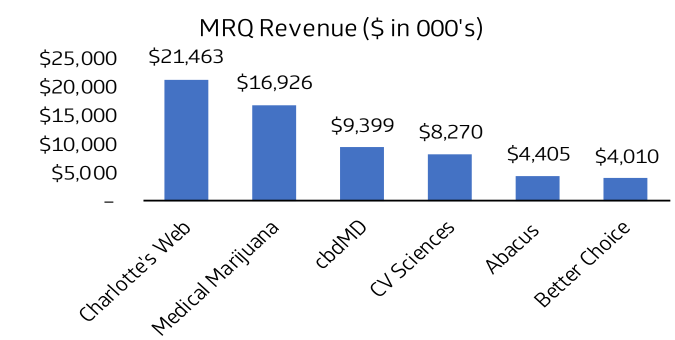
CWEB has established itself as the market leader within U.S. CBD, with solid brand equity, which is reflected when benchmarking revenues across the large, publicly traded companies operating in the U.S. today. On a LTM basis, CWEB is running at over $94 mm. These revenues are 25% higher than their next leading competitor and almost 120% higher than their peer group average. What is more, the company is guiding for organic revenue growth of 15% at the midpoint this year, at a time where most companies will experience outsized declines due to COVID-19 and market saturation, which should further cement their positioning as a best in class operator.

Figure 114 CWEB Is the Market Leader Within the Space...



Source: Company Reports and Cowen and Company

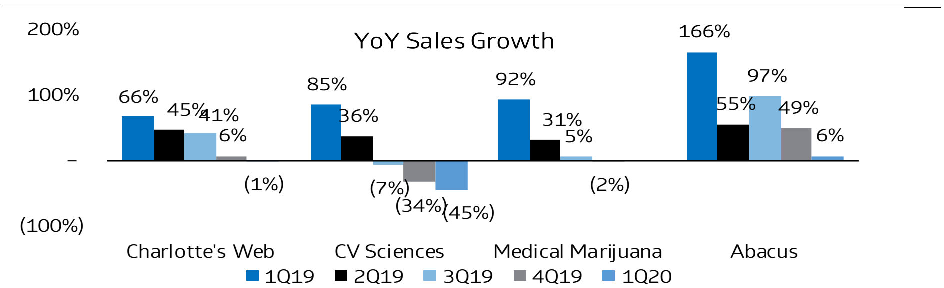
Figure 115 ...Reflected in the Highest Levels of Absolute Revenues



Source: Company Reports and Cowen and Company

While CWEB is generating higher levels of absolute revenues, it is also holding up better from a growth perspective, given the notable fragmentation that is starting to take place within the natural products and B2C channels. In the most recent quarter, CWEB reported a 1% decline in revenues, which was affected in part by lapping large inventory stocking from FDM retailers in the YoY period. Performance over the next nine months of the year is expected to improve meaningfully, and of note, a 1% decline compares to a 45% decline from main competitor CVSI, which is more levered to the natural products channel.

Figure 116 CWEB Growth Holding Up Much Better Than Competition



Source: Company Reports and Cowen and Company

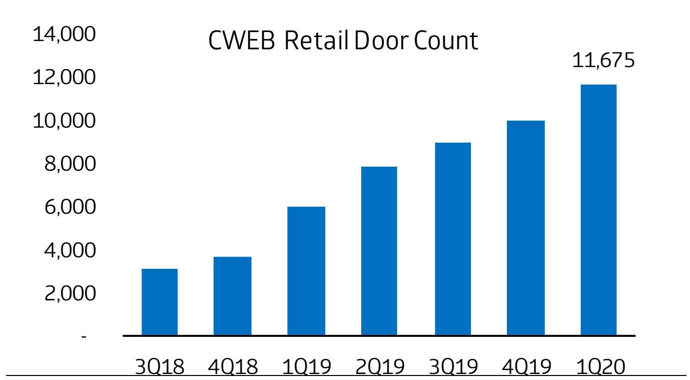
Brand Resonates with Large Retailers

Since the passage of the 2018 Farm Bill, we have seen CWEB sign distribution agreements with most of the leading FDM channels currently offering products within the space, including CVS, Rite Aid, Kroger, Safeway, and Vitamin Shoppe. These partnerships have resulted in a notable increase in distribution gains where their overall door count stood at 10,000+ as per year-end 2019 (and is currently just under 12K). With higher barriers to entry than the typical independent natural products retailer, brand equity, market leadership, good manufacturing processes, testing, and QA/QC all come into play. In that regard, CWEB is better positioned than any company to make continued distribution gains to the extent that more FDM retailers opt to enter the space or expand geographically.

Figure 117 Solid Traction with FDM

Source: Company Reports and Cowen and Company

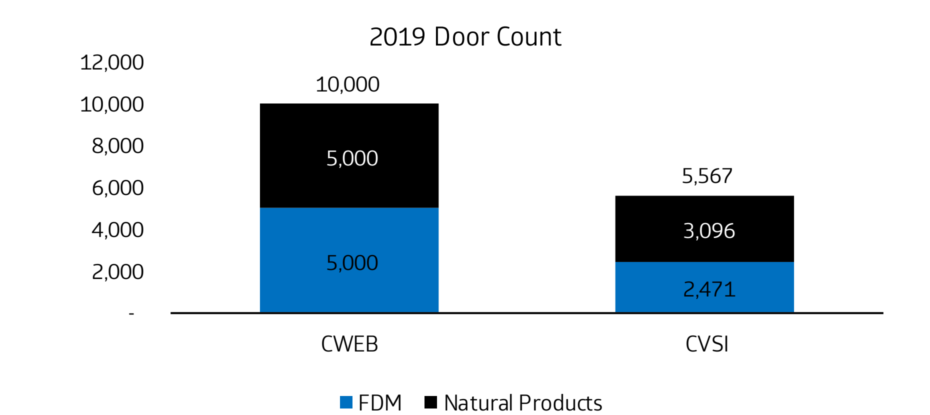
Figure 118 10,000+ Door Count



Source: Company Reports and Cowen and Company

We would note that while both CWEB and CVSI have made good headway in terms of FDM distribution gains, CWEB benchmarks meaningfully higher at 5,000+ FDM doors, relative to 2,471 for CVSI, providing the added benefit of making them less exposed to the pressured, low barrier to entry, natural products channel.

Figure 119 CWEB Exceeds CVSI in FDM Gains

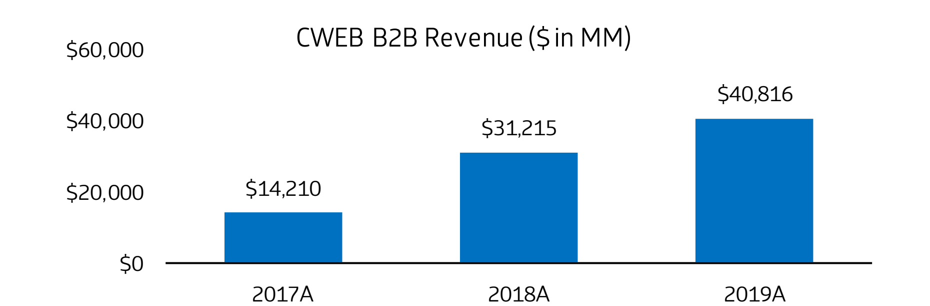


Source: Company Reports and Cowen and Company

What If the FDA Allowed for Ingestible Form Factors?

Should the FDA release language around ingestibles, ultimately allowing for them to be sold as dietary supplements, we believe this could be an incremental **$85 mm annualized revenue opportunity within CWEB's established FDM channel alone (assuming no expansion),** which would almost match what they reported in total company revenues for 2019. As it stands, in 2019, the company delivered ~$95 mm in revenue, of which $40.8 mm (or ~43%) came from the B2B channel.

Figure 120 B2B Accounts for ~43% of CWEB Revenue



Source: Company Reports and Cowen and Company

If we assume that 30% of the $40.8 mm of revenue delivered in the B2B channel came from FDM retailers that are carrying topical products only, that equates to about $12.2 mm in revenue for the year. CWEB has indicated that ~10-15% of sales come from topicals in stores where their full portfolio of products is selling. Given that backdrop and using the midpoint of the range for topical sales (12.5%) implies an $85 mm incremental revenue opportunity alone. To the extent topicals reflect 10% of sales (the lower end of the range), that would imply incremental annualized revenues of ~$110 mm.

Figure 121 Adding Ingestibles to FDM Channel Could Be Worth $85 MM in Annualized Revenue

	FDM as a % of B2B Sales (Topicals Only)								
Topcial Sales Mix of Total	20%	23%	25%	28%	30%	33%	35%	38%	40%
7.5%	$100,679	$113,264	$125,849	$138,434	$151,019	$163,604	$176,189	$188,774	$201,359
8.0%	$93,877	$105,611	$117,346	$129,081	$140,815	$152,550	$164,284	$176,019	$187,754
8.5%	$87,874	$98,859	$109,843	$120,827	$131,812	$142,796	$153,780	$164,765	$175,749
9.0%	$82,539	$92,856	$103,174	$113,491	$123,809	$134,126	$144,443	$154,761	$165,078
9.5%	$77,765	$87,486	$97,207	$106,927	$116,648	$126,368	$136,089	$145,810	$155,530
10.0%	$73,469	$82,652	$91,836	$101,020	$110,203	$119,387	$128,570	$137,754	$146,938
10.5%	$69,582	$78,279	$86,977	$95,675	$104,372	$113,070	$121,768	$130,465	$139,163
11.0%	$66,048	$74,304	$82,560	$90,816	$99,072	$107,328	$115,583	$123,839	$132,095
11.5%	$62,821	$70,674	$78,526	$86,379	$94,232	$102,084	$109,937	$117,790	$125,642
12.0%	$59,863	$67,346	$74,829	$82,312	$89,795	$97,278	$104,761	$112,244	$119,727
12.5%	$57,142	$64,285	$71,428	$78,571	$85,714	$92,856	$99,999	$107,142	$114,285
13.0%	$54,631	$61,459	$68,288	$75,117	$81,946	$88,775	$95,604	$102,432	$109,261
13.5%	$52,305	$58,843	$65,381	$71,919	$78,457	$84,996	$91,534	$98,072	$104,610
14.0%	$50,145	$56,414	$62,682	$68,950	$75,218	$81,486	$87,754	$94,023	$100,291
14.5%	$48,135	$54,152	$60,168	$66,185	$72,202	$78,219	$84,236	$90,253	$96,269
15.0%	$46,258	$52,040	$57,823	$63,605	$69,387	$75,169	$80,952	$86,734	$92,516
15.5%	$44,503	$50,065	$55,628	$61,191	$66,754	$72,317	$77,880	$83,442	$89,005
16.0%	$42,857	$48,214	$53,571	$58,928	$64,285	$69,642	$74,999	$80,357	$85,714
16.5%	$41,311	$46,475	$51,638	$56,802	$61,966	$67,130	$72,294	$77,458	$82,621
17.0%	$39,856	$44,838	$49,820	$54,801	$59,783	$64,765	$69,747	$74,729	$79,711
17.5%	$38,484	$43,294	$48,105	$52,915	$57,725	$62,536	$67,346	$72,157	$76,967

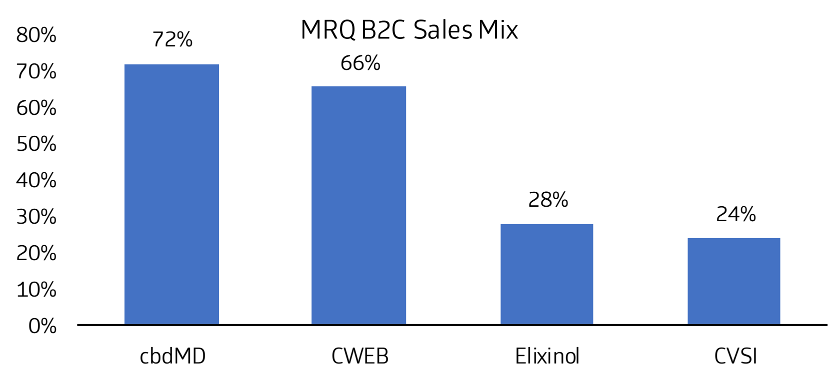
Source: Cowen and Company

Strong B2C Mix

Over half of CWEB's total company revenues are being derived in the B2C channel, which is encouraging as it allows the company to capitalize on velocity, given the ability to sell ingestible form factors, in addition to being gross margin accretive.

Based on 1Q20 performance, we can see that CWEB benchmarks above most of their publicly traded competition as it relates to the B2C channel. As it currently stands, CWEB's B2C mix is almost 2.5x the amount seen for Elixinol and ~almost 3x the amount seen for CVSI.

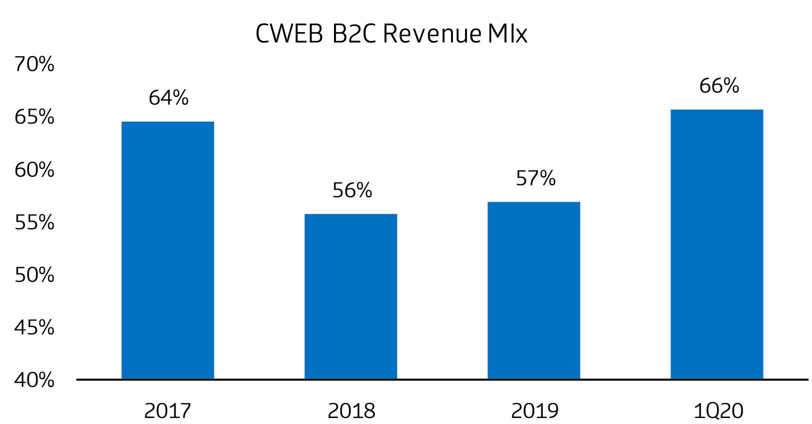
Figure 122 CWEB Benchmarking Above Many Competitors on B2C Mix



Source: Company Reports and Cowen and Company

While an increasing number of brick and mortar distribution gains have resulted in B2C mix coming down from the levels seen in 2017, the company encouragingly increased its mix by 100 bps in 2019, which has subsequently increased to 66% in the most recent quarter. B2C remains arguably the most important revenue driver for the company in 2020 and CWEB will look to build on its positive mix shift over the remaining three quarters of 2019 through increased traffic, conversion, basket, and consumer retention.

