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Recommendation: Buy

SIM Equity Research
Report finished on November 7, 2021

Glass House Brands, Inc. | OTC: GLASF | Cannabis Cultivation, Retail

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Price on 10/27/2021: $4.69 | Market Cap: $263M
5yr Target Price: $23.50 (+400% upside) | Target Cap: $2.35B

GLASS HOUSE
BRANDS

Business Summary

Glass House Brands, Inc (GLASF, Glass House) is a vertically integrated Cannabis firm that operates exclusively in the state of California. Glass House cultivates product in their own greenhouses. They sell their branded products at wholesale to California dispensaries and own a growing channel of retail stores themselves. They recently completed a SPAC to go public and are growing quickly.

Overview (As of 10/27/2021)	
Market Cap	$ 262,892,908
Shares Outstanding	56,053,925
Share Price	$4.69
52-week range	4.13 - 13.99
IPO Year (SPAC)	2020
1 year return	-52.0%
Latest Quarterly Sales	$ 18,674,277
YoY Quarterly Sales Growth	61.5%
Total Assets	$ 203,470,317
Total Liabilities	$ 35,332
Next Earnings Date	Nov 11, 2021

Investment Thesis

Glass House Brands is an under the radar value investment behind a premium and growing vertically integrated California cannabis organization. Glass House is rapidly expanding both their cultivation capacity and retail network, doing so at lower costs than most competitors. As regulations continue to change, the cannabis industry continues to grow, and interstate commerce opens, GLASF is poised to be a big winner in an investor's portfolio. STRONG BUY!

Potential Risks

- California cannabis supply continues to outweigh demand, causing wholesale prices to drop significantly further and remain depressed
- Excessive delays or challenges in cannabis laws and regulations impact ability to maximize performance in the long run
- Greenhouse grown cannabis loses its premium over outdoor grown products, hurting Glass House margins
- Cannabis is still federally illegal for the foreseeable future

Exciting Statistics + Highlights

- GLASF's historical cost per lb. is near industry bests at under $150, giving the firm a clear cost advantage to their competitors
- GLASF closed a purchase of 5.5M sq ft greenhouse in July '21 and is working to bring this capacity online over the next few years
- When complete, GLASF will be able to grow ~1.7M lbs. of cannabis flower each year
- Average CA greenhouse grown cannabis has historically sold for $1,000 - $2,500 per lb.
- 1.7M lbs. sold at $1,200 per lb. equates to $2.04B in revenue when they reach full capacity
- GLASF has grown their flower brand from #64 to **#1 in CA** as of July 2021 in less than 2 years.
- Changing regulations will enable plenty more institutional capital and investments to enter the space

Table of Contents

Company & Industry Overview

General Overview:

Glass House Brands Inc. (Glass House) is a vertically integrated cannabis company that operates exclusively in the state of California. The company cultivates, manufactures, and distributes cannabis consumer packaged goods primarily to third-party retailers in the State of California. Glass House also owns and operates their own retail cannabis stores in California. With cannabis still federally illegal in the United States (and interstate commerce also illegal), Glass House can currently only operate in California, which is the largest cannabis market in the world.

Glass House, formerly known as Mercer Park Brand Acquisition Corp, is the product of mergers and a qualifying SPAC transaction. To better understand the combination, we look at management's latest discussion and analysis from August 2021:

> "On January 31, 2020, pursuant to an Agreement and Plan of Merger (and various Securities Exchange Agreements) (the "Roll-Up Agreements"), a roll-up transaction ("Roll-up") was consummated whereby the assets and liabilities of a combined group of investment fund entities were merged with and into GH Group, Inc., formerly known as California Cannabis Enterprises, Inc. ("GH Group"), whereby GH Group now owns and controls the assets from such entities previously merged into GH Group.
>
> *Reverse recapitalization* : On June 29, 2021, Mercer Park Brand Acquisition Corp. consummated its qualifying transaction (the "Business Combination") contemplated by an Agreement and Plan of Merger dated as of April 8, 2021, as amended, pursuant to which Mercer Park Brand Acquisition Corp. acquired indirectly 100% of the common equity interests of GH Group, i.e., the Class A and Class B common shares outstanding as well as assuming all outstanding warrants and incentive stock options of GH Group. As a result of the Business Combination, GH Group's shareholders became the controlling shareholders of the Company. The Business Combination was effectuated by a reverse merger of a merger subsidiary of the Company's subsidiary with GH Group, with GH Group as the surviving corporation and a majority-owned subsidiary of the Company's subsidiary. GH Group is considered the acquirer for accounting and financial reporting purposes and the Business Combination is treated as a recapitalization of GH Group. Concurrent with the closing of the Business Combination, Mercer Park Brand Acquisition Corp. changed its name to Glass House Brands Inc."

With the Mercer Park de-SPAC completed in June, Glass House's Equity Shares and Warrants now trade on the Aequitas NEO exchange under the symbol "GLAS.A.U" and "GLAS.WT.U". The shares and warrants also trade on OTC Markets under the symbols "GLASF" and "GHBWF". With Cannabis federally illegal in the US, organizations that touch the plant in the US such as Glass House are not able to list on major US stock exchanges. This may change sooner than later however with a Schumer Bill or SAFE Banking passing in congress.

Glass House is continuing to expand their cultivation and retail footprint. In July 2021 the firm closed on the acquisition of a 5.5M sq ft greenhouse in Southern California that will enable Glass House to expand to over 6M sq ft of growing operations over the coming years. This new facility will ultimately 10x the firm's current capacity. Glass House also expects to expand from 4 operating retail dispensaries to over 23 operational stores before the 2H of 2022.

Current operations (>500k sq ft cultivation and 4 retail stores) have continued to improve with Q2 2021 (ending June 30th) revenue increasing 62% year over year to $18.7M. With continued increases in cultivation and retail locations, Glass House has a clear runway to continue to grow revenues at highly attractive rates in the coming years.

Business 'Segments':

Glass House views its financial results under just one business segment – "the creation of dominant, extensible CPG products and brands through cannabis cultivation, production, and sales." Management "believes that in a consumer-focused CPG space, consistent delivery of high-quality product at an attractive price point is a first principle, and a prerequisite for any other activity."

The firm operates their Padaro and Casitas greenhouse cultivation facilities in Carpinteria, CA and their production facility is in Lompoc, CA. They generate their revenue by selling their products (raw cannabis, cannabis oil, and cannabis consumer goods) to both its own and third-party dispensaries in California. Their current owned retail locations are in Santa Barbara, Santa Ana, and Berkley CA. These current and future locations and facilities can be seen on a map of California in **Figure 1** in the appendix.

Sustainable Advantages:

Low-Cost Operations

Glass House Brands has a critical competitive advantage when it comes to the cost of cannabis production. According to Jeffries, the average greenhouse grown cannabis cost $233 per lb. to produce in 2020 **(Figure 2)**. Glass House has a historical cost per lb. that is under $150, over 35% cheaper than the national average for greenhouses. This is even more impressive as Glass House operates and grows their products in the more expensive state of California. This low-cost structure has been driven by Glass House's 100% owned and unencumbered real-estate as well their increases in scale and capacity. Going forward, with the newly acquired 5.5M sq ft greenhouse, adding this capacity should only enable them to reach higher scale and reduce their cost per pound even further toward $100 per lb.

Innovative & Eco-Friendly Growing Ops

Glass House bases their farming techniques off Dutch horticulture. The Netherlands, while having a fraction of the land compared to other countries, has become an agricultural powerhouse, harvesting by far the highest yield per square mile of tomatoes, peppers, and cucumbers worldwide (See **Figure 3**). The Dutch utilize greenhouses and hydroponic techniques to better control growing conditions and to use less resources like water and fertilizer. For instance, the Netherlands uses just 1.1 gallons of water per pound of tomato production, whereas the global average is over 25.5 gallons per pound (US is 15.2 gallons/lb., China is 34 gallons/lb.) (**Figure 3**).

Glass House has taken notice to the impressive innovation and yields from the Dutch and that is why they have focused their own growing operations on the Dutch greenhouse design. Not only does this increase yields but it does so in an incredibly environmentally friendly way. To demonstrate, a study by cannabis energy consultancy group Seinergy found the average indoor grow uses 262 kilowatt-hour per square foot of flower (kWh/SF). The average greenhouse grow used 134 kWh/SF. Glass House's average was just 13 kWh/SF, over 90% less consumption than competing greenhouses! This led the firm to win the 2021 Sustainable Leadership Award for Energy Use from *Cannabis & Tech Today*. As many growing operations have come under pressure for being unsustainable and using too much energy (see an example here), Glass House is leading the way with innovative techniques that are sustainable and environmentally conscious. With many investors focused on ESG initiatives now and in the future, Glass House is the poster child for ESG investing in the cannabis industry.