Figure 123 CWEB's B2C Mix Increasing

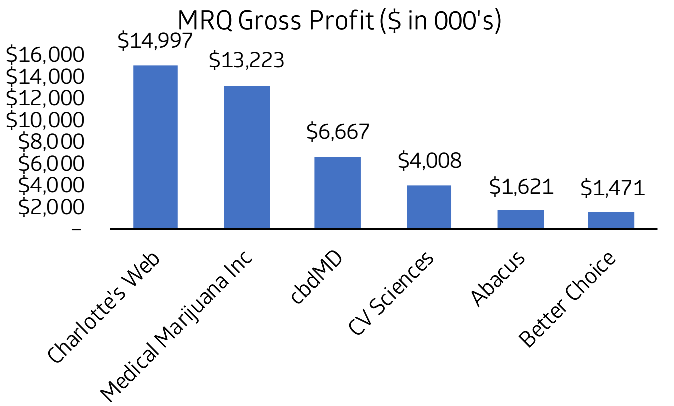


Source: Company Reports and Cowen and Company

History of Delivering Strong Gross Margins

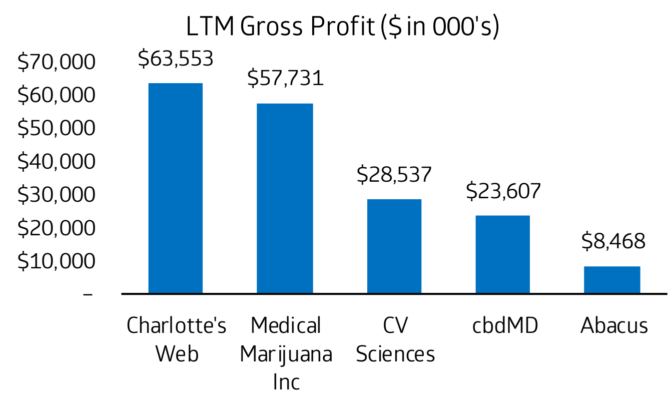
A high B2C mix, coupled with vertical integration benefits have resulted in a history of robust gross margins. Among the competitive set, CWEB is generating the highest overall levels of gross profits, at $15 mm in the most recent quarter ended 1Q20, as well as over the last 12 months at ~$63.5 mm.

Figure 124 CWEB Generating Highest Gross Profits on an MRQ...



Source: Company Reports and Cowen and Company

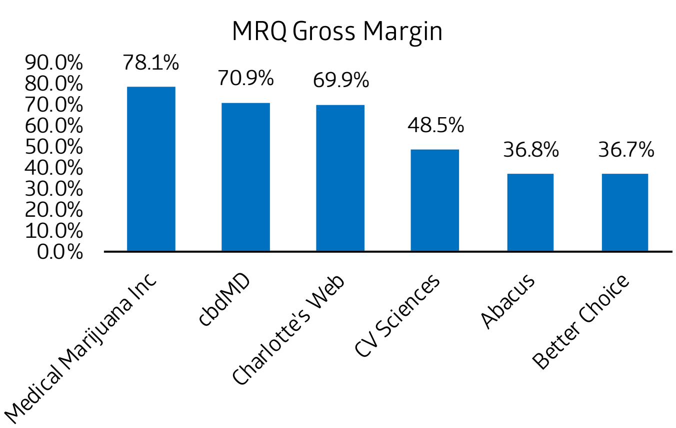
Figure 125 ...and LTM Basis



Source: Company Reports and Cowen and Company

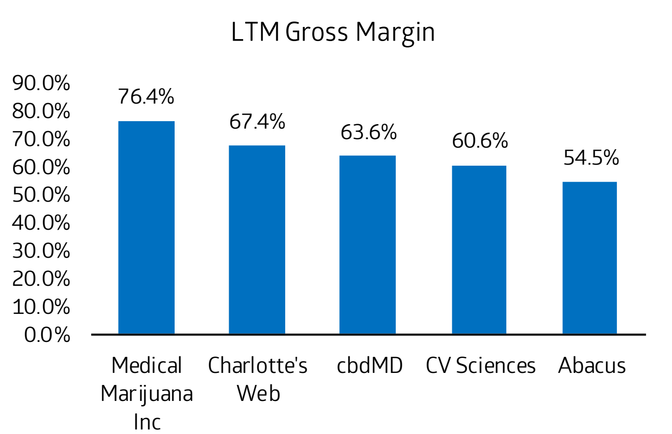
From a margin perspective, CWEB has consistently been in the high 60's to low 70's though on a go-forward basis, in a price sensitive environment, the company is expecting mid-to high 60's with improvement toward the back half of the year.

Figure 126 Strong Gross Margin...



Source: Company Reports and Cowen and Company

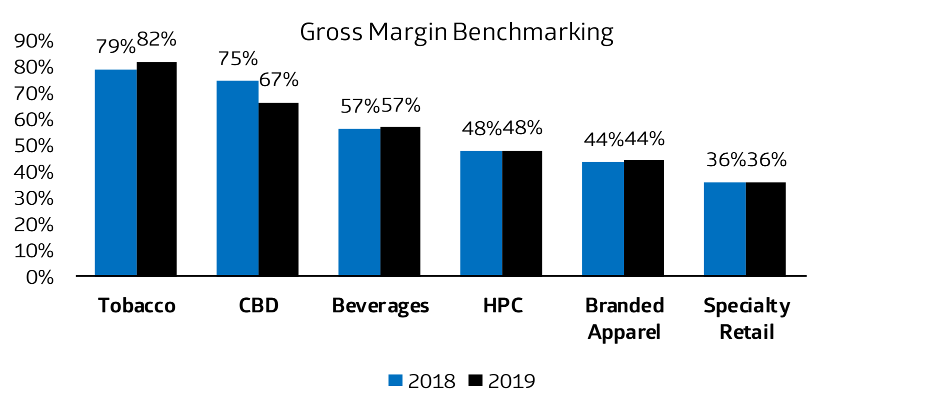
Figure 127 ...in the High 60's



Source: Company Reports and Cowen and Company

For a finished goods producer, we would still classify a mid to high 60's margin as robust, in particular when benchmarking to other consumer categories. Outside of cigarettes, which command the highest margins, we can see that even at a mid-60's margin, CWEB would outpace all of the other consumer categories laid out below) ex tobacco). And, while the industry margin structure is very favorable, CWEB's margin structure outpaces the category, having delivered 75.5% GM in 2018 and 68% GM in 2019 (adjusted).

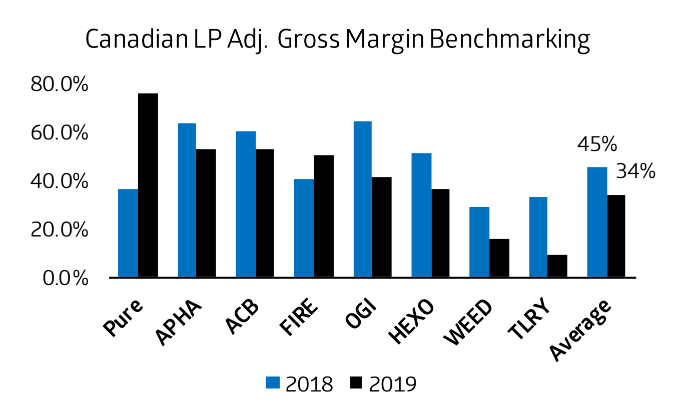
Figure 128 CBD Has a Very Favorable Margin Structure



Source: Company Reports and Cowen and Company

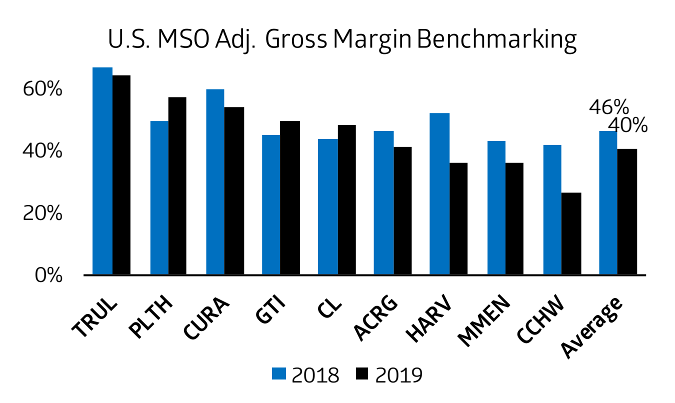
Additionally, we can see below that CWEB's gross margins benchmark above most of the major publicly traded Canadian LPs and MSOs operating in the U.S, which on average is 34% and 40%, respectively.

Figure 129 CBD Margins Benchmark Above Canadian...



Source: Company Reports and Cowen and Company

Figure 130 ...and U.S. Cannabis on Average



Source: Company Reports and Cowen and Company

Abacus Acquisition

In March, CWEB announced the acquisition of Abacus Health Products (CSE: ABCS), in an all-stock transaction valued at C$4.39 ($3.03) per share, which at the time reflected an LTM revenue multiple of ~3x.

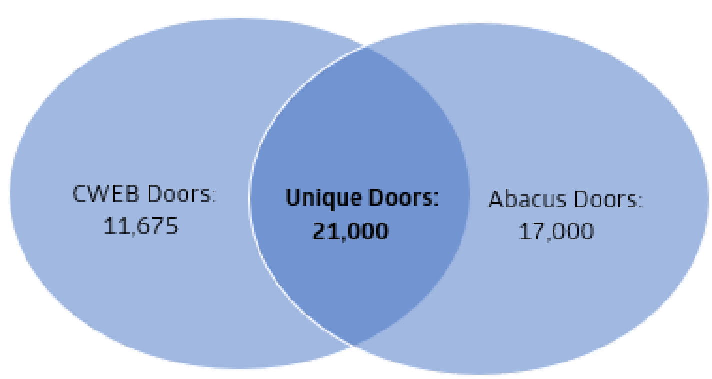
Figure 131 CWEB Acquired Abacus for ~3x LTM Revenues

Offer Price (USD)	$3.03	
Fully Diluted Shares Outstanding (MM)	22.6	
Market Cap ($ in MM)	**$68.3**	
Total Debt ($ in MM)	$0.0	
Cash & Cash Equivalents ($ in MM)	$28.2	
Enterprise Value ($ in MM)	**$40.0**	
	Revenue ($ in MM)	**EV/Revenue**
LTM (9M19 - Time of Announcement)	$14.1	2.8x
2019A	$15.5	2.6x
2020E	$50.5	0.8x
2021E	$107.8	0.4x

Source: Company Reports, Thomson EIKON and Cowen and Company

While CWEB is ~6x the size of Abacus from a revenue perspective, the acquisition should complement CWEB's portfolio, particularly in topicals, which is where Abacus specializes. As it stands Abacus predominately sells two lines of products, (1) CBD CLINIC, and (2) CBD MEDIC. CBD CLINIC is marketed and sold exclusively to registered health practitioners, while CBD MEDIC is marketed to the consumers through retail outlets, health and fitness outlets and e-commerce. Prior to the announcement of this transaction, Abacus announced the acquisition of Harmony Hemp in February, which markets personal care lines in OTC for topicals as well as bath and beauty. As of year-end 2019, Abacus CBD CLINIC products are sold to 16,500 practitioners, while its CBD MEDIC line is sold in 8,000 retail locations. Including Harmony Hemp and CBD MEDIC, Abacus's CBD products are now sold in 17,000 locations, which compares to just under 12,000 for CWEB. Now with the closure of all pending acquisitions complete, the net number of unique doors for combined co. will be ~21,000.

Figure 132 The Transaction Will Provide CWEB with an Incremental ~4 MM Doors

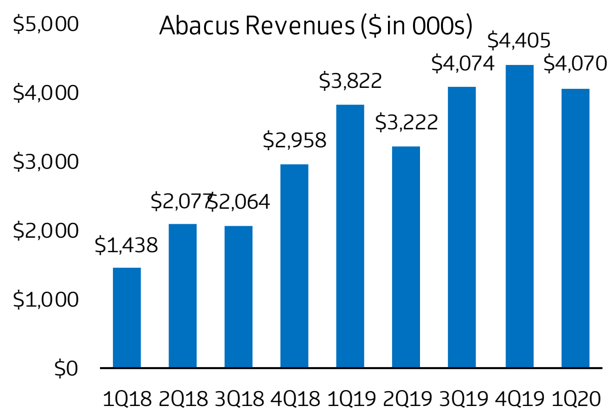


Source: Company Reports and Cowen and Company

Financial Walkthrough

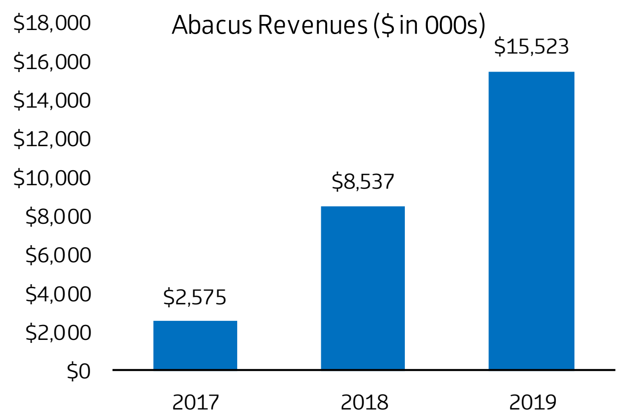
On a relative basis, Abacus is still a small company reflected in 2019 total company sales of ~$15.5 mm (which compares to $95 mm for CWEB and ~$54 mm for CVSI for reference). That said, the company has made notable progress in scaling its top line relative to the $2.5 mm in sales seen just two years ago.

Figure 133 While Small, Abacus Has Done a Good Job Scaling Top Line...



Source: Company Reports and Cowen and Company

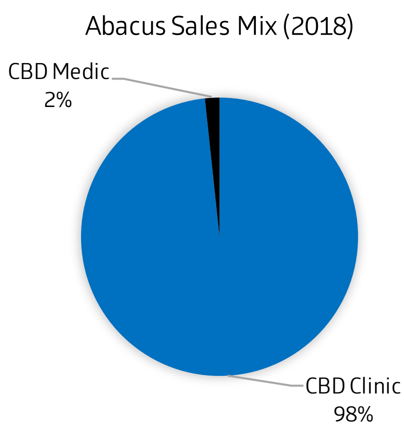
Figure 134 ...With Revenues Growing Over 80% in 2019



Source: Company Reports and Cowen and Company

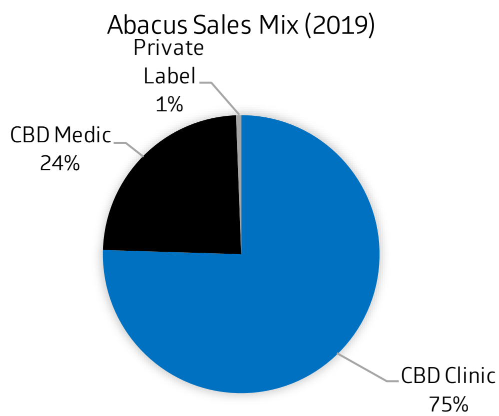
In the most recent year, Abacus has made strong progress in terms of building out its consumer-focused CBD MEDIC line, where sales grew to over $3.7 mm (from just $144K in 2018). As a result, the line contributed almost a quarter to total company revenues. Off a much larger base, Abacus's CBD CLINIC line grew,~40% resulting in a full year revenue contribution of 75%.

Figure 135 While Negligible in 2018, CBD MEDIC Has Scaled Meaningfully



Source: Company Reports and Cowen and Company

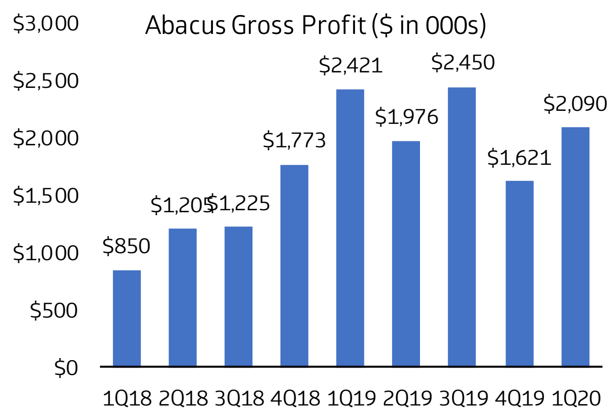
Figure 136 Much Better Balance of Revenues in 2019



Source: Company Reports and Cowen and Company

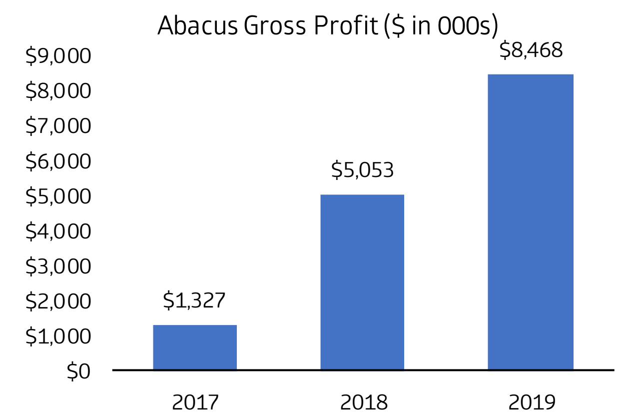
Outside 4Q19, total company gross profit had largely followed the trajectory of revenues, resulting in consistent gross margin in the high 50's / low 60's range. From a full year perspective, Abacus gained an incremental ~$3.5 mm in profits, closing the year out at just under $8.5 mm.

Figure 137 Quarterly Margin Had Largely Followed Revenue Trajectory



Source: Company Reports and Cowen and Company

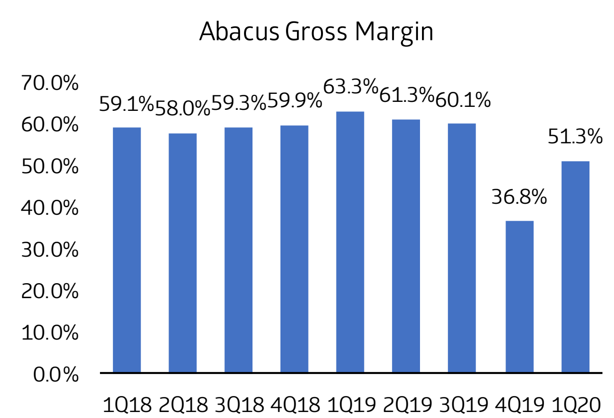
Figure 138 Abacus Gained an Incremental ~$3.5 MM in Profit in 2019



Source: Company Reports and Cowen and Company

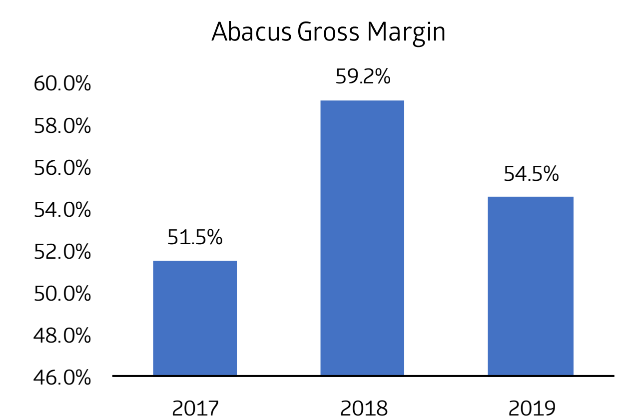
4Q19 gross margins were affected by one-off items, which resulted in notable sequential contraction and more than offset the expansion the company was able to deliver over the first 9 months of 2019. Given the non-recurring nature of this near-term impact, management expects the company's go-forward margin to look similar to the levels that were achieved over the first three quarters of 2019, which would imply margins eclipsing 60% in 2020. Most recently, while not to the same levels seen historically, ABCS's gross margin bounced back, expanding almost 15 pts sequentially. Now with the transaction closed, margins should benefit from more cross-sell volume throughput in addition to utilizing CWEB's e-commerce platform to drive positive mix shift.

Figure 139 Recent Gross Margin Contraction Driven By One-Off Items…



Source: Company Reports and Cowen and Company

Figure 140 …Which More Than Offset the Progress Made in 9M19



Source: Company Reports and Cowen and Company

From a bottom line perspective, operating losses for the company have become more pronounced reflecting increased expenses associated with scaling. In 2019, the largest increase came from marketing and advertising, which grew almost ~$11 mm, due to a ramp in activities to promote the company's products. Outside of marketing, increases were seen across the board in shipping and delivery, salaries, wages & benefits, professional fees, office and general administration, D&A, and R&D. In light of the current situation, which has seen a notable step-up in competition, as well as a major loss in retail traffic as the U.S. deals with the COVID-19 pandemic, ABCS looks to be trading market share for profitability, which we believe is prudent at this stage, given the competitive jockeying to secure on-premise retail locations.

Figure 141 The Cost of Scale Reflected in OPEX

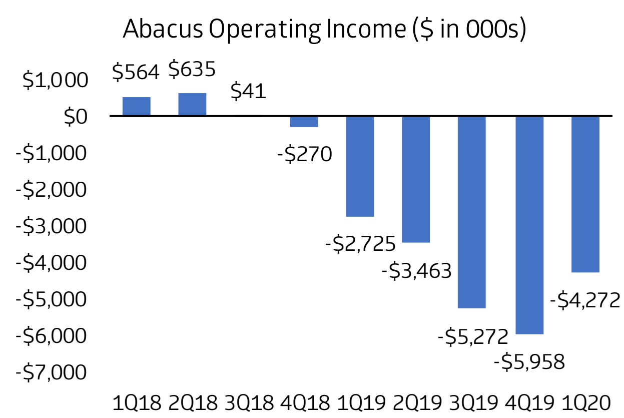
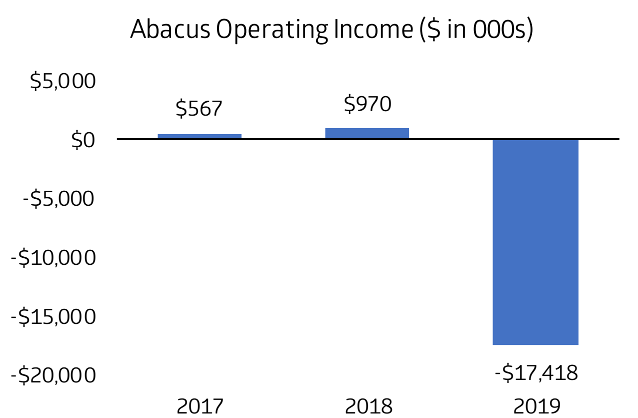


Figure 142 Notable Change in Trajectory for Abacus

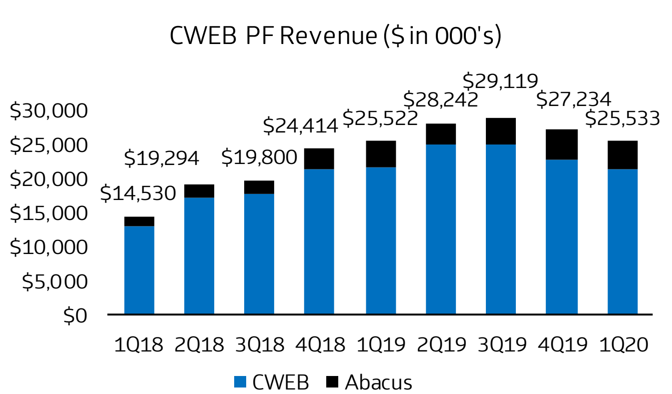


Source: Company Reports and Cowen and Company

CWEB PF Walkthrough

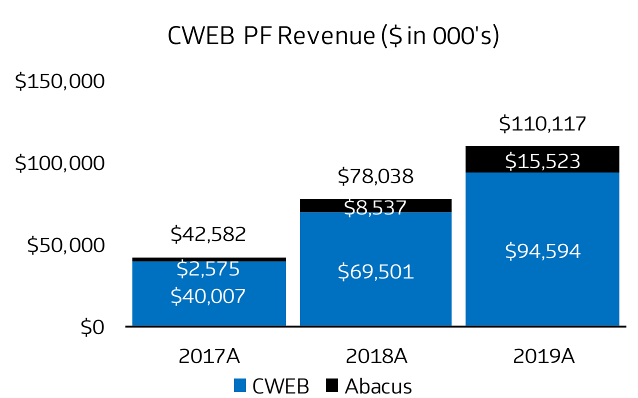
Based on standalone 2019 performance, we can see that CWEB is roughly 6x the size of Abacus. On a pro-forma basis, the consolidated company would have delivered $110 mm in revenue, further cementing CWEB as the largest CBD manufacturer operating in the U.S. Going forward, we expect synergies to complement combined co. revenue growth.

Figure 143 Revenue Accretive Acquisition...



Source: Company Reports and Cowen and Company

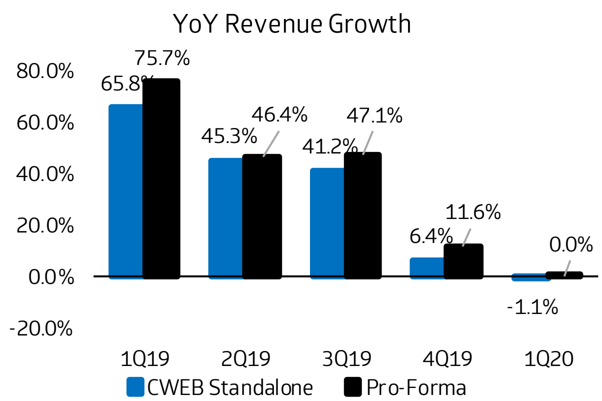
Figure 144 ...Would Have Put CWEB Over $100 MM for 2019



Source: Company Reports and Cowen and Company

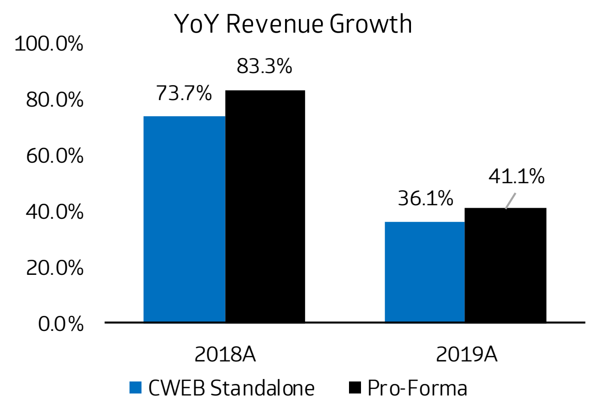
Abacus is growing faster, which makes good sense given the much smaller revenue base. We can see below that every quarter would have been accretive to CWEB's revenue growth. For the full year, the transaction would've been almost 10 pts accretive to the CWEB's top line in 2018 and ~5 pts accretive to top-line growth in 2019. On a go-forward basis, we would expect Abacus growth to continue to outpace CWEB as the company secures more accounts and continues to scale, resulting in faster pro-forma revenue growth, with the added benefit of each respective company being able to cross-sell into channels, as well as Abacus utilizing CWEB's strong e-commerce platform.

Figure 145 Abacus Transaction Accretive To Revenue Growth...



Source: Company Reports and Cowen and Company

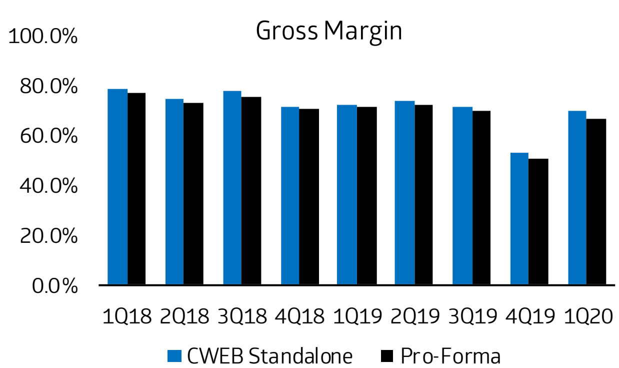
Figure 146 ...Which We Expect to Persist Going Forward



Source: Company Reports and Cowen and Company

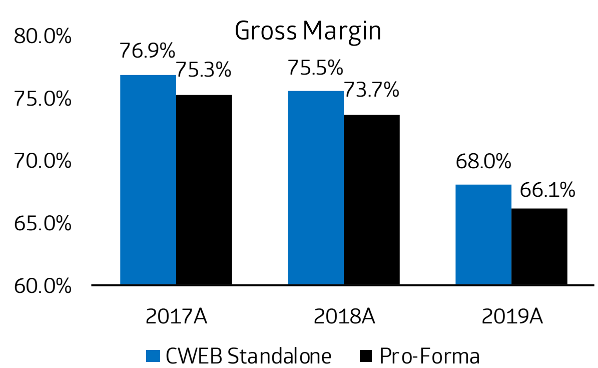
Historically, Abacus's gross margin has trailed their publicly traded peers, which certainly includes CWEB, making the acquisition gross margin dilutive when looking at historical pro-forma financials. That said, going forward these margins should not be looked at in isolation as CWEB will be able to leverage their vertical integration capabilities to create synergies. As well, as stated above, Abacus margins should benefit from positive mix shift associated with being able to sell their products on CWEB's e-commerce platform.