Vertical Integration

Glass House not only cultivates and manufactures cannabis products, but they are also vertically integrated and own 4 operating dispensaries in CA. This number is going to rapidly expand, primarily through a retail license purchase agreement with CA company Element 7, to an estimated 23 owned stores by the end of 1H 2022. This vertical integration from cultivation to retail gives Glass House more control over their supply chain, pricing, margins, product placement, positioning, and more. As the Jeffries Cannabis report states:

> "Vertical integration allows economies of scale to be achieved (important in cannabis with many factors impeding profitability), it ensures quality is better maintained (critical when trying to take market share and build brand equity), it allows better geographical expansion (having dispensaries for your brand in additional areas), it allows differentiation from competitors (allows you to control the brand experience within retail stores), it allows quicker response times to changing consumer trends (these are changing all the time), and it protects proprietary processes and genetics (these can be a significant competitive advantage in these early days)."

So, while vertical integration does not often maximize the total value at each stage for most mature industries, in the cannabis industry it is a clear advantage to maximizing value. Therefore, Glass House's increasing integration will better enable them to achieve scale economies, grow quicker, and ultimately be more profitable.

Brand Strength and Growth

Glass House Brands has three separate consumer centric brands they own (see **Figure 4** for brand details). The most popular is Glass House Farms, targeted at everyday recreational consumers. In less than two years, they have grown their brand from #64 to the #1 overall CA flower brand. This is an incredible feat and shows off the company's ability to build CPG brands, but there is still clear room for growth as well as the brand only has a 4% total market share in CA. Still, with proven, dominant, and distinct brands, Glass House is poised to gain further market share as they ramp up cultivation. With a cost advantage on its side, retailers in the state will be flocking to the high-quality, fair-priced, and popular brand cannabis products that Glass House is selling.

The Cannabis Market Landscape:

The Cannabis Plant

Before discussing the overall industry, I think it is important to highlight the many misconceptions and then the numerous benefits that surround the cannabis plant. Many people have been led to believe that consuming cannabis is a gateway drug and that it leads to dumb, fat, and lazy individuals who sit on their couches wasting their lives away. Cannabis has often been falsely demonized as a tool to fight Mexican immigration into the US as well as unjustly incarcerate and discriminate against African Americans. Fortunately, all of these misconceptions and discriminations are coming to an end as US cannabis use becomes more normalized and the benefits of the plant become better understood.

Cannabis has now been proven study after study to provide enormous health and wellness benefits to society. Cannabis investor Aaron Edelheit points out in his Cannabis Manifesto that "consumers of cannabis have been shown to binge drink less, use less opioids and use less powerful prescription drugs. The medical benefits are numerous including the ability to quit opioid addiction, tolerate powerful cancer medications, migraine pain relief, general pain relief, and help with insomnia and post-traumatic stress disorder". Similar studies have shown cannabis use can help with depression and anxiety as well as lead to a reduction in suicide rates (Example 1, Example 2, Example 3). Also important, states that have legalized Cannabis have actually seen a reduction in teen usage, a concern for many people that are against legalization (Study). Even athletes, including ultramarathon runners, have turned to cannabis as a way to enhance their performance and recovery (Study). With more studies being conducted as the plant grows in acceptance, the benefits are becoming more clear than ever, leading roughly 70% of all Americans to support Federal legalization (Poll).

The US Cannabis Industry
With Cannabis still federally illegal, individual states have been leading the charge in both medical and recreational legal reform. California was the first state to legalize medical cannabis use in 1996 while Colorado was the first to legalize full recreational use in 2012. Fast forward to today and 38 states have legalized some form of medical use, with 18 of those states having legalized recreational use as well. There is the expectation that another 10-15 new states join in legalizing it recreationally by the end of 2023 and full Federal legalization should come within the decade.

With this expected growth in legalization comes large expected growth in revenues. Jeffries estimates 2020 retail sales were $17.2B (40% increase from 2019) and sees sales reaching $36B by 2025 (CAGR of 16% vs 2020) and then doubling again to $64B by 2030 (CAGR of 14% vs 2020). Stifel has more aggressive growth expectations, expecting the US state licensed market to grow to $35B in sales by 2023, basically two years quicker than Jeffries anticipates. Regardless, the expected growth of the market is substantial and is not necessarily all driven by the expected addition of new states. Jeffries points out that mature markets still grew 25% in 2020 with increasing normalization, prevalence, and per capita spend.

Furthermore, the illicit cannabis market is already massive at an estimated $65B across the US, higher than Jeffries anticipates the legal market in 2030. However, Colorado is an example that as legal states mature, illicit sales will decrease significantly. Illicit sales are estimated to be just 10% of the Colorado market now, with the oldest recreationally legal state having a prevalence of 18% vs the US average of 11%. Jeffries points out that "if all legal states were to match Colorado's current spend per capita this would be a market of $87B, and when adding current illegal states this would be $124B."

The makeup of the current market is highly fragmented, with roughly 27,000 plant touching businesses currently in operation. With market leaders urgently scaling ahead of future reforms in order to build moats before new competitors (Big Tobacco, Alcohol, etc.) join the market, there has been and should continue to be a high level of M&A activity in the sector. However, current operators struggle to get access to capital as US Banks will not support cannabis operations since the plant is still federally illegal. For the same reason, publicly traded US cannabis firms cannot list on major US exchanges, unlike Canadian operators who benefit from Canada's national legalization. Because of this inability to list and other capital restrictions, many investment institutions cannot even choose to own public US cannabis firms at this time. This can be seen by institutional participation standing at just 4% of the US Cannabis market, vs. 15% in the Canadian cannabis firms and 45% in global large cap staple stocks.

While most see full federal legalization still a few years away, the majority expect capital protections for the industry to pass through Congress in the next 12 months "via either [a] Schumer Bill or SAFE Banking." These protections should enable banking services, exchange up-listings, further institutional investments, and potentially even legalized interstate commerce. As of now, the only way to operate in multiple states is to get licenses and operate the business from multiple states (Multi State Operators – MSOs). This is why Glass House, who operates exclusively in California, can currently only sell their products within their home state.

The California Cannabis Industry

After legalizing recreational cannabis in 2016, California has become the largest single market for cannabis in the US and even across the world, with an estimated $3.5B-$4.5B in legal sales in 2020 (~20% of the entire US market). This makes the state over twice as large as any other state and the dominance is expected to continue, with 2025E revenues in the state at $6.4B, almost as big as the next three state markets combined (**Figure 5**). With millions of residents and tourists, the state should continue to experience high sales growth well into the future. Additionally, California has a highly prevalent illicit market that Jeffries estimates to be over $12B. As the state continues to crack down on these illicit growing operations, this revenue should flow into the legal market and further support CA's legal growth.

However, "the California market is highly fragmented with over 6,000 cultivation licenses in operation, over 1,000 distribution licenses over 700 operational dispensaries and greater than 1,000 brands." California is not a limited license state, allowing large amounts of competition to receive licenses and operate in the space. (This has led to some wholesale pricing pressures, especially for sub-scale/outdoor growers.) Similar to the overall US market, we expect high amounts of M&A activity to increase consolidation across the CA market.

Overall, as the largest market by far, Jeffries believes "having a presence in California is key" for MSO's to create long-term value. They believe:

- CA could remain over 15% of the entire market even after federal legalization
- CA is a more likely template for what future federal regulation looks like with unlimited licenses and competitive supply
- CA is known for its brand dominance – from Hollywood studios to Napa Valley wines – CA Cannabis will be (and has been illicitly) demanded at a premium to other states when interstate commerce is in play

Growth Drivers:

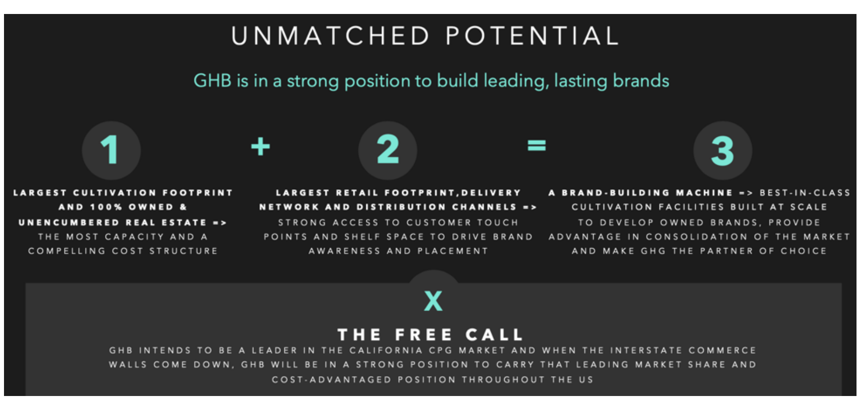
The majority of growth drivers for Glass House have already been discussed to this point. Even if interstate commerce does not come for a long time, Glass House has plenty of opportunities within the state of CA, the largest cannabis market in the world, to drive revenue growth. Starting with cultivation, the new greenhouse purchase will enable Glass House to easily 10x their capacity, from growing just over 113k lbs. of cannabis per year today to over 1.7M lbs. when the new greenhouse is fully operational in 4 or 5 years. Add in the impressive and sustainable horticulture technology that Glass House is utilizing in their cultivation processes and the firm should produce some of the highest quality greenhouse cannabis at some of the lowest prices available and with some of the least impact to the environment.