Figure 147 Abacus GM Trails CWEB...



Source: Company Reports and Cowen and Company

Figure 148 ...Though Should Improve Following Acquisition



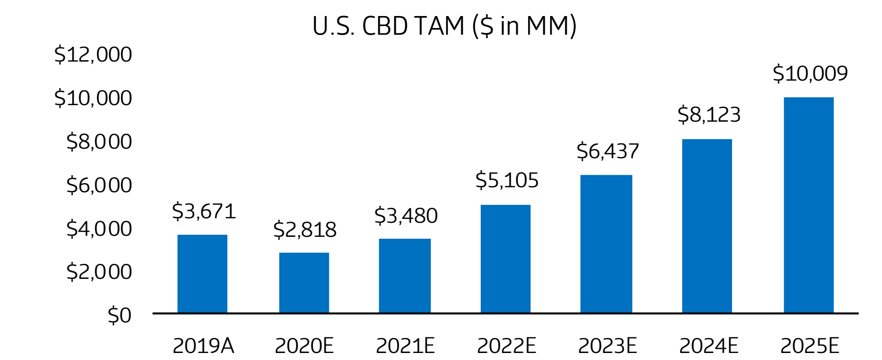
Source: Company Reports and Cowen and Company

Investment Risks

Category Not Scaling to Previously Anticipated Levels

Now in year two following the passage of the 2018 Farm Bill, it is clear that total addressable market assumptions for U.S. CBD need to come down, which has prompted us to revise down our TAM by almost 40% ~$10 bn by 2025, while also offering a bear case scenario in the event our assumptions prove too aggressive.

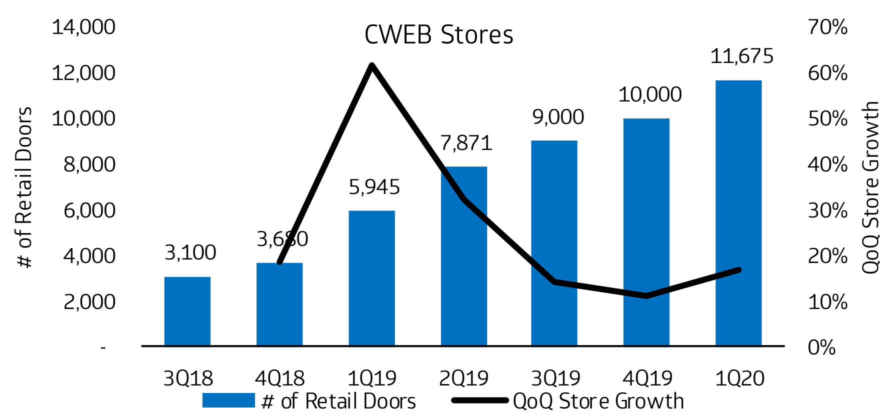
Figure 149 Our $10 BN TAM Offers a More Realistic Outlook on Market Expectations



Source: Company Reports and Cowen and Company

While much optimism was embedded into initial expectations on large retailers' ability to enter into and scale the category in a meaningful way, thus far the entrance has been relatively muted, with limited interest from large food, drug and mass (FDM) retailers. As reflected in the below figure, while CWEB has indeed been able to grow its store count, which benchmarks well relative to competition, sequential growth has been broadly slowing. For an emerging category, we would've expected increased retail demand and sequential store growth, at least over the first 4 quarters of 2019, which clearly has not played out.

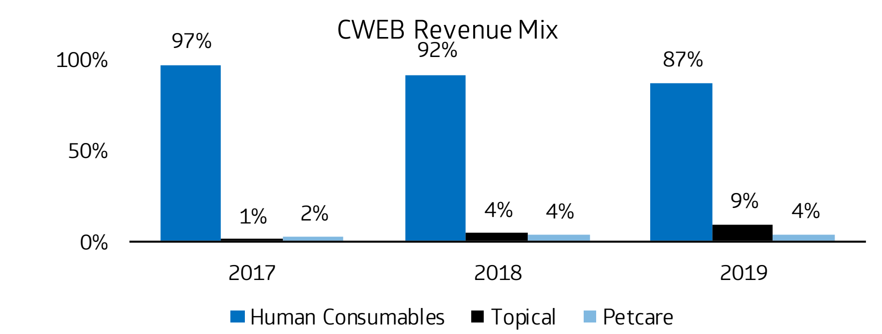
Figure 150 Sequential Door Growth Broadly Slowing



Source: Company Reports and Cowen and Company

Additionally, the vast majority of these FDM retailers are carrying topical products only. These products tend to be much lower velocity than ingestible form factors, and as it relates to CWEB, account for less than 10% of total company sales. With a higher barrier to entry than the natural products channel, the industry awaits clear guidelines from the FDA on the permissibility of ingestible form factors, which in our minds should not be embedded in expectations at this point. In our view, the acquisition of Abacus was telling from an industry perspective; CWEB acquired them with a clear focus on increasing its topical mix, which to us suggests the conviction on the FDM channel adding ingestibles anytime soon is low.

Figure 151 Big Retail Needs to Carry Topicals to Notably Scale This Category

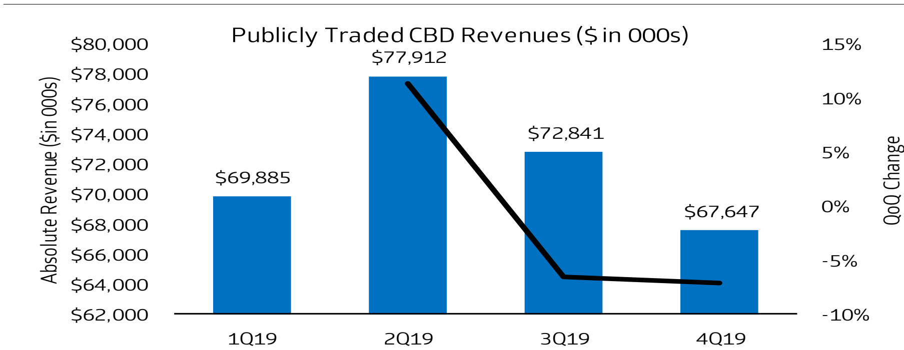


Source: Company Reports and Cowen and Company

Increased Competition in Natural Products Channel

With much lower barriers to entry, the natural products channel has seen a plethora of competition flood the market, fragmenting the channel. This has been the largest singular driver in broad industry pressure, which has been reflected in recent sales performance starting predominately in 3Q19. With regard to fragmentation, we saw a similar dynamic play out in the craft beer channel and while we believe a shakeout is inevitable, over the near-term, increased competition can result in pressure on the market leading brands.

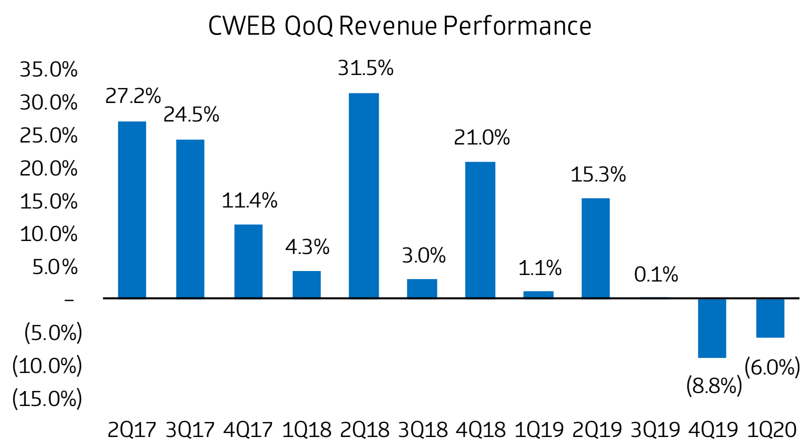
Figure 152 3Q19 Pressure Reflected the Start of Natural Products Saturation



Source: Company Reports and Cowen and Company

Sequentially, the recent pressure started to show up with flat sales performance in 3Q19, which was subsequently followed by declines of ~9% and 6% over the past two quarters, respectively. With CWEB currently guiding for organic 2020 revenue +10-20%, these trends will need to reverse course meaningfully over the next nine months.

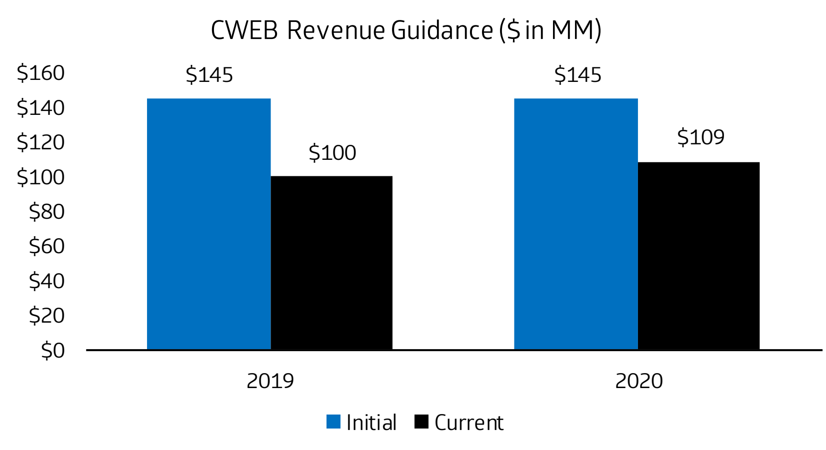
Figure 153 CWEB Sales Under Near-Term Pressure, Though Expected to Improve



Source: Company Reports and Cowen and Company

CWEB's previously issued revenue guidance is perhaps the best indicative of the state of the current CBD market. When the company offered their original 2019 revenue guidance, they were expecting to deliver $145 mm at the midpoint of the range. That was subsequently guided down to $100 mm at the midpoint (they delivered ~$95 mm for the full year). Additionally, off a $100 mm 2019 base, CWEB had been originally looking for 45% growth at the midpoint, essentially pushing out 2019 revenues by a full year, which has also been guided down to 10-20% organic growth for the full year 2020. We would highlight that in a COVID-19 environment, DD organic revenue growth is certainly encouraging and we believe would be well received by the Street. The guidance revisions are more to reinforce the notion that the category is under pressure and CWEB is not immune to challenges, making this a risk.

Figure 154 Revenues Expectations Were Essentially Pushed Out by a Year

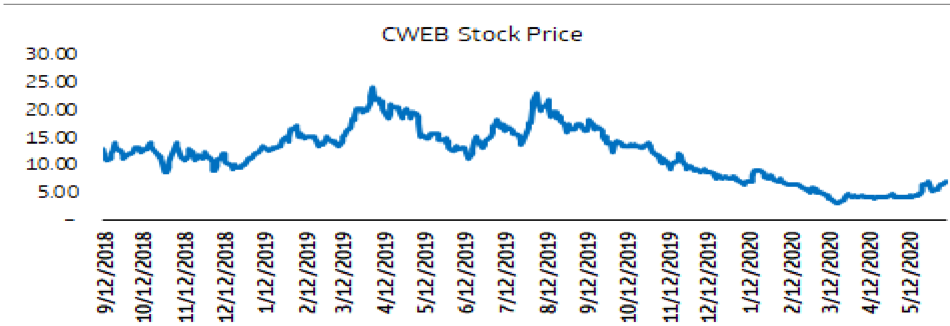


Source: Company Reports and Cowen and Company

Valuation

We can see that over the past 10 months, CWEB's shares have meaningfully retrenched relative to historical levels, in part reflecting disappointment in industry expectations that were ultimately too high, as well as increased competition and a slowdown in revenues, all exacerbated by the impact of COVID-19. We ultimately expect a shakeout in the market and for consolidation to come more in focus, which interestingly, has already started to take hold over the past few months in form of two acquisitions (CWEB/Abacus and ACB/Reliva). In March, CWEB acquired Abacus for ~3x LTM revenue. Meanwhile, more recently in May, ACB acquired Reliva for ~4x LTM revenues. Assuming no premium to these multiples, which is overly conservative given that CWEB is almost 4x larger than both companies combined, a 4x multiple on LTM revenues provides a floor for CWEB's shares of ~$4.

Figure 155 CWEB's Shares Have Retrenched



Source: Thomson Eikon and Cowen and Company

We initiate coverage of CWEB with an Outperform rating and $7 PT, which implies a ~5.2x EV/FY2 revenue multiple. CWEB is the market leader in the CBD space and as such trades at a notable premium to other, much smaller CBD companies, which is expected and justified (~4.1x relative to 1.9x EV/FY2 revenues). To establish a more meaningful comp, we looked at market leading companies under our coverage in three separate buckets including traditional consumer staples (beverages), Canadian LPs and U.S. MSOs. Taking the average EV/FY2 multiple across all industries results in a multiple of ~6.5x. Our 5.2x multiple reflects a ~20% discount to the peer set. CWEB is projected to grow revenues faster than all of the consumer staples companies, has a superior gross margin profile to all companies in the comp set, and while EBITDA will be challenged over the near-term, the company has demonstrated the ability to generate strong bottom line operating leverage in the past.

Figure 156 Market Leading Staples and Our Covered Cannabis Companies Trade at an Avg ~6.5x FY2 Multiple

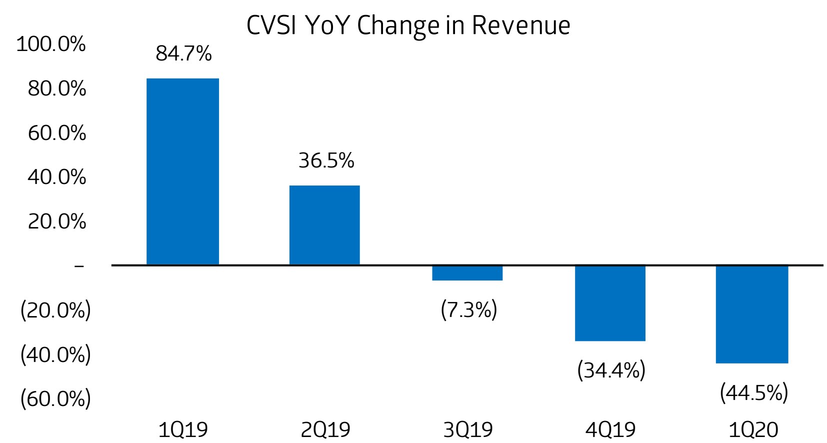
Market Leading Consumer Staples Under Coverage					
Ticker	**KO**	**STZ**	**BFB**	**MNST**	**Average**
EV/FY2 Revenue	6.7x	6.8x	7.3x	8.0x	7.2x
Leading Canadian LPs Under Coverage					
Ticker	**WEED**	**CRON**	**ACB**	**TLRY**	**Average**
EV/FY2 Revenue	9.7x	14.5x	5.8x	4.0x	8.5x
Leading U.S. MSOs Under Coverage					
Ticker	**GTI**	**CL**	**CURA**	**ACRG**	**Average**
EV/FY2 Revenue	3.0x	3.0x	5.2x	3.8x	3.8x
Consolidated Average					**6.5x**

Source: Thomson and Cowen and Company

CV Sciences – Initiate at Market Perform – Looking to Right the Ship (Pascarelli)

We initiate coverage of CV Sciences (CVSI) with a Market Perform rating and a $0.75 PT. As it currently stands, through its PlusCBD offering, CVSI has established one of the more well-known brands in the U.S. market, but the company's channel positioning within the current environment warrants caution and has been reflected in considerable revenue declines which started to take hold in 3Q19 and have become more amplified through the most recent 1Q20 quarter.

Figure 157 CVSI Revenue Performance Indicative of Unfavorable Positioning



Source: Company Reports and Cowen and Company

Why We're Cautious

From a macro perspective there are three main headwinds currently impacting the U.S. CBD industry, which are universal in nature and a headwind to every company in operation. These headwinds include:

1) **A lack of clarity from the FDA on ingestible form factors,** which has resulted in a measured rollout from large food, drug and mass channels, which typically only carry (slower velocity) topicals.

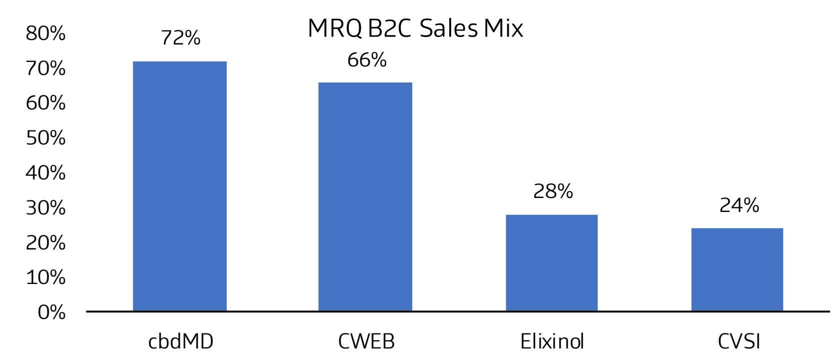
2) **An abundance of competition in the natural products channel,** which has resulted in considerable saturation, fragmentation and price promoting.

3) **COVID-19,** which has clearly resulted in a near-term loss of foot traffic in brick and mortar retail outlets.

To be sure, although the category may not be trending on the same trajectory as previously anticipated, we believe the best positioned companies have ample opportunity to thrive in this market and will benefit from a strong e-commerce presence as well as the ability to generate trial and repeat, which is where best in class brand equity comes into play. Unfortunately for CVSI, the company remains meaningfully under-exposed to e-commerce and meaningfully concentrated in the natural products retail channel, which has lower barriers to entry and as such is seeing notable pressure with increased competition that has eroded CVSI's revenues. With COVID-19 overlapping with the company's upcoming 2Q20, we suspect trends will get worse given the natural loss of foot traffic in retail channels, and as such would opt to stay on the sidelines until we see a major reversal in trend from both a topline and profitability perspective.

With large FDM retailers predominately carrying topical products only, the opportunity for distribution gains and improving velocity in this channel remains capped, making the e-commerce channel very important to sustain revenues as well as gross margin. The issue with CVSI is that as it currently stands, they meaningfully under-index to e-commerce relative to competition. While this remains a key focus for the company in 2020, much work needs to be done in order to increase traffic in this highly competitive channel which we feel may prove difficult.

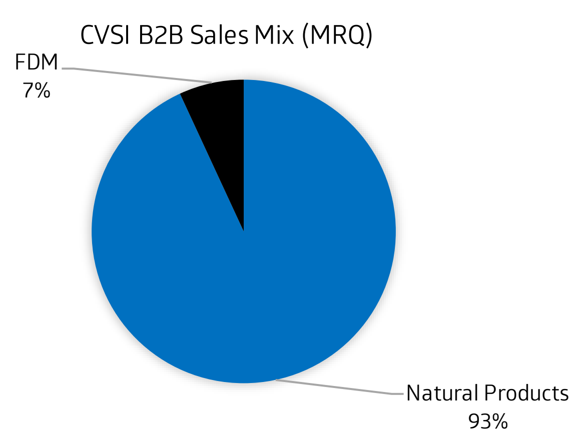
Figure 158 CVSI Benchmarks Below Peers in E-Commerce



Source: Cowen and Company

Additionally, in its B2B segment, CVSI over-indexes to the natural products channel, which accounts for 93% of their current B2B revenues (70% of total company revenues) and has seen considerable pressure from an influx of brands, flooding the channel with varying degrees of price points and quality.

Figure 159 Revenues Overwhelmingly Over-Index to Challenged Natural Products Channel



Source: Company Reports and Cowen and Company

What Would Make Us More Constructive?

There are a few key notable items on the docket for CVSI this year, which includes a brand refresh and driving under-exposed channels in the form of e-commerce as well as potential entry into c-store (presumably).

While we expect revenues to remain under pressure, given their outsized mix to natural products, we will be looking for a sequential improvement in the magnitude of losses over the back half of 2020 and growth in 2021. To us, this would suggest that their new products are resonating better with consumers.

As well, given where they stand today, e-commerce represents a significant channel expansion opportunity for CVSI, which in the most recent quarter was 24% of revenue mix. Going forward, revenue mix will be one of the key metrics that we will continue to focus on, but headline mix doesn't tell the whole story. Specifically, given their upcoming brand refresh and stated focus on driving e-commerce revenue, we need to see growth in this channel, which did not come to pass in the most recent quarter. Although the company improved its mix by 900 bps YoY going from 15-24%, absolute e-commerce revenues were actually down 12% YoY. For a channel that has seen increased usage given stay-at-home measures, we need to see CVSI grow its e-commerce channel organically to provide comfort on their brands as well as the progress on their stated initiatives to drive revenue.

Channel expansion into c-store would be well received, as it would help to make them less reliant on natural products channels. However, given their topline outlook over the remainder of the year, coupled with SG&A cuts and a low cash balance, we think this is likely a 2021 endeavor after they either 1) raise more capital or 2) notably improve the trajectory of their topline and resulting gross margin.

Their smokeless nicotine patent is a point of differentiation and in part justifies that large operating expenses associated with their specialty pharma segment. It is still early days, and we are not embedding any incremental revenues within this segment until we get more clarity on when they plan to commercialize this operation. A faster than expected rollout as well as the potential for CVSI to find a strategic partner can help to expedite this process, which we believe would be well received.

CVSI has stated that they are looking at all options for their smokeless nicotine patent including a potential partnership with a strategic partner. If the company is seeking a strategic partner to build out its specialty pharma business, there is no reason to think that a potential strategic partnership would preclude their CBD business. Given their low cash balance, a strategic partner could help to expedite some of their above stated mandates and help with driving a turnaround in the company. Given their relative size in the market, M&A could be an option with CVSI likely an acquirer looking to round out channel and portfolio gaps.

Investment Highlights

1) **Well Known Brand.** While not the market leader, over the past five years, CVSI has established itself as one of the most well-known companies operating in the CBD space today; reflected in solid distribution gains made over the course of 2019 with large FDM retailers underscoring their quality controls and good manufacturing processes (cGMP and GRAS credentials).

2) **Brand Refresh.** In 2020, CVSI will launch a total refresh on its PlusCBD brand to generate better consumer trial on its products amid a challenged environment.

3) **Potentially Launching in Other Channels.** CVSI has indicated that they are looking at opportunities to launch in other channels outside of FDM and natural products, which presumably means the c-store channel; this will require the launch of a lower priced offering, but has the potential to result in incremental distribution gains. Opportunity for channel expansion in e-commerce could help, but we need to see organic revenue growth to get conviction.

4) **Patent to Treat Smokeless Tobacco Addiction with CBD.** Patent has the potential to open up a new revenue stream for CVSI.

Key Risk Factors

1) **Over-Exposed to the Natural Products Channel.** Outsized exposure to the natural products channel is resulting in outsized pressure from competition.

2) **Low B2C Mix Relative to Competition.** While CVSI had made progress on improving their overall B2C mix, much of this is due to natural mix shift and overall levels still benchmark considerably below other publicly traded competition.

3) **Outsized Risk for Being Market Share Donor to Competition.** CVSI is not the market leader, but is big enough to be notably impacted by competition, which is what we are seeing play out in the market today; COVID-19 headwinds likely amplify these declines over the near term.

4) **Cash at Risk; Will Likely Need to Raise Capital.** CVSI will need to see a notable reduction in SG&A to preserve cash balance over the next 12 months; should topline growth or working capital not improve, company will likely need to raise more capital in less than 12 months; lower SG&A in a competitive environment can negatively hamper top-line growth prospects.

CVSI Financial Outlook

In 2019, CVSI delivered DD revenue growth, though it was clearly a tale of two halves as trends began to notably deteriorate in 3Q19 and have persisted through present day. While some of the company's new initiatives may pay dividends over the near-to-medium term, COVID-19 will not help reverse the trajectory of their topline and as such we are modeling for 2020 revenues to decline by almost 50% to just under $30 mm. 2021 should be a bounce back year for the company where they will be lapping massive revenue declines and presumably benefit from increased foot traffic, their package refresh and a potential shakeout in the natural products channel. Longer term, we expect growth to normalize to a mid-teens rate with modest levels of deceleration thereafter.

Figure 160 Massive Revenue Declines Expected in 2020

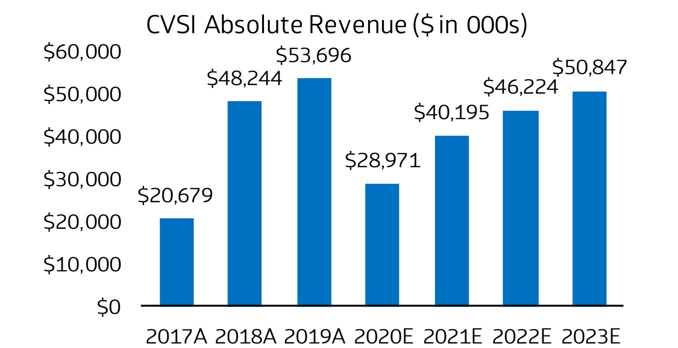
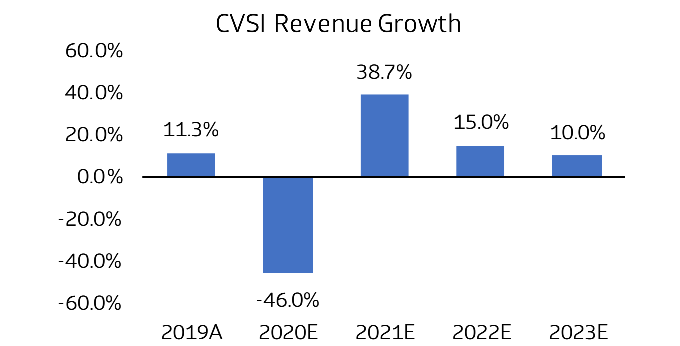


Figure 161 Normalized Levels of Growth Should Follow in Out Years



Source: Company Reports and Cowen and Company

Following 2Q20, which we are modeling to show the most pronounced YoY revenue decline, we expect the magnitude to improve sequentially and for 2021 to result in much better revenue performance. Even with almost 40% growth projected for 2021, we would note that would still result in revenues of ~$40 mm (vs. ~$54 mm seen in 2019), so revenue expectations are clearly reset for CVSI assuming no notable changes on the regulatory front.

Figure 162 With No Clear Catalyst to Inflect Revenues...

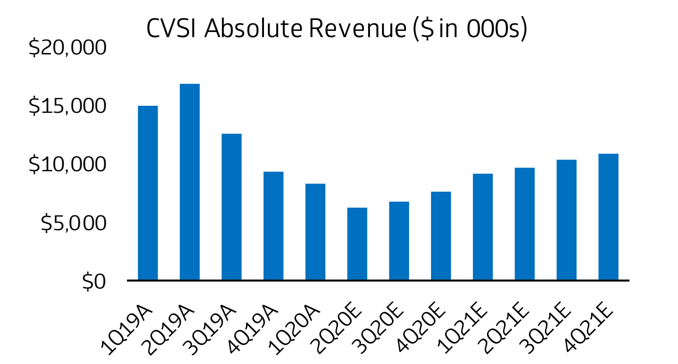
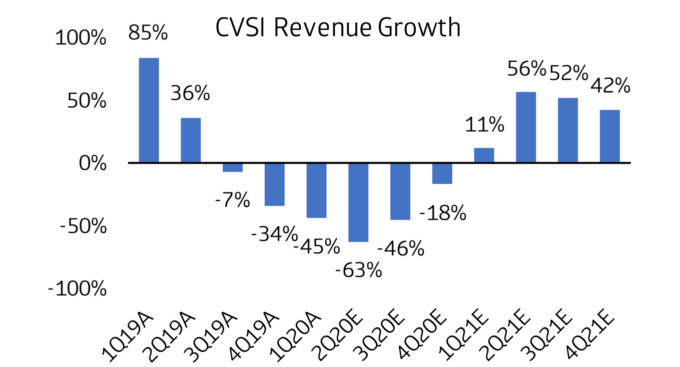


Figure 163 ...Performance Becomes an Exercise in Comps



Source: Company Reports and Cowen and Company

Like revenues, CVSI's gross margin profile will likely need to be reset, in particular given the massive volume deleverage seen over the past few quarters, which is expected to persist over the duration of 2020. With a lack of volume throughput, industry price deflation and under-exposure to e-commerce, we expect gross margin for 2020 to come in at ~46%, followed by a measured expansion in the years to follow where we expect increased price promotion to favor topline growth at the expense of margins.