Next, the vertical integration upward into retail and delivery allows Glass House to further their growth as they add almost 20 new retail locations to their portfolio in the next 9 months. As the network of retail locations expands, they are forming a foundation for state-wide delivery options to customers, providing them with the most convenient purchase options. Then, we consider the firm has been able to build their main brand to become the most popular flower brand in the state in less than two years, and we see that Glass House can continue to grow their existing brands across cannabis categories as well as develop and launch new brands and products that can quickly gain market share.

Another potential area for growth for Glass House is to acquire smaller competitors or merge with a large MSO, as M&A is rampant in the industry. This can allow Glass House to expand their CA presence or could be an opportunity for Glass House to become an MSO themselves by acquiring businesses in other states. With little debt on the balance sheet at this time, Glass House certainly has room to be more aggressive with their growth through debt (or share) driven acquisitions.

Finally, there is the expectation across the industry that interstate commerce opens up at some point in the future and CA growers such as Glass House should benefit immensely from this opportunity to sell across state lines. To learn more about why people expect interstate commerce to change even if cannabis remains federally illegal, check out Aaron Edelheit's interview with Vanderbilt Law Professor Robert Mikos (Part 1, Part 2).

With all these growth drivers in place and with the industry growing at a high rate itself, Glass House Brands truly has the potential to grow into a multi-billion-dollar business in the next decade.



The Glass House Growth Formula

Latest Updates:

While Glass House has continued to execute on their strategic objectives, the majority of US cannabis stocks (seen by the MSOS ETF), including GLASF, have been in a secular bear market since a peak in share prices in February 2021. This bear market is despite strong growth trends across the industry. Since listing, GLASF shares are down over 50% in value and have been floating around $4-$6 over the past few months. Shares of firms across the sector will most likely remain repressed until a catalyst (SAFE Banking, Interstate Commerce, Institutional Involvement, etc.) prompts a clear change in momentum. With the timing of these catalyst's quite uncertain, the sector should remain volatile in the short term, perhaps falling an additional 50% or rising 50%+ before the year even ends. Overall, an investor in the space needs to accept this higher volatility and remain patient with a long-term thesis for the industry or companies in the industry.

For Glass House, their latest earnings report for Q3 2021 (ended Sept 2021) is due to be released on Nov 11, 2021. This will give a lot more clarity into their latest quarter of execution, their updated balance sheet after closing on the greenhouse acquisition, and the progress they are making toward long-term objectives. To stay up to date with the firm's investor relations and listen to their next earnings call, sign up for alerts here.

Investment Thesis

Fundamental Drivers:

The fundamental drivers for an investment in Glass House are quite similar to the sustainable advantages and growth drivers that were discussed in the previous section. Below will reiterate some of these drivers as well as include a few additional drivers not thoroughly discussed.

Primary Focus on Quality Products

Glass House prides itself on producing some of the highest quality cannabis in the world. End users can be confident that Glass House branded products are safe and effective to use. This consistency and quality builds trust between Glass House and consumers, leading to loyal long-term customers for the firm.

Brand Strength

Glass House has proven they can build brand awareness and sales incredibly quickly, moving their Glass House Farms products from #64 to the #1 cannabis brand in CA in less than two years. Going forward, this ability to build on current and future brands is critical to gaining further market share and sales across their end-markets.

Low Cost, High-Tech, Environmentally Friendly Horticulture Techniques

The Dutch influence on Glass House cultivation techniques enables Glass House to maximize their production output while minimizing both their costs and environmental impact. As a low-cost producer, Glass House has higher margins and the ability to outlast competitors in the CA market even if wholesale prices continue to tighten. Further, the ESG initiatives undertaken by the firm should pique the interest of ESG investors when they begin to invest in the sector.

Sector Strength & Trading Weakness
The Cannabis market is expected to grow at a double digit CAGR over the next decade, much higher than the majority of industries that investors are currently invested in. On top of this, while the general stock market is at all time highs with historically high valuations, the cannabis sector is in its own bear market, providing investors a more attractive entry to ride the industry growth over the next decade.

Cannabis Normalization
While many still have misconceptions about the benefits of cannabis, there has never been more support for legalization in the US, with roughly 70% of all Americans agreeing it should be legalized. This support is now bipartisan, with 50% of Republicans and 83% of Democrats supporting legalization. In a time when partisan politics have led to conflicting opinions and stalemates on nearly every major issue, it is amazing to see the overall support that cannabis has received. This support will continue to grow and lead to further normalization (and eventually federal legalization) of cannabis consumption, further supporting the fundamental growth of the sector.

Regulatory Change Catalysts
There are numerous potential catalysts that can further improve the growth and stability of the cannabis sector and its public stocks. Whether it's a Schumer Bill, SAFE Banking Bill, Federal Legalization, Interstate Commerce Opening, or even just more and more states voting to legalize cannabis, these catalysts will all generate improvements across the industry and its capital markets. The best time to invest in the sector is most likely before any of these catalysts come to fruition as any one of these catalysts is likely to send US cannabis stocks significantly higher in a short period of time.

The Cannabis Sector:
Valuations across the US cannabis sector are extremely attractive compared to other industries. **Figure 6** compares Large Cannabis MSOs with other similar industries. Of the 9 industries in comparison, Cannabis MSOs have the lowest 2023E EV/EBITDA and by far the highest expected CAGR of revenue from 2021 thru 2023. This dichotomy means investors can invest in a high growth industry at attractive value multiples. To further reiterate this undervaluation, Jeffries initiated coverage on seven US Cannabis stocks and believes all names are a Buy with an average upside over 100%. See **Figure 7** for financial details on the stocks they are now covering.

In his Cannabis Manifesto, Aaron Edelheit points us to a specific example of this evident undervaluation with Verano Holdings (OTC: VRNOF). "This company should earn approximately $1.3B in revenue and close to $600M in EBITDA in 2022. At slightly less than $4B in market cap, Verano trades at 3x revenue and less than 7x EBITDA unlevered. That is with a company with a 3-year CAGR (compounded annual growth rate) of over 50% with over 40% EBITDA margins and in a net cash position. It's possible that if the growth Verano is experiencing continues that the company could be trading at 4x 2024/2025 EBITDA." This valuation is in comparison to "prominent consumer goods companies and alcohol companies [that] are lucky to be seeing 3-4% growth and trade north of 20x EBITDA." Aaron continues by citing DraftKings (NASDAQ: DKNG), who operates in the once illegal sports betting market and has a market cap over $20B, trading 40x above expected 2024 EBITDA. Thus, while investors are currently ignoring the cannabis sector (some are forced to), when further legalization and regulatory clarity comes, cannabis (like the once illegal sports betting) is almost certain to be one of the most exciting sectors in the market and prices could drastically change from seemingly undervalued to sky high valuations.

Financial & Valuation Analysis:

"Focus on finding evident undervaluation rather than calculating intrinsic value down to the second decimal point. You don't have to know a man's exact weight to know that he's fat." – Ben Graham

Glass House Brands has little to no institutional coverage on their stock with no Wall Street projections on revenues, earnings, cash flows, etc. Further, since the de-SPAC occurred just a few months ago, much of the relevant historical financial data is difficult to piece together. Below I will dive into my own best projections and analysis while comparing my estimates to Glass House management and to peer firms. While all financial models will be wrong, the goal is to develop a useful guide to determine if there is evident undervaluation and to measure against management's future execution.