Figure 164 Absolute GP Should Be Reset

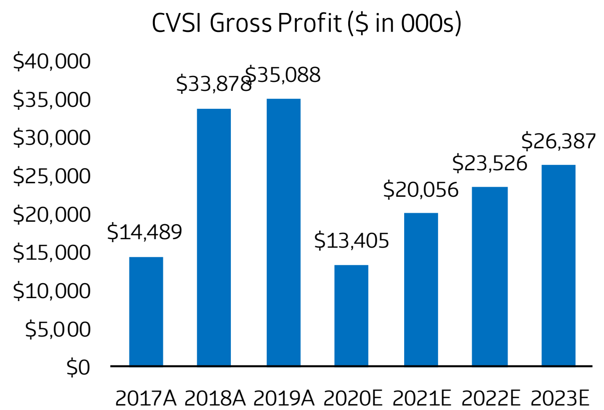
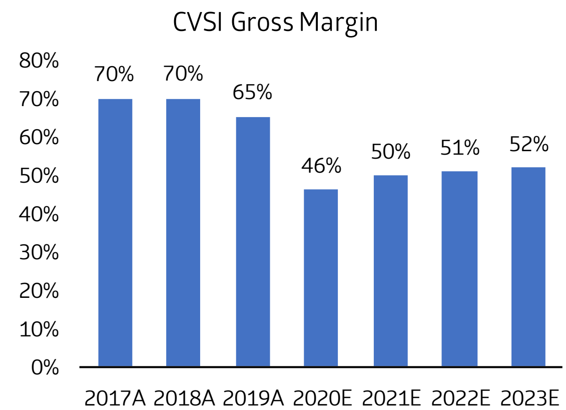


Figure 165 We Model for GM to Shakeout in the Low 50's Range



Source: Company Reports and Cowen and Company

On a quarterly basis, we are modeling for a sequential contraction in margin, given outsized revenue declines, though we expect trends to start to improve as we get into 2021, where we are forecasting quarterly sequential expansion. Given the company's historical margin profile, we believe that there is upside to these estimates, though at this point, we are opting to remain prudent and model for low 50's margins by 4Q21.

Figure 166 Quarterly Margins Should Be Driven by Volume Performance

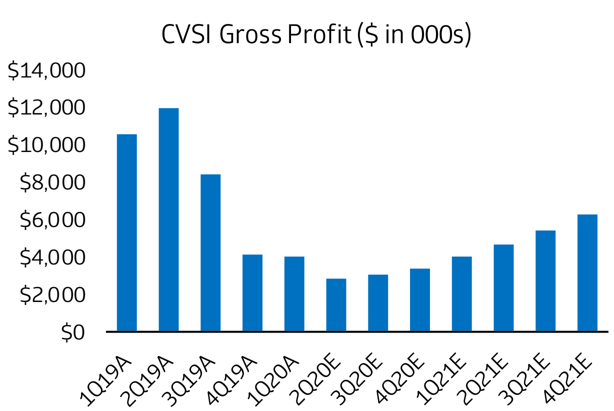
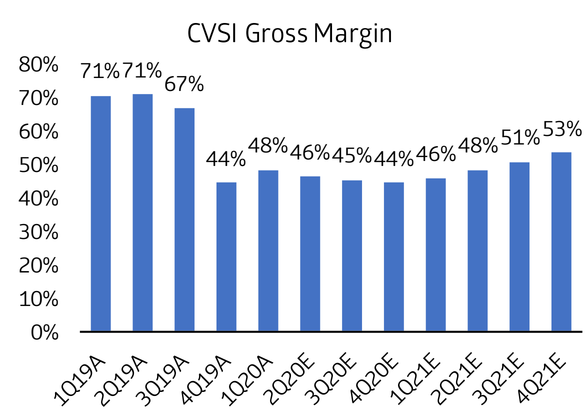


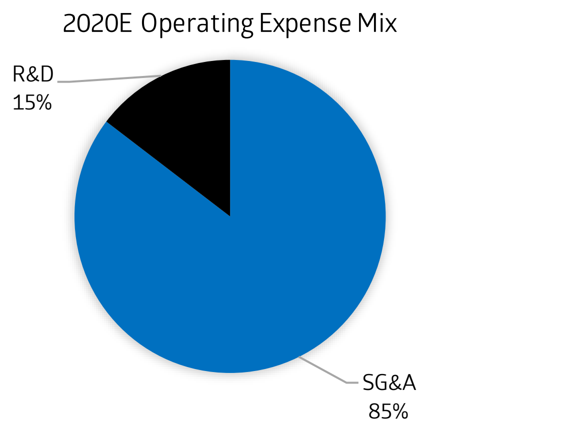
Figure 167 We Expect Improvement Starting in 2021



Source: Company Reports and Cowen and Company

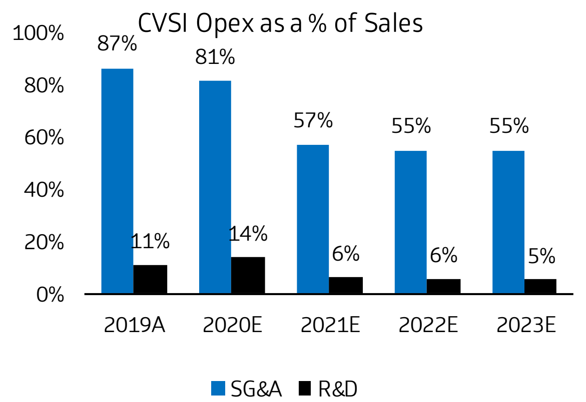
With our cautious outlook on topline performance and with gross margins expected to contract relative to historical levels, CVSI will implement a $10 mm expense reduction, largely coming out of SG&A, which currently accounts for ~85% of total company operating expenses. This year we are modeling for a ~500 bps reduction in SG&A as a percentage of sales, where we expect sequential improvement to persist from 2Q20 onward before capping out at ~55% of sales following 2021.

Figure 168 SG&A Accounts for Majority of Company OPEX



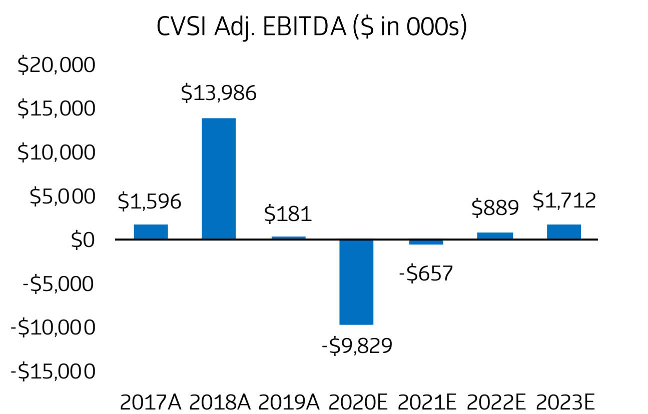
Source: Company Reports and Cowen and Company

Figure 169 We Model for Sequential Decreases Going Forward



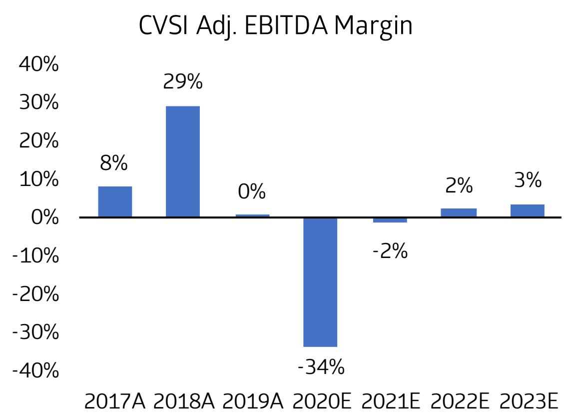
Coming off a year where the company saw a notable slowdown in its adjusted EBITDA margin, we are modeling for trends to remain under pressure given CVSI's topline trajectory. While we believe that CVSI will be able to partially offset topline and gross margin challenges with SG&A cuts, our outlook implies an adj. EBITDA loss of ~$10 mm this year, followed by an improvement in 2021, (though still negative), before returning to positive adj. EBITDA in 2022.

Figure 170 EBITDA Challenges Should Be Most Pronounced in 2020



Source: Company Reports and Cowen and Company

Figure 171 ...But Improve Going Forward

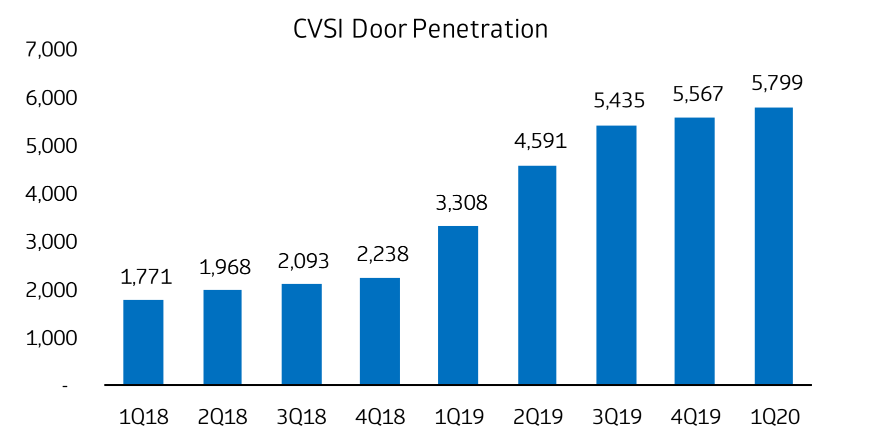


Investment Positives

Well Known Brand

CVSI is one of the more well-known brands operating within the U.S. CBD space currently. Over the past five years, the company has been able to build its business by establishing brick and mortar relationships, resulting in a current door count of ~5,800 locations. While not best in class, the company has been able to make consistent distribution gains QoQ, albeit at a decelerating rate.

Figure 172 Consistent Distribution Gains Reflect a Well-Established Brand



Source: Company Reports and Cowen and Company

Increases in door penetration within brick and mortar has translated into solid total company revenues historically, where over the last twelve months, the company has delivered ~$47 mm in sales, benchmarking below market leader CWEB, but above many other pure-play publicly traded CBD companies. Of note, given channel pressure, MRQ revenues have slipped with the company benchmarking below three other publicly traded companies, including CWEB, Medical Marijuana and cbdMD.

Figure 173 CVSI Brand Equity Reflected in Solid Absolute Revenue...

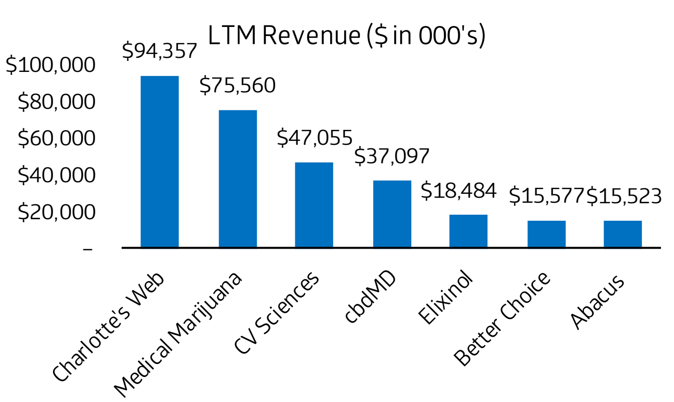
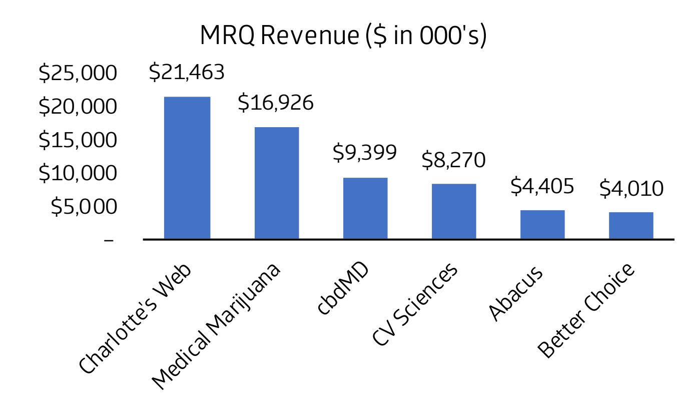


Figure 174 ...Though Their Relative Position is Slipping



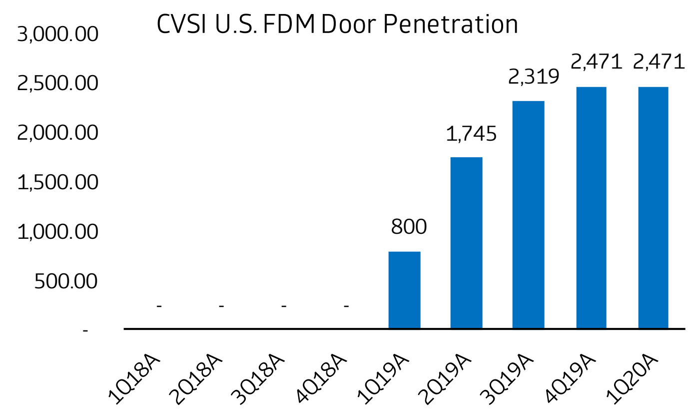
Source: Company Reports and Cowen and Company

CVSI's relative status as one of the leading CBD brands in the U.S. has been well reflected in the traction the company has received from large FDM retailers where to date, the company has announced deals with CVS, Kroger, The Vitamin Shoppe, and Harris Teeter. After establishing an 800-store partnership with CVS in 1Q19, CVSI's FDM store count had increased consistently over the subsequent three quarters, though looks to have plateaued with the brand being carried in almost 2,500 locations.

Figure 175 CVSI Partnerships Thus Far

Source: Company Reports

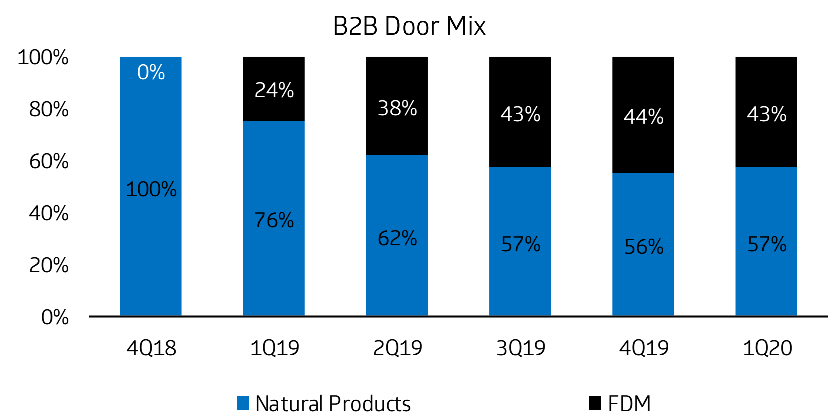
Figure 176 FDM Door Penetration Has Expanded Since the Passage of the Farm Bill



Source: Company Reports and Cowen and Company

To provide context on FDM's ability to scale, we take a look at door mix, where FDM mix has gone from zero, to over 40% of CVSI's total doors in just three quarters. That said, with revenue mix benchmarking meaningfully below door mix, these channels are likely taking a very limited amount of product from CVSI, but the interest from FDM channels points to the overall brand equity and solid reputation that CVSI has established over the years.

Figure 177 FDM Mix Increasing Meaningfully



Source: Company Reports and Cowen and Company

The vast majority of large FDM channels carry a limited number of topical products only, which in part reflects the caution around the category in its current capacity, as well as the higher barriers to entry and difficulty in achieving distribution within this channel. One of the areas where CVSI has excelled has been in terms of safety and cGMP certification. In late 2018, CVSI received self-affirmed Generally Recognized as Safe (GRAS) status in accordance with FDA safety guidelines, and to date is one of the only companies that has invested in the scientific evidence necessary to achieve the GRAS designation (CWEB also now carries this designation). Additionally, in January 2019, CVSI announced certification by the U.S. Hemp Authority Guidance Program. Established in 2018, the U.S. Hemp Authority Certified program was developed by the U.S. Hemp Roundtable, designed specifically to educate finished goods producers in FDA Current Good Manufacturing Processes (cGMP). The achievement illustrates the company's quality management system throughout the supply chain, from seed to sale.

Figure 178 CVSI Has Achieved Safety…

Figure 179 …and cGMP Certifications

Source: Company Reports

These designations, along with transparent packaging which includes QR codes that are linked to documents containing information about the manufacture of CVSI's hemp extract provide a platform for informed buying and thus makes the brand an attractive target for large FDM channels looking to get into the space.

Figure 180 Transparent Packaging Provides Platform for Informed Buying

Source: Company Reports

Brand Refresh

Over the coming months, CVSI will be launching a brand refresh on its PlusCBD products, with the goal of improving consumer trial and resulting repeat in a competitive environment. This refresh will be across its entire suite of CBD offerings. Examples of its current (legacy) product can be seen in the below figures.

Figure 181 Over the Course of 2020...

Source: Company Website

Figure 182 ...CVSI Will Launch New Packaging for Legacy Plus CBD Products

This is a common practice in consumer staples, in particular as it relates to beverages, where we have seen many package refreshes in the past. The most meaningful and recent has come from Boston Beer Company (SAM) on their Truly Hard Seltzer brand, which has also seen increased competition come online over the course of 2020. While the hard seltzer category continues to post robust growth, SAM has held up well amid increased competition, with dollar share expanding sequentially over the last two months in measured channels.

Figure 183 Bold Packaging from Truly Looks to Be Helping

Source: Company Website

Potentially Launching into Other Channels

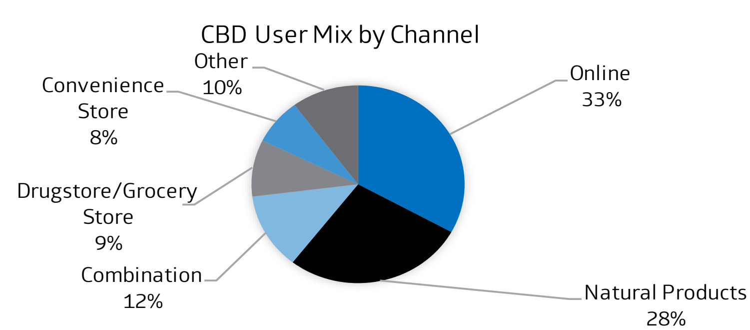
CVSI has indicated that they are looking at the potential to launch their products in other channels, which presumably means c-store, as these channels are abundant and will typically allow for higher velocity ingestible products to be sold. That said, given the launch into this channel, the company would likely need to introduce a new lower priced product relative to its current offerings, as c-store typically carries products at $20 or below. Benchmarking the price of a 1 oz, 250 mg bottle of PlusCBD oil relative to Reliva, which is one of the market leading brands in c-store and was recently acquired by Aurora (ACB), we can see that CVSI's standard offering is 60% higher than Reliva's comparable offering.

Figure 184 Plus CBD = $31.99 / Reliva = $19.99

Source: Company Websites

To be sure, while we believe a launch in c-store can provide an incremental form of distribution and revenue stream for CVSI, we would note that it will not fully alleviate the pressure on CVSI's other channels as according to our Cowen survey, ~8% of CBD users on average buy their products in c-store. This compares to a combined 61% of consumers exclusively utilizing e-commerce and natural products channels to make their purchases. Additionally, as a point of reference, Reliva, which is a market leading c-store-focused brand with over 20k points of distribution delivered ~$10 mm in revenues in 2019.

Figure 185 C-Store Can Provide Incremental Sales, but Won't Help Stem Losses in Other Channels



Source: Cowen Consumer Survey, April 2020, n=~2,500

Patent to Treat Smokeless Tobacco Addiction

In May, CVSI announced that it had received formal notice of patent issuance for proprietary CBD and nicotine formulation for treating smokeless tobacco addiction. The patent covers methods of treating tobacco addiction by administering pharmaceutical formulations containing both CBD and nicotine. The patent is notable insofar as the worldwide smokeless tobacco addiction treatment market is estimated at $2 bn+ and importantly provides the company with another incremental revenue stream. While encouraging, we would note that it is still very early days here and the company will look to move this program forward including potential co-development with a strategic or financial partner, given their current SG&A constraints.

Of note, the patent somewhat provides validation to the expenses seen in the company's Specialty Pharmaceutical segment, which does not generate revenue, but has seen operating expenses increase over the past three years, largely due to R&D costs. In the most recent year, the segment posted an almost $4 mm decline in operating income, which in turn was a 6.7 pt drag to total company EBITDA margin.

Figure 186 Specialty Pharma R&D Showing Up in Opex...

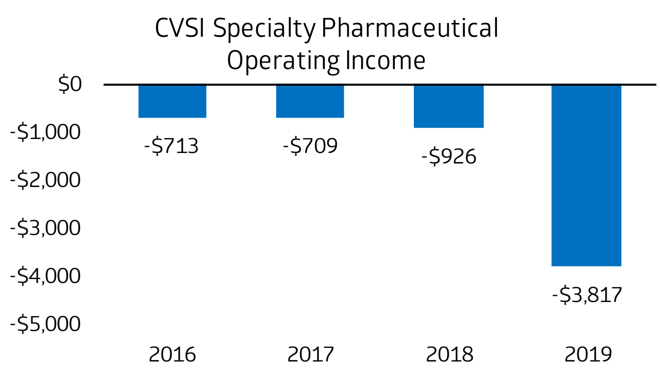
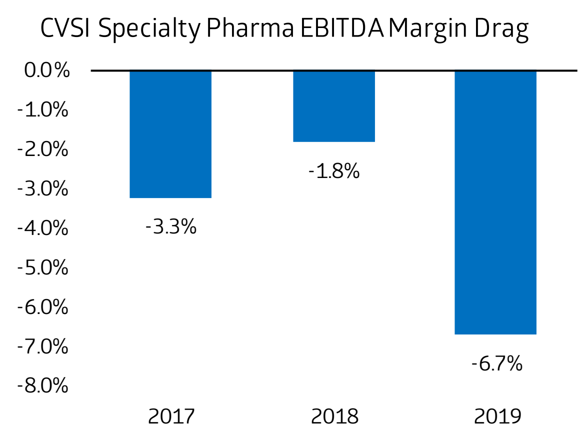


Figure 187 ...And Has Been a Drag on EBITDA Margin



Source: Company Reports and Cowen and Company

Investment Risks

Over-Exposed to the Natural Products Channel

While CVSI has made good progress in terms of establishing large FDM partnerships, the company still over-indexes to the natural products channel, which represents almost 60% of doors, but over 90% of the company's B2B revenues (or ~70% of total company sales).

Figure 188 Natural Products Account for 57% of Doors...

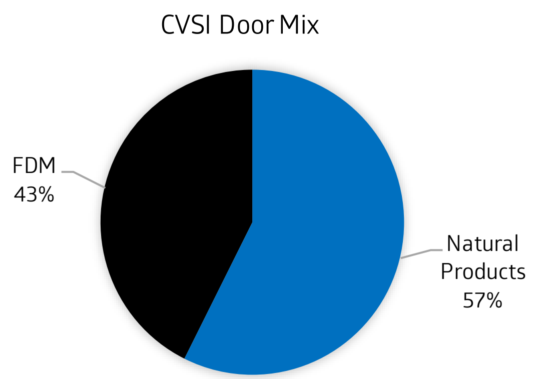
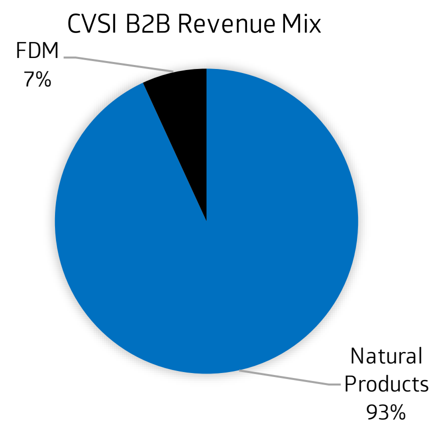


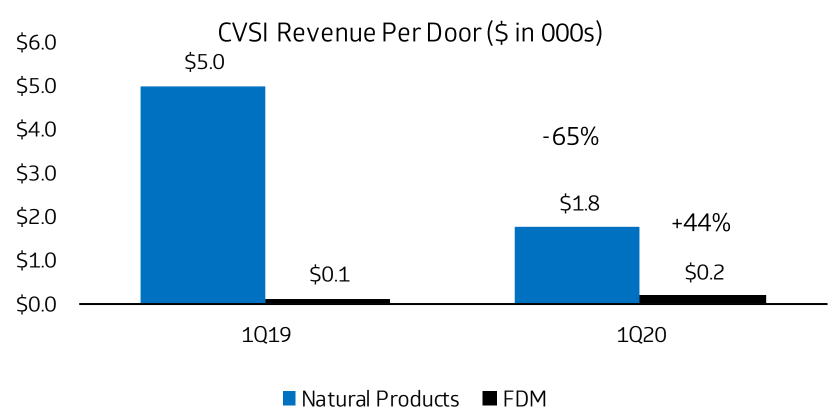
Figure 189 ...But 93% of B2B Revenues



Source: Company Reports and Cowen and Company

The pressure seen in the natural products channel is perhaps best illustrated in the below figure, where we can see that in the most recent quarter, revenue per door in the natural products channel was ~$1,800, representing a 65% YoY decline relative to the ~$5,000 per door seen in 1Q19. This suggests that CVSI is either 1) losing velocity to increased competition, 2) losing shelf space for their products within the natural products channel, or 3) both. In any case, being exposed to this low barrier to entry channel is a key risk which in our minds continues to see pressure over the near term.

Figure 190 Revenue Per Door Going Down...Meaningfully

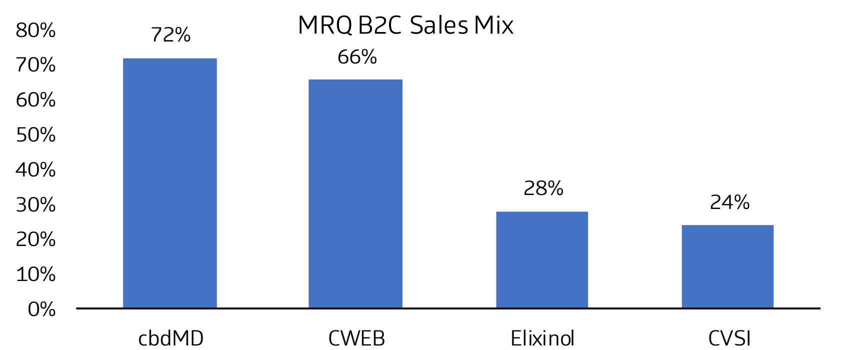


Source: Company Reports and Cowen and Company

B2C Mix Benchmarks Below Competition

Over-indexing to natural products within the B2B segment naturally implies that CVSI is under-represented in the B2C channel, which is accounting for just less than a quarter of total company sales as per the most recent quarter. In our minds, B2C represents a must win channel, in particular if we assume the status quo holds where large FDM retailers will continue to carry lower-velocity, topical products only. In addition to providing companies with a platform to sell its full portfolio of products, the direct-to consumer channel naturally comes with higher levels of gross profitability. Benchmarking to competition, we can see that CVSI trails most of their publicly traded peers.