Income Statement Projections & Discussion:

Glass House Brands (OTC: GLASF) : Analyst: Frank Geib	Projected			Historic
(in thousands, except per share amounts)	FY 2023E	FY 2022E	FY 2021E*	FY 2020**
Management Rev Forecast (As of April 2021)	601,000	326,000	124,000	
NET SALES	$ 490,000	$ 275,000	$ 84,000	$ 53,000
COST OF SALES	220,500	132,000	43,680	29,150
Gross profit	269,500	143,000	40,320	23,850
OPERATING EXPENSES				
General and Administrative	52,000	40,000	24,500	17,500
Sales and Marketing	15,000	8,000	4,000	1,600
Professional Fees	8,000	6,000	8,000	2,500
Depreciation and Amortization	10,000	6,000	3,000	2,400
Total operating expenses	85,000	60,000	39,500	24,000
OPERATING INCOME (LOSS)	184,500	83,000	820	(150)
Total Non-Operating expense (income)	10,000	10,000	10,000	4,500
EARNINGS (LOSS) BEFORE TAXES	174,500	73,000	(9,180)	(4,650)
Income tax expense	43,625	18,250	10,000	4,000
Equity in net earnings (loss) of affiliates	-	-	-	-
NET EARNINGS (LOSS) ATTRIBUTABLE TO GLASS HOUSE BRANDS	130,875	54,750	(19,180)	(8,650)
EARNINGS (LOSS) PER COMMON SHARE - GLASS HOUSE BRANDS				
Basic	**$ 1.31**	**$ 0.72**	**$ (0.34)**	**$ (0.15)**
Diluted	**$ 1.31**	**$ 0.72**	**$ (0.34)**	**$ (0.15)**
WEIGHTED AVERAGE COMMON SHARES				
Basic	100,000	76,000	56,053	56,053
Diluted	100,000	76,000	56,053	56,053

Income Statement Model continues on next page

Tax Rate	25.0%	25.0%	-108.9%	-86.0%
D&A	10,000	6,000	3,000	2,400
% of Sales	2.0%	2.2%	3.6%	4.5%
CapEx	49,000	27,500	8,400	5,300
% of Sales	10.0%	10.0%	10.0%	10.0%
Receivables	29,400	16,500	5,000	5,000
% of Sales	6.0%	6.0%	6.0%	9.4%
Inventory	49,000	27,500	11,600	$ 5,300.0
% of Sales	10.0%	10.0%	13.8%	10.0%
Total Current Liabilities	98,000	55,000	30,200	19600
% of Sales	20.0%	20.0%	36.0%	37.0%
Change in WC	**8,600**	**(2,600)**	**4,300**	**9,300**
Sales Growth	78.2%	227.4%	58.5%	185.0%
Expenses as % of Sales				
Gross Margin	55.0%	52.0%	48.0%	45.0%
General and Administrative	10.6%	14.5%	29.2%	33.0%
Sales and Marketing	3.1%	2.9%	4.8%	3.0%
Professional Fees	1.6%	2.2%	9.5%	4.7%
Depreciation and Amortization	2.0%	2.2%	3.6%	4.5%
Total Non-operating expense (income)	2.0%	3.6%	11.9%	8.5%
Operating Margin	37.7%	30.2%	1.0%	-0.3%
Management EBITDA Margin Forecast (As of April 2021)	*40%*	*32%*	*20%*	

*2021E includes 6mo of actual data

**Since GLASF de-SPAC'd in 2021, the 2020 financial data is somewhat estimated as well due to unavailable financial statements. Revenue #'s pulled from Mercer Park SPAC deal announcement

GLASF Income Statement Projection Model – November 1, 2021

In my income statement projections, I predict revenue growth of 58% in 2021 before a massive 227% increase in 2022 to $275M, driven by increasing cultivation and additional retail store openings in 2022. Growth is predicted to remain strong well into the future as the cultivation capacity expands to over 6M sq ft eventually. My revenue projections are lower than managements own published forecast from April 2021, perhaps meaning my estimates are somewhat conservative. Still, with strong revenue growth comes increasing earnings projections as well, where I predict GLASF to lose $0.34 per share in 2021 before earning $0.71 and $1.31 per share in 2022 and 2023, respectively. It is important to note that these per share projections incorporate a predicted dilution of shares outstanding as seen in the model. **Figure 8** from the firm's latest investor presentation shows there are potential earnouts, warrants, options, etc. that may convert into more outstanding shares in the future. Exact future outstanding shares will most likely differ from my projections and will lead to different per share earnings amounts. Regardless, even if shares are diluted significantly as I predict, Glass House is still projected to grow income and earnings significantly in the coming years.

Discounted Cash Flow Model

Glass House Brands (OTC: GLASF)

Analyst: Frank Geib
11/1/21
(numbers in thousands except per share)

Terminal Discount Rate =	12.0%
Terminal FCF Growth =	4.0%

Year	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Revenue	$ 84,000	$ 275,000	$ 490,000	$ 612,500	$ 765,625	$ 957,031	$ 1,148,438	$ 1,320,703	$ 1,479,188	$ 1,627,106	$ 1,773,546
% Growth		227.4%	78.2%	25.0%	25.0%	25.0%	20.0%	15.0%	12.0%	10.0%	9.0%
Operating Income	820	83,000	184,500	245,000	306,250	382,813	459,375	528,281	591,675	650,843	709,418
Operating Margin	1.0%	30.2%	37.7%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%	40.0%
Total Non-Operating Expense (Income)	10,000	10,000	10,000	12,500	15,625	19,531	23,438	26,953	30,188	33,206	36,195
Interest % of Sales	11.9%	3.6%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Income Before Taxes	(9,180)	73,000	174,500	232,500	290,625	363,281	435,938	501,328	561,488	617,636	673,224
Taxes	10,000	18,250	43,625	58,125	72,656	90,820	108,984	125,332	140,372	154,409	168,306
Tax Rate	-108.9%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
Net Income	(19,180)	54,750	130,875	174,375	217,969	272,461	326,953	375,996	421,116	463,227	504,918
% Growth		385.5%	139.0%	33.2%	25.0%	25.0%	20.0%	15.0%	12.0%	10.0%	9.0%
Add Depreciation/Amort	3,000	6,000	10,000	12,500	15,625	19,531	23,438	26,953	30,188	33,206	36,195
% of Sales	3.6%	2.2%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Plus/(minus) Changes WC	4,300	(2,600)	8,600	(3,063)	(3,828)	(4,785)	(5,742)	(6,604)	(7,396)	(8,136)	(8,868)
% of Sales	5.1%	-0.9%	1.8%	-0.5%	-0.5%	-0.5%	-0.5%	-0.5%	-0.5%	-0.5%	-0.5%
Subtract Cap Ex	8,400	27,500	49,000	61,250	76,563	95,703	114,844	132,070	147,919	162,711	177,355
Capex % of sales	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
Free Cash Flow	(20,280)	30,650	100,475	122,563	153,203	191,504	229,805	264,275	295,988	325,587	354,890
% Growth		-251.1%	227.8%	22.0%	25.0%	25.0%	20.0%	15.0%	12.0%	10.0%	9.0%

NPV of Cash Flows	863,965	37%
NPV of terminal value	1,485,447	63%
Projected Equity Value	2,349,411	100%
Free Cash Flow Yield	-7.71%	

Terminal Value	4,613,572
Free Cash Yield	7.69%
Terminal P/E	9.1
Terminal EV/EBITDA	6.2

Current P/E	(13.7)	4.8	2.0
Projected P/E	*(68.7)*	*24.1*	*10.1*
Current EV/EBITDA	68.8	3.0	1.4
Projected EV/EBITDA	*344.7*	*14.8*	*6.8*

Shares Outstanding (Current)	56,053
Shares Outstanding (Expected Future Dilution)	100,000
Current Price	$ 4.69
Implied equity value/share (using diluted sharecount)	$ 23.49
Upside/(Downside) to DCF	400.9%

Sensitivity Analysis on Share Price

		Terminal Discount Rate							
		10.0%	10.5%	11.0%	11.5%	12.0%	12.5%	13.0%	13.5%
Terminal	2.0%	$ 27.31	$ 25.23	$ 23.39	$ 21.76	$ 20.29	$ 18.98	$ 17.79	$ 16.72
FCF	2.5%	$ 28.56	$ 26.29	$ 24.30	$ 22.54	$ 20.97	$ 19.57	$ 18.31	$ 17.17
Growth	3.0%	$ 29.99	$ 27.49	$ 25.32	$ 23.41	$ 21.72	$ 20.21	$ 18.87	$ 17.66
	3.5%	$ 31.65	$ 28.87	$ 26.47	$ 24.39	$ 22.55	$ 20.93	$ 19.49	$ 18.20
	4.0%	$ 33.58	$ 30.46	$ 27.79	$ 25.50	$ 23.49	$ 21.74	$ 20.18	$ 18.80
	4.5%	$ 35.86	$ 32.31	$ 29.32	$ 26.76	$ 24.56	$ 22.64	$ 20.95	$ 19.46
	5.0%	$ 38.59	$ 34.50	$ 31.10	$ 28.23	$ 25.78	$ 23.66	$ 21.82	$ 20.20
	5.5%	$ 41.94	$ 37.13	$ 33.20	$ 29.94	$ 27.19	$ 24.84	$ 22.81	$ 21.04
	6.0%	$ 46.12	$ 40.34	$ 35.72	$ 31.96	$ 28.83	$ 26.19	$ 23.93	$ 21.98

GLASF Discounted Cash Flow Model – November 1, 2021

My DCF analysis model implies a **projected equity value of $2.35B** and a projected share price of **$23.49** based on 100k diluted shares outstanding. This signifies **over 400% upside** for GLASF shareholders at today's prices. I utilized a discount rate of 12% (markedly higher than the market average to account for increased sector risks) and a terminal growth rate of 4% (much lower than the forecast period growth). I also provided a sensitivity analysis in the bottom right of the DCF model to show potential share prices based on different discount and growth rates. For instance, a 10% discount rate with a 3% growth rate would imply a projected share price $29.99. This sensitivity analysis shows the large impact that small changes in discount and growth rates can have on equity values in a DCF analysis. Overall, my model confirms to me that there is evident undervaluation in Glass House's future growth. However, with little financial history and the future of cannabis in the US still unknown it will be imperative to measure and assess how the business actually performs going forward for an investment in the equity to be successful.

For a feasibility check on my model, I want to understand if Glass House's expected maximum capacity of 1.7M lbs. of cannabis flower across their 6M sq ft of cultivation facilities could garner over $1.8B in sales (> my 2031 estimate). With current wholesale price per gram for greenhouses in California selling for just under $3 (**Figure 9**) and 453.6 grams in 1lb., this implies **future revenue potential over $2.3B per year** (*Equation*: $3 per gram * 453.6 grams/lb. * 1.7M lbs. = $2.313B). With future wholesale prices potentially lower (or higher), the table below shows a few revenue scenarios with different average prices.

Glass House Potential Future Revenue*	
Wholesale Price per Gram	**Potential Revenue (In Millions)**
$1.00	$771
$1.25	$964
$1.50	$1,157
$1.75	$1,349
$2.00	$1,542
$2.25	$1,735
$2.50	$1,928
$2.75	$2,121
$3.00	$2,313
$3.25	$2,506
$3.50	$2,699
$3.75	$2,892
$4.00	$3,084
$4.25	$3,277
$4.50	$3,470
$4.75	$3,663
$5.00	$3,856
*Based on expected 1.7M lbs. yearly capacity	

This table shows that wholesale prices need to remain above $2.25 per gram for Glass House's current expected capacity to meet my 2031E revenue projections. This is certainly feasible but with further price compression possible going forward, monitoring wholesale prices is critically important. Regardless, this check helps me ensure my projected DCF model is at least realistic based on current information and reiterates my undervaluation thesis.

Peer Comparison

I have seen no better comparison tool for US Cannabis equities than @cashflow_free's Canna Comp Sheet that they update weekly and share on their twitter account. The comp sheet (Oct 31 update seen below) splits 38 firms in the sector into 4 separate tiers based on enterprise value and compares sales and EBITDA estimates. Glass House is the 14th largest firm overall (9th in Tier 2) based on this list and seems to have favorable valuation metrics compared to many of its peers. In fact, out of the top 15 firms, Glass House has the lowest expected 2022 EV/EBITDA and EV/Sales ratios. While these are expected projections that may not materialize, this favorable valuation shows Glass House is at least fairly valued compared to how peers are trading. Overall though, these low EV ratios across the sector reiterate the current opportunity for significant growth for cannabis sales and cannabis stocks in the future.

As of Sunday, October 31, 2021 @cashflow_free $37.0B <Totals> $39.1B

#	Company	Ticker	Price	FD S/O	Mkt Cap	Net Debt	EV	Stores[1]	FactSet Sales Ests (M) 2020	2021	2022	2023	CAGR
1	Curaleaf Holdings, Inc.	CURLF	$9.81	774	$7.6B	+$316M	$7.9B	109/150	$627	$1,283	$1,851	$2,308	54%
2	Trulieve Cannabis Corp.	TCNNF	$25.25	190	$4.8B	+$285M	$5.1B	152/160	$753	$1,304	$1,692	$2,521	49%
3	Green Thumb Industries In	GTBIF	$20.12	235	$4.7B	+$10M	$4.7B	64/114	$557	$901	$1,192	$1,530	40%
4	Verano Holdings Corp. Clas	VRNOF	$11.32	315	$3.6B	+$28M	$3.6B	87/90	$355	$822	$1,253	$1,504	61%
5	Cresco Labs, Inc.	CRLBF	$7.70	418	$3.2B	+$278M	$3.5B	38/47/60	$476	$854	$1,196	$1,331	40%
	Tier 1 (EV > $2.7B)			Average	$4.8B	+$183M	$5.0B	Average	$553	$1,033	$1,437	$1,839	49%
				Total	$23.9B	+$917M	$24.8B	Total	$2,767	$5,163	$7,184	$9,193	
6	TerrAscend Corp.	TRSSF	$5.64	314	$1.8B	+$72M	$1.8B	13/14	$158	$244	$464	$668	61%
7	Ayr Wellness, Inc.	AYRWF	$20.82	74	$1.5B	+$181M	$1.7B	61/64/67	$155	$374	$799	$993	85%
8	Ascend Wellness Holdings	AAWH	$7.51	174	$1.3B	+$201M	$1.5B	18/27	$144	$343	$628	$845	79%
9	Columbia Care, Inc.	CCHWF	$3.01	407	$1.2B	-$33M	$1.2B	75/92	$198	$511	$792	$1,065	74%
10	Jushi Holdings Inc Class B	JUSHF	$3.86	260	$1.0B	+$26M	$1.0B	26/30/32	$81	$225	$394	$520	85%
11	MedMen Enterprises, Inc. (	MMNFF	$0.24	1256	$0.3B	+$485M	$0.8B	30/38	$157	$145	$211	$273	20%
12	4Front Ventures Corp.	FFNTF	$0.98	690	$0.7B	+$97M	$0.8B	6/9	$88	$171	$233	$279	46%
13	Planet 13 Holdings, Inc.	PLNHF	$3.85	206	$0.8B	-$112M	$0.7B	2/3	$70	$125	$192	$231	48%
14	Glass House Brands Inc	GLASF	$4.67	107	$0.5B	-$10M	$0.5B	4/8/23	$62	$124	$326	$391	84%
15	Greenrose Acquisition Cor	GNRS	$10.30	42	$0.4B	+$3M	$0.4B	9/9	$83	$125	$230	$276	49%
	Tier 2 (EV $0.4B - $2.7B)			Average	$1.0B	+$91M	$1.0B	Average	$120	$239	$427	$554	63%
				Total	$9.6B	+$909M	$10.5B	Total	$1,196	$2,388	$4,268	$5,542	
16	Acreage Holdings Inc Class	ACRDF	$1.97	151	$297M	+$124M	$421M	30/33	$115	$184	$274	$345	44%
17	Gage Growth Corp.	GAEGF	$1.59	260	$413M	-$10M	$403M	10/19/29	$40	$126	$301	$371	109%
18	Red White & Bloom Brands	RWBYF	$0.51	464	$237M	+$141M	$378M	1/24 whls	$30	$141	$200	$240	99%
19	Goodness Growth Holdings	GDNSF	$1.48	202	$299M	+$22M	$321M	22/29	$49	$65	$141	$259	73%
20	Medicine Man Technologie	SHWZ	$2.05	133	$272M	+$37M	$309M	19/19	$24	$117	$237	$300	130%
21	MariMed Inc	MRMD	$0.76	387	$292M	+$6M	$298M	7/10	$51	$118	$144	$172	49%
22	Cansortium, Inc.	CNTMF	$0.71	303	$214M	+$51M	$265M	27/30/36	$52	$76	$140	$168	47%
23	TILT Holdings, Inc.	TLLTF	$0.32	470	$148M	+$77M	$225M	2/3	$158	$208	$280	$325	27%
24	Lowell Farms, Inc.	LOWLF	$0.82	201	$165M	+$43M	$208M	wholesale	$43	$59	$110	$130	44%
25	Item 9 Labs Corp.	INLB	$1.37	107	$147M	+$6M	$152M	whsl/frnch	$8	$23	$80	$120	143%
	Tier 3 (EV $140M - $0.4B)			Average	$248M	+$50M	$298M	Average	$57	$112	$191	$243	77%
				Total	$2,484M	+$496M	$2,979M	Total	$570	$1,119	$1,906	$2,430	
26	TPCO Holding Corp	GRAMF	$2.84	139	$393M	-$258M	$136M	4/13/15+	$189	$208	$292	$350	23%
27	Vext Science, Inc.	VEXTF	$0.63	187	$118M	+$2M	$120M	2+whsl+JV	$25	$39	$65	$77	45%
28	Harborside Inc.	HBORF	$0.79	103	$82M	+$35M	$117M	6/6	$60	$72	$103	$120	26%
29	C21 Investments Inc	CXXIF	$0.53	129	$68M	+$19M	$87M	2	$37	$50	$85	$140	55%
30	SLANG Worldwide, Inc.	SLGWF	$0.11	549	$62M	-$4M	$58M	4/whlse	$22	$39	$55	$66	44%
31	Next Green Wave Holdings	NXGWF	$0.29	197	$58M	+$0M	$58M	wholesale	$13	$19	$30	$60	66%
32	Body & Mind Inc.	BMMJ	$0.40	128	$51M	+$1M	$53M	5/6/8	$21	$32	$42	$50	33%
33	Hollister Biosciences Inc	HSTRF	$0.17	314	$54M	-$3M	$51M	wholesale	$31	$110	$125	$150	69%
34	Chalice Brands Ltd	GLDFF	$0.56	66	$37M	+$8M	$45M	7/21	$22	$30	$48	$53	34%
35	Captor Capital Corp	CPTR-CAN	$0.96	60	$58M	-$16M	$41M	8/15	$11	$25	$50	$60	75%
36	1933 Industries, Inc.	TGIFF	$0.05	585	$31M	+$10M	$40M	wholesale	$9	$16	$22	$26	41%
37	Vibe Growth Corporation	VBSCF	$0.37	119	$44M	-$10M	$34M	7/9	$25	$37	$57	$68	40%
38	Grown Rogue Internationa	GRUSF	$0.11	158	$17M	+$2M	$20M	wholesale	$6	$15	$25	$30	67%
	Tier 4 (EV < $140M)	Average		Average	$83M	-$16M	$66M	Average	$36	$53	$77	$96	48%
		Total		Total	$1,074M	-$213M	$861M	Total	$470	$693	$998	$1,251	
	US Publicly Traded Cannabis Totals				$37.0B	+$2,109M	$39.1B		5,003	9,363	14,356	18,416	54%
	YOY Industry Growth Rates									87%	53%	28%	