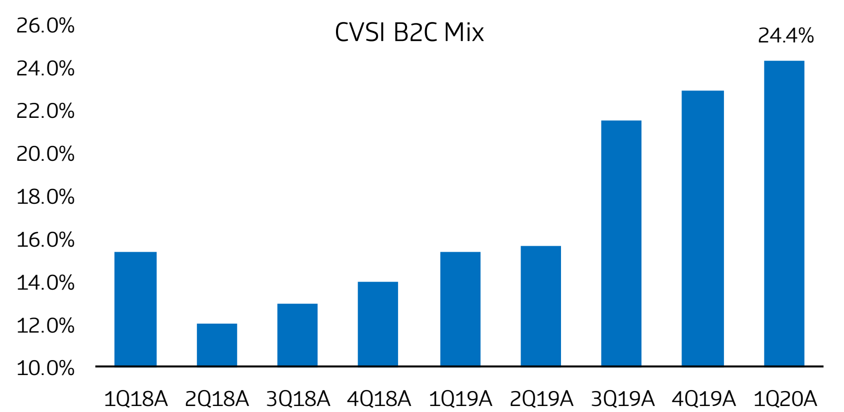
Figure 191 CVSI Benchmarking Below Many Competitors on B2C Mix



Source: Company Reports and Cowen and Company

That said, we would note that CVSI's B2C mix has been improving, which will remain one of the company's stated goals in 2020. In the most recent quarter, CVSI's B2C mix stood at 24%, marking a 500 bps pickup relative to the 19% mix seen for the full year 2019. We would caution reading too much into these trends, however, given the outsized declines the company is experiencing in their B2B channel, which will inherently result in a natural increase in mix to B2C.

Figure 192 B2C Mix Increasing, But Still Low Relative to Peers

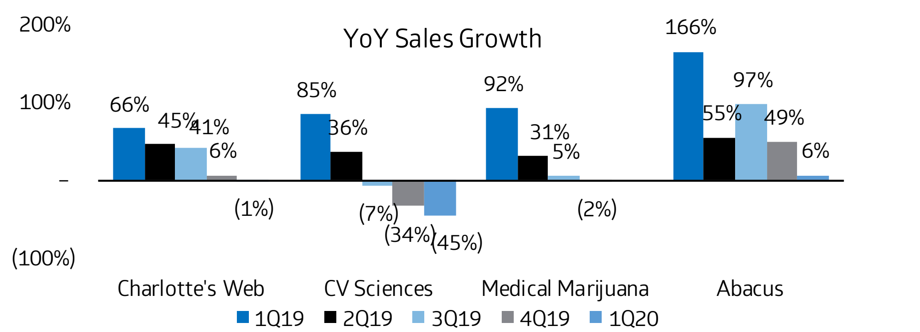


Source: Company Reports and Cowen and Company

Outsized Risk for Being Market Share Donor to Competition

Given the current state of the CBD environment, CVSI finds itself in a tough position. They are not the market leader with best-in-class brand equity, but are still big enough to experience outsized share losses from the onslaught of competition that has come to the market in recent months. To be sure, in the event that large FDM retailers started carrying ingestibles, this would be a clear tailwind for a company like CVSI. However, assuming current trends hold for the foreseeable future, CVSI is at risk to be squeezed by smaller competitors offering products at lower price points. CVSI's most recent total company sales decline of 45% underscores these challenges. Benchmarking to competition, CVSI's DD decline in the most recent quarter represented a notable swing in performance relative to the 36%+ growth the company delivered less than a year prior in 2Q19.

Figure 193 CVSI's Most Recent Decline Points to Pressure Within the Space



Source: Company Reports and Cowen and Company

As well, as stated above, while CVSI has seen a notable decrease in revenue per door within natural products, and while some of this can arguably be explained by industry price deflation, the company is either losing in-store velocity or losing shelf space within this channel (or both). Additionally, while the company has made solid progress in terms of its B2C mix, where mix grew ~900 bps YoY in the most recent quarter, this was largely due to outsized declines in the natural products channel, as B2C revenues were down 12% YoY.

Figure 194 E-Commerce Improvement More a Function of Natural Mix...

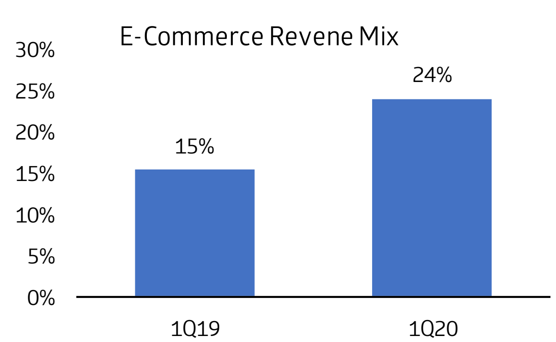
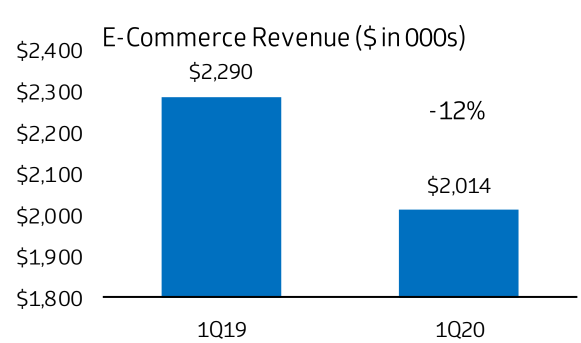


Figure 195 ...Than Increased Sales



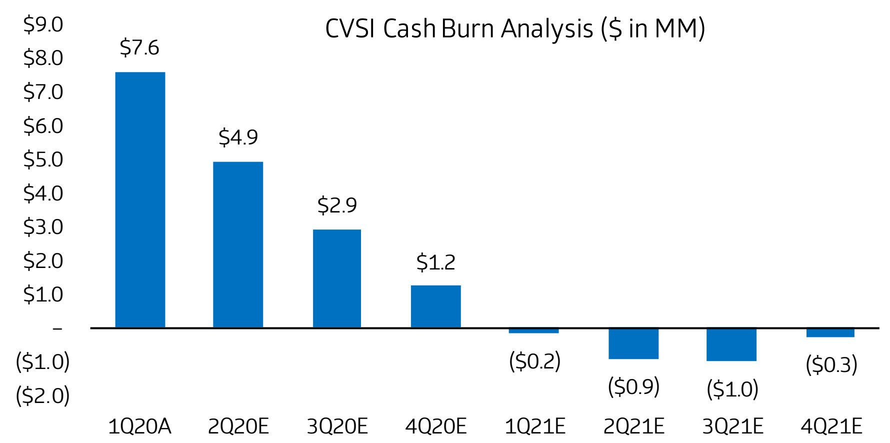
Source: Company Reports and Cowen and Company

Cash Balance at Risk

As of the most recent quarter (1Q20), CVSI had a cash balance of ~$7.6 mm, which the company feels is sufficient to get them through the next 12 months of operations. To be fair, the company has instituted a massive SG&A reduction plan where they are targeting pulling an incremental $10 mm out of their operating expenses which should start in 2Q and become more pronounced over the back half of the year and into 2021. However, we remain cautious on CVSI's ability to fund their operations given the current state of their P&L. Taking into account our estimates for quarterly adj. EBITDA, capex, interest, and taxes results in a short fall as of 1Q21 and we would note that assumes notable sequential decreases in SG&A as a percentage of sales where we are modeling for reductions of 10%, 10%, 5%, and 5% from 2Q20-1Q21. We would note that our cash burn analysis does not model in working capital improvements which can presumably improve, but it is worth noting that CVSI will likely need to raise cash earlier than expected.

In our minds, CVSI's ability to raise capital in the form of straight debt would be well received and could accelerate some of their strategic growth initiatives laid out above. Equity raises are also an option though less attractive as it would result in dilution to shareholders.

Figure 196 CVSI May Need to Raise Capital Sooner Rather Than Later



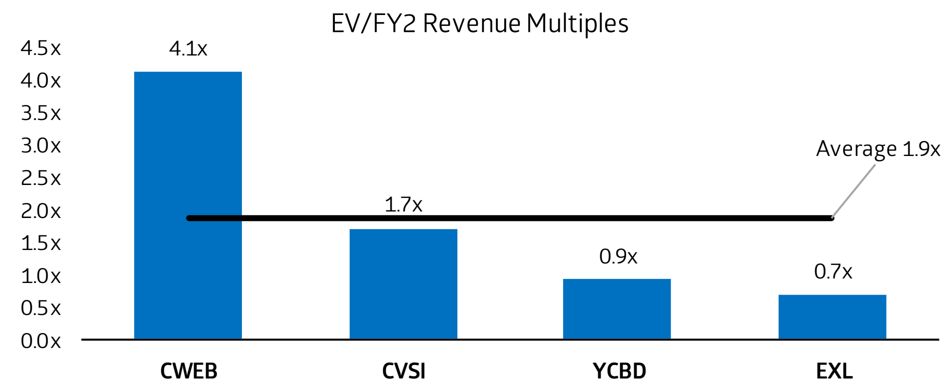
Source: Cowen and Company

While we are encouraged by the reductions in SG&A, we would also highlight that this can negatively impact an already challenged topline with a lack of A&P to combat against competition in the current environment.

Valuation

We initiate coverage of CVSI with a Market Perform rating and $0.75 PT, which reflects a 1.8x EV/FY2 revenue multiple. The company is currently trading at ~1.7x FY2 revenues and our PT implies negligible market expansion and is relatively in line with where the peer group average is currently trading (1.9x). Relative to competition CVSI is showing among the most pronounced revenue declines stemming from unfavorable positioning within the U.S. marketplace. We believe that the company should trade in line with the category average until they are able to improve their financial performance and demonstrate progress in their stated 2020 goals.

Figure 197 We Expect CVSI to Trade in Line with Category Average Until They Can Demonstrate Progress on 2020 Goals



Source: Thomson, Company Reports and Cowen and Company

VALUATION METHODOLOGY AND RISKS

Valuation Methodology

Cannabis: Our valuation methodology is primarily based on Relative EV-to-Sales (EV-to-Sales divided by Sales-Growth), followed by EV-to-Sales.

Investment Risks

Cannabis: Cannabis is an emerging industry and is subject to regulatory headwinds. While over 50% of the population is in favor of legalization, only a few states have thus far legalized cannabis for recreational use and the product remains illegal at the federal level. Looking forward, much work and change still needs to occur in order for this industry to realize its full potential.

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Stocks Mentioned In Important Disclosures

Ticker	Company Name
CWBHF	Charlotte's Web
CVSI	CV Sciences

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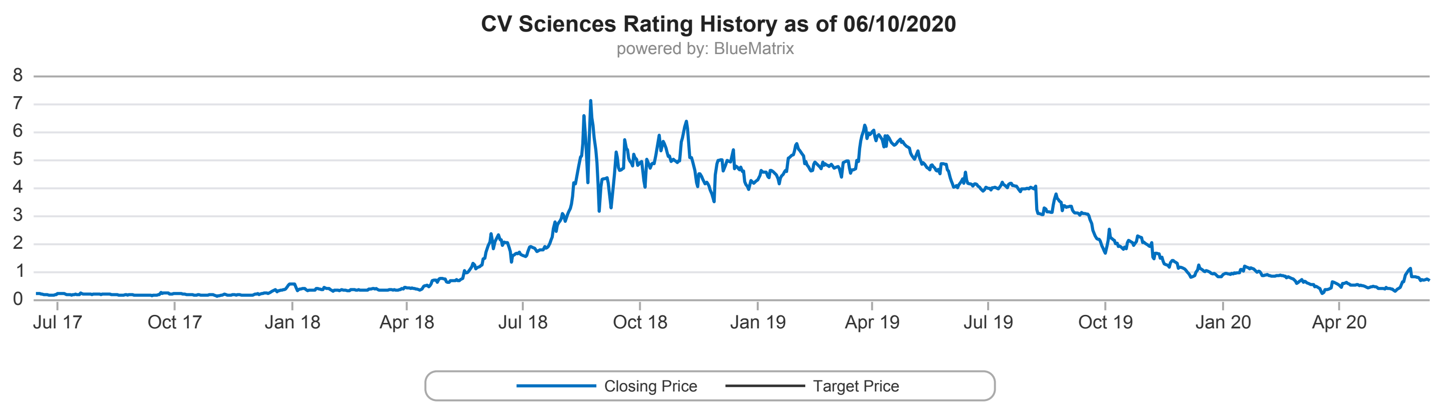

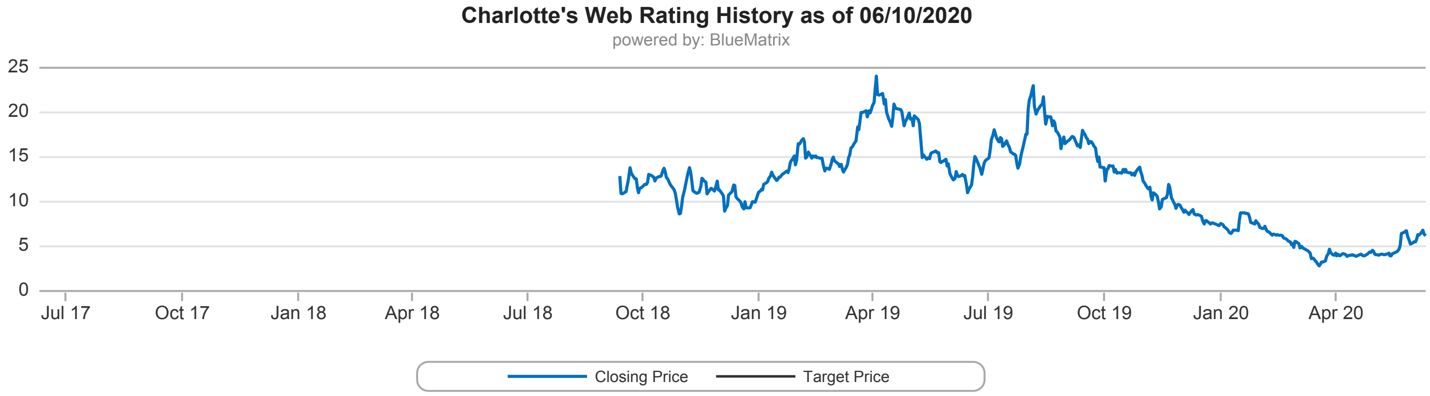

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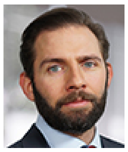

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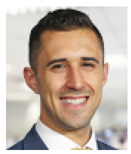

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