#	Company	FactSet EBITDA Ests (M) 2020	2021	2022	2023	EBITDA Margin 2020	2021	2022	2023	EPS 2021	2022	2023	EV / Sales 2021	2022	2023	EV / EBITDA 2021	2022	2023	P/E 2021	2022	2023
1	Curaleaf Holdings, Inc.	$144	$362	$617	$768	23%	28%	33%	33%	-$0.02	$0.22	$0.26	6.2	4.3	3.4	21.8	12.8	10.3	-	44.5	38.1
2	Trulieve Cannabis Corp.	$266	$508	$682	$928	35%	39%	40%	37%	$1.03	$1.26	$1.58	3.9	3.0	2.0	10.0	7.4	5.5	24.6	20.0	16.0
3	Green Thumb Industries In	$180	$324	$447	$584	32%	36%	38%	38%	$0.37	$0.69	$0.89	5.3	4.0	3.1	14.6	10.6	8.1	53.8	29.1	22.5
4	Verano Holdings Corp. Clas	$144	$349	$554	$675	41%	42%	44%	45%	$0.70	$0.98	$1.29	4.4	2.9	2.4	10.3	6.5	5.3	16.1	11.5	8.8
5	Cresco Labs, Inc.	$64	$206	$380	$453	13%	24%	32%	34%	-$0.01	$0.28	$0.31	4.1	2.9	2.6	17.0	9.2	7.7	-	27.6	24.8
	Tier 1 (EV > $2.7B) Average	$160	$350	$536	$682	29%	34%	37%	37%				4.8x	3.4x	2.7x	14.7x	9.3x	7.4x	31.5x	26.5x	22.0x
	Total	$798	$1,749	$2,681	$3,408																
6	TerrAscend Corp.	$48	$97	$198	$259	30%	40%	43%	39%	-$0.08	$0.28	$0.53	7.5	4.0	2.8	19.1	9.3	7.1	-	20.4	10.7
7	Ayr Wellness, Inc.	$56	$105	$301	$427	36%	28%	38%	43%	-$0.51	$1.25	$1.50	4.6	2.1	1.7	16.3	5.7	4.0	-	16.7	13.9
8	Ascend Wellness Holdings	$31	$86	$217	$338	21%	25%	35%	40%	-$0.62	$0.55	$1.07	4.4	2.4	1.8	17.5	7.0	4.5	-	13.7	7.0
9	Columbia Care, Inc.	-$4	$97	$223	$319	-2%	19%	28%	30%	-$0.07	$0.16	$0.18	2.3	1.5	1.1	12.4	5.4	3.7	-	18.5	16.7
10	Jushi Holdings Inc Class B	-$3	$34	$115	$166	-3%	15%	29%	32%	-$0.15	$0.20	$0.21	4.6	2.6	2.0	30.6	9.0	6.2	-	18.9	18.4
11	MedMen Enterprises, Inc. (	-$228	-$42	$16	$32	-145%	-29%	7%	12%	-$0.22	-$0.04	-$0.02	5.4	3.7	2.9	-	50.3	24.6	-	-	-
12	4Front Ventures Corp.	$6	$48	$78	$102	7%	28%	34%	37%		$0.12		4.5	3.3	2.8	16.1	9.9	7.6		8.2	
13	Planet 13 Holdings, Inc.	$8	$30	$60	$80	12%	24%	31%	35%	$0.01	$0.15		5.5	3.5	3.0	22.7	11.5	8.5	497.6	26.3	
14	Glass House Brands Inc	$7	$24	$104	$116	11%	19%	32%	30%				4.0	1.5	1.3	20.5	4.7	4.2			
15	Greenrose Acquisition Cor	$32	$50	$90	$111	39%	40%	39%	40%				3.5	1.9	1.6	8.6	4.8	3.9			
	Tier 2 (EV $0.4B - $2.7B) Average	-$5	$53	$140	$195	1%	21%	32%	34%				4.6x	2.7x	2.1x	18.2x	11.7x	7.4x		17.5x	13.3x
	Total	-$47	$528	$1,401	$1,950																
16	Acreage Holdings Inc Class	-$29	$33	$70	$62	-26%	18%	25%	18%	-$0.15	$0.04	$0.32	2.3	1.5	1.2	12.7	6.1	6.8	-	54.7	6.2
17	Gage Growth Corp.	-$13	$2	$90	$126	-33%	2%	30%	34%	-$0.08	$0.27		3.2	1.3	1.1	190.9	4.5	3.2	-	5.8	
18	Red White & Bloom Brands	-$35	$19	$28	$35	-116%	13%	14%	15%	-$0.29	$0.08		2.7	1.9	1.6	20.2	13.5	10.8	-	6.4	
19	Goodness Growth Holdings	-$5	-$0	$34	$62	-11%	0%	24%	24%	-$0.12	$0.10	$0.26	5.0	2.3	1.2	-	9.4	5.2	-	14.8	5.7
20	Medicine Man Technologie	$3	$38	$76	$98	13%	32%	32%	33%	$0.17	$0.92		2.6	1.3	1.0	8.1	4.1	3.2	12.4	2.2	
21	MariMed Inc	$10	$32	$53	$71	20%	27%	37%	41%	$0.03	$0.06	$0.09	2.5	2.1	1.7	9.3	5.7	4.2	25.2	12.6	8.4
22	Cansortium, Inc.	$10	$23	$60	$74	20%	30%	43%	44%	-$0.12	$0.14		3.5	1.9	1.6	11.5	4.4	3.6	-	5.2	
23	TILT Holdings, Inc.	$17	$30	$49	$63	11%	14%	18%	19%	-$0.03	$0.03		1.1	0.8	0.7	7.5	4.5	3.6	-	12.6	
24	Lowell Farms, Inc.	-$8	$5	$34	$43	-19%	9%	31%	33%	-$0.04	$0.06		3.5	1.9	1.6	39.2	6.1	4.8	-	13.1	
25	Item 9 Labs Corp.	-$2	$5	$9	$30	-26%	19%	11%	25%	-$0.01	$0.15		6.5	1.9	1.3	33.8	16.9	5.1	-	9.1	
	Tier 3 (EV $140M - $0.4B) Average	-$5	$19	$50	$66	-17%	16%	26%	29%				3.3x	1.7x	1.3x	37.0x	7.5x	5.0x	18.8x	13.7x	6.7x
	Total	-$53	$187	$502	$664																
26	TPCO Holding Corp	-$35	-$55	-$29	$25	-18%	-26%	-10%	7%	-$0.39	-$0.84		0.7	0.5	0.4	-	-	5.4	-	-	
27	Vext Science, Inc.	$7	$14	$24	$30	27%	35%	38%	39%	$0.05			3.1	1.9	1.6	8.8	4.9	4.0	12.6		
28	Harborside Inc.	$7	$6	$19	$27	12%	9%	19%	22%		$0.06	$0.11	1.6	1.1	1.0	18.7	6.0	4.4		12.9	7.0
29	C21 Investments Inc	$9	$15	$31	$53	24%	30%	36%	38%				1.7	1.0	0.6	5.8	2.8	1.6			
30	SLANG Worldwide, Inc.	-$4	-$2	$3	$8	-21%	-5%	6%	12%	-$0.03	-$0.02		1.5	1.1	0.9	-	17.2	7.3	-	-	
31	Next Green Wave Holdings	$4	$6	$11	$22	31%	32%	37%	37%				3.0	1.9	1.0	9.6	5.2	2.6			
32	Body & Mind Inc.	-$5	$7	$14	$18	-24%	22%	33%	36%				1.6	1.3	1.0	7.5	3.8	2.9			
33	Hollister Biosciences Inc	-$2	$15	$22	$30	-8%	14%	18%	20%				0.5	0.4	0.3	3.4	2.3	1.7			
34	Chalice Brands Ltd	-$5	-$1	$4	$6	-21%	-2%	8%	11%	-$0.07	$0.01		1.5	0.9	0.9	-	11.9	7.5	-	56.3	
35	Captor Capital Corp	-$2	$4	$10	$14	-18%	16%	20%	23%				1.7	0.8	0.7	10.4	4.1	3.0			
36	1933 Industries, Inc.	-$7	$2	$4	$6	-78%	13%	18%	21%				2.5	1.8	1.5	20.1	10.0	7.3			
37	Vibe Growth Corporation	$3	$6	$18	$20	11%	17%	31%	29%	$0.02	$0.10		0.9	0.6	0.5	5.5	1.9	1.7	18.1	3.6	
38	Grown Rogue Internationa	-$1	$3	$7	$9	-11%	20%	28%	30%				1.3	0.8	0.7	6.6	2.8	2.2			
	Tier 4 (EV < $140M) Average	-$2	$2	$11	$21	-7%	13%	22%	25%				1.7x	1.1x	0.8x	9.6x	6.1x	4.0x	15.3x	24.3x	7.0x
	Total	-$31	$21	$138	$267																
	US Publicly Traded Cannabis Totals	667	2,485	4,723	6,290	13%	27%	33%	34%				4.2x	2.7x	2.1x	15.7x	8.3x	6.2x			
	YOY Industry Growth Rates		273%	90%	33%																

All figures $USD, FactSet Consensus Estimates in BLUE, Management's Guidance in PURPLE, Author's Estimates in RED. [1]Stores = Open Now/"YE'21 Est/Total FD S/O = Fully Diluted Shares Outstanding, regardless of strike price. Stocks w negative P/E multiples are show as "-", stocks w/out EPS data are shown as " " or an empty cell.
TCNNF estimates pro-forma for HRVSF merger by combining Oct '21 analyst estimates for both firms. GLASF figures pro-forma for pending GreenHouse (10m shrs & 120m cash) & Element7 (2.4m shrs) deals. ACRHF/ACRDF mkt cap & EV are 90% correct due to dual share classes. Not investment advice, errors are possible

Canna Comp Sheet via @cashflow_free Twitter – Oct 31, 2021

Key Risks:

Federal Illegality

As it stands, the most obvious risk to the sector is that selling cannabis or touching it in any way as a business is federally illegal. This illegality is the primary reason many institutional investors are avoiding the sector, leading to lower liquidity, higher volatility, and lower valuations in publicly traded US cannabis companies. While there is the possibility that cannabis becomes federally legal in the next few years, many analysts estimate it can and will take much longer. There is also a possibility where an unknown form of future legality can negatively impact business performance. Nonetheless, the illegality we have today will most likely continue to have a negative influence on US cannabis stock valuations.

California Supply Surplus/Pricing Pressures

Glass House has and will continue to expand their cultivation capacity to increase their cultivation from just over 110k lbs. of cannabis per year to well over 1.5M lbs. per year. However, this increase in their own supply may be matched by increasing capacity from competitors and the entire market may become significantly oversupplied, especially if interstate commerce remains illegal for a long while. This could lead to deteriorating CA wholesale prices or worse throwaway inventory for large suppliers such as Glass House. Fortunately, Glass House has a strong cost structure that should enable them to survive over competition if prices would deteriorate. Still, CA supply-demand imbalances can have significant negative impacts on Glass House growth or profitability.

Severe Weather, Natural Disaster, Earthquake, etc.

Each year, southern California has around 10,000 earthquakes, though most are extremely small and unnoticeable. Still, with cultivation facilities only in southern CA, there is risk that severe weather or an unforeseen natural disaster such as an earthquake could adversely impact facilities, operations, and assets.

Other Risks
There are numerous other risks and uncertainties that underly an investment in Glass House Brands. These include but are not limited to credit risk, liquidity risk, interest rate risk, share dilution, price risk, etc. Thus, an investment in Glass House could lead to permanent loss of capital.

Summary & Conclusion

Buy $GLASF with a target price of $23.50 and implied upside over 400%

An investment in Glass House Brands is a rare opportunity to invest in a high-quality ultra-high growth business at a discounted valuation. With numerous catalysts set to unleash the growth of the cannabis sector and capital markets in the coming years, a patient investor has the opportunity to achieve a strong risk adjusted return should they invest and stay the course. In particular, Glass House has a clear runway to **grow their entire operations over 1000%** in the next five years. With world class real estate, a low-cost structure, dominant brands, and a growth engine behind the firm and the industry, Glass House should flourish. I also suspect management will be stewards of capital and find future accretive and fairly priced acquisitions that will further benefit long term shareholders. This paper failed to discuss management but they have plenty of impressive previous experience with a particular focus in entrepreneurship and real estate transactions. I recommend following founders Graham Farrar and Kyle Kazan on twitter to learn more about their team and the ongoing growth of their business. I believe they and their team are building Glass House into a multi-billion-dollar organization over the coming years as they scale their highly competitive and highly sustainable vertical cannabis operations.

Glass House Equity Shares trade on the Aequitas NEO exchange under the symbol “GLAS.A.U” and on OTC Markets under the symbol “GLASF”. Thus, to invest in Glass House, one needs to find a broker that allows for purchases from these exchanges. Popular brokers like TD Ameritrade and Fidelity should offer investors the ability to purchase these shares.

I recommend an investor with a long-term focus take a position in GLASF shares while they trade under $6 per share. I also would like to point out the investment opportunity in the warrants (OTC: GHBWF), which are currently priced around $1.50. Warrants have similar tendencies to call options and a GHBWF warrant has a strike price of $11.50 with expiration in 2026. Thus, if GLASF shares should reach my price target of $23.50 before expiration, the warrants would likely trade for a small premium over $12. ($23.50 - $11.50 = $12.). At an estimated $13 for a warrant if shares reach $23.50, the warrant investment return would be over 750%, almost double the return of the investment in the shares. However, warrants carry more risk as they are time dependent and have different liquidity so I believe they should remain supplemental investments to the actual equity shares. Overall, through my research and analysis, I believe a patient capital investment into Glass House shares or warrants will be a significant compounding force for any investment portfolio over the next decade, and perhaps beyond.

Appendix

Figure 1: Glass House Brands Operating Footprint in California

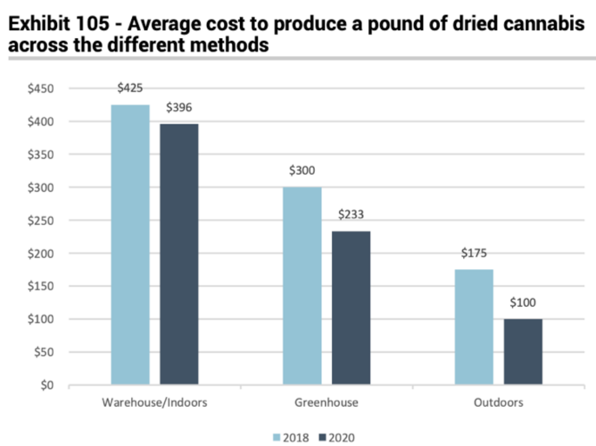


Figure 2: Average Production Cost by Cultivation Method

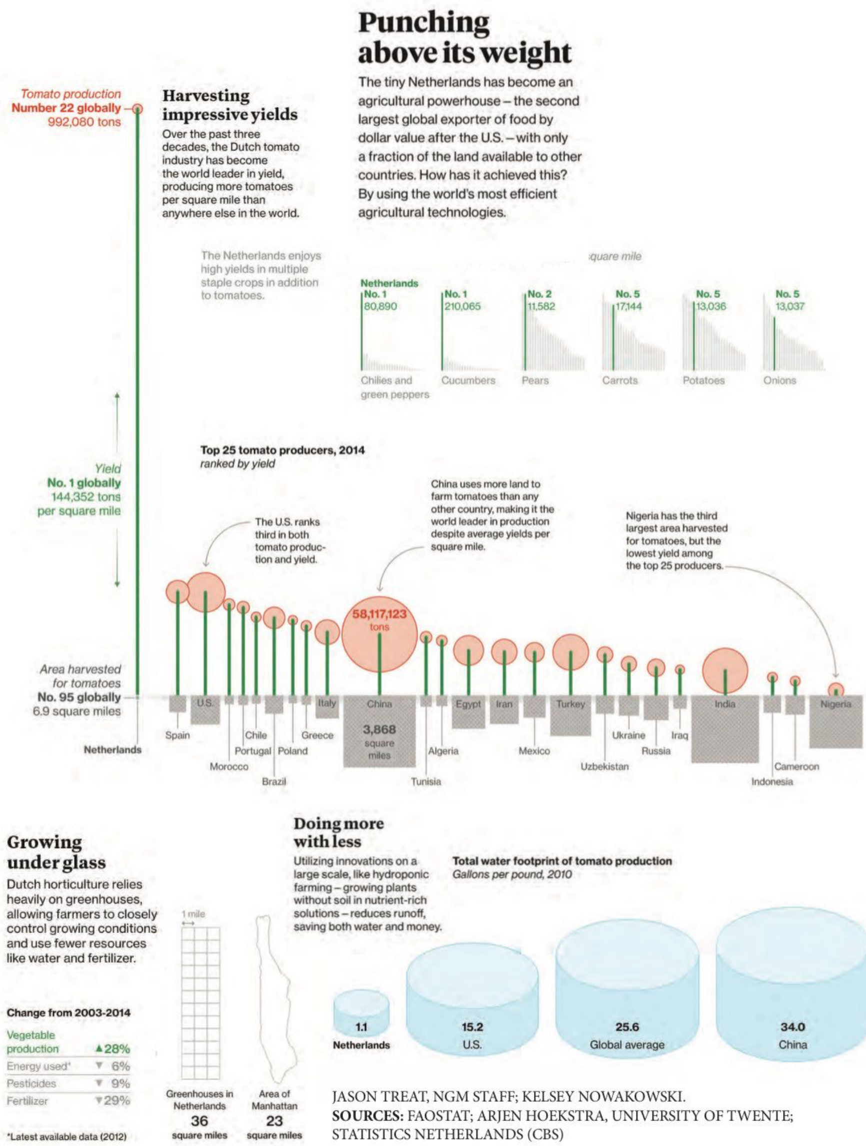


Figure 3: Impressive Yields from Dutch Horticulture

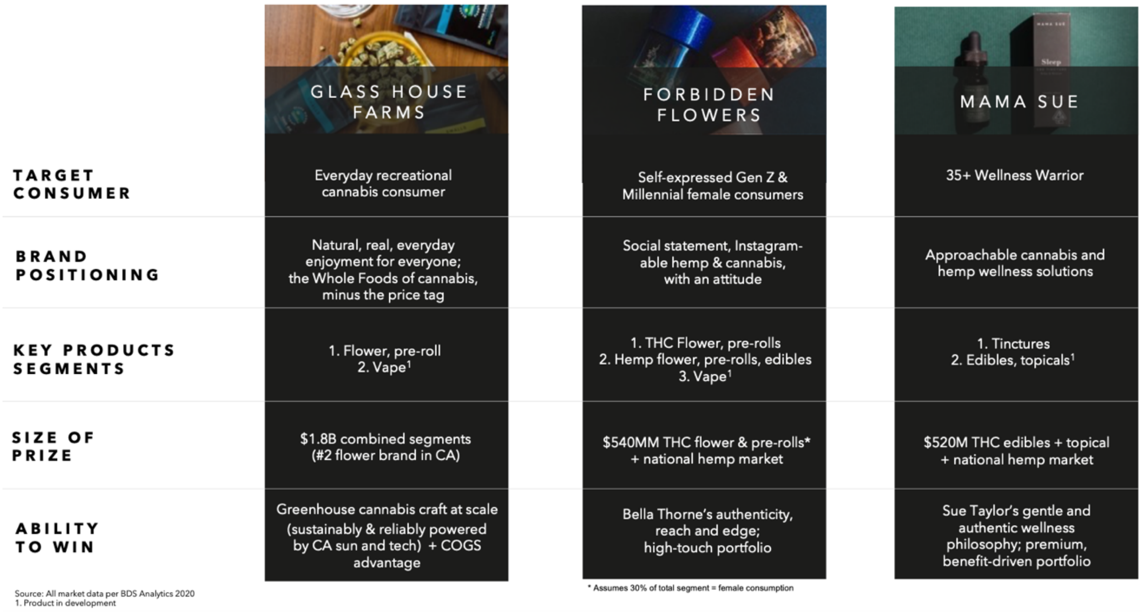


Figure 4: Glass House Current CPG Brands

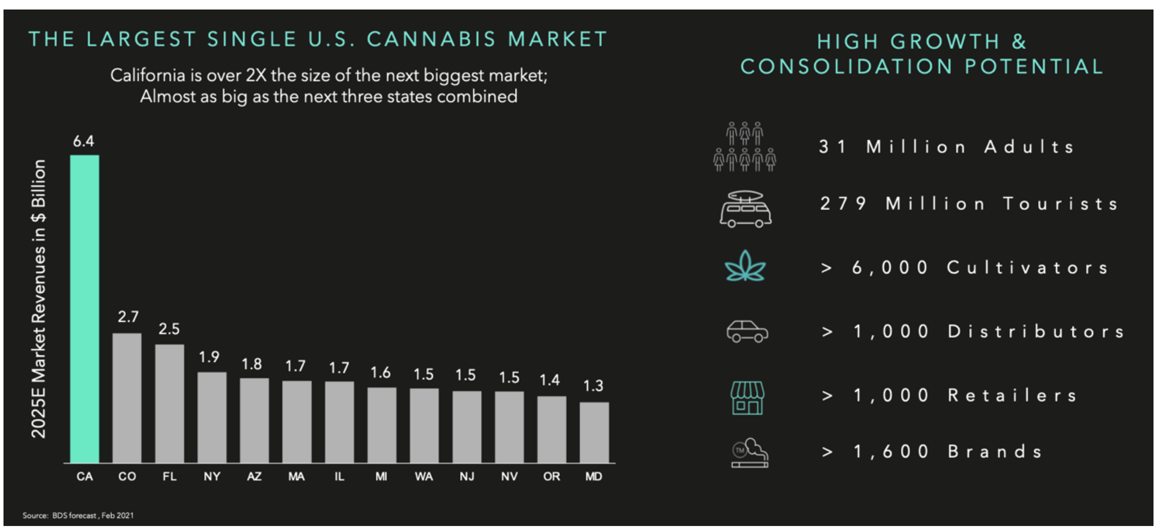


Figure 5: California Cannabis Market Highlights

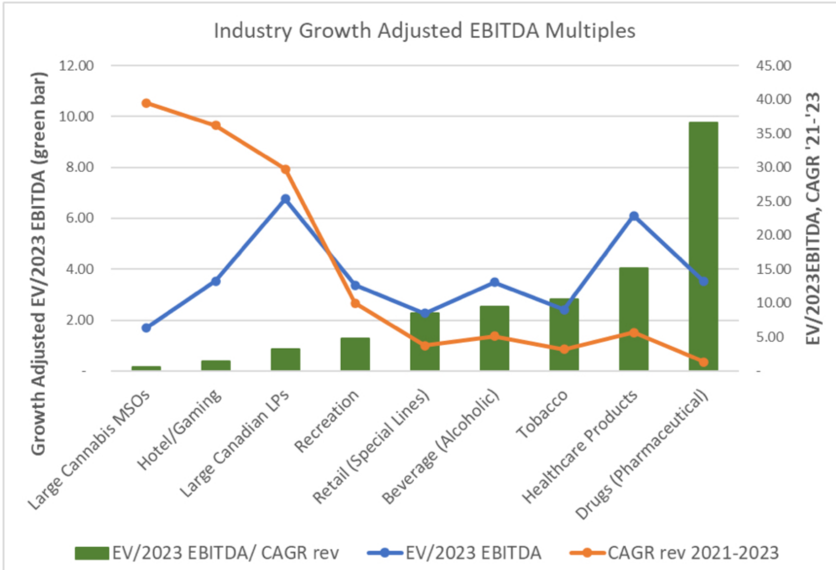


Figure 6: Industry Growth and Valuations - Viridian Capital

Exhibit 1 - Coverage overview: Ratings, market caps, PT's and estimates vs consensus

Market cap USD mn; PT and CP CAD; Estimates USD mn

							Sales								Gross Margin					EBITDA Margin				
Company	Ticker	Mkt Cap	Rating	PT	CP	Upside	FY18A	FY19A	FY20A	FY21	FY22	FY23	FY20-FY23 CAGR	Cons. FY21	FY20A	FY21	FY22	FY23	Cons. FY21	FY20A	FY21	FY22	FY23	Cons. FY21
Curaleaf	CURA:CN	8468	BUY	32	17	84%	77	221	627	1,288	1,611	2,050	48.4%	1,309	50.3%	52.5%	55.0%	55.0%	53.0%	23.0%	28.6%	33.9%	36.6%	28.7%
Green Thumb	GTII:CN	6141	BUY	70	41	71%	62	216	557	866	1,104	1,389	35.7%	874	54.7%	57.0%	59.0%	57.0%	57.0%	32.3%	36.4%	39.2%	38.5%	36.7%
Trulieve	TRUL:CN	2682	BUY	62	48	30%	103	253	522	830	1,426	1,612	45.7%	873	74.1%	70.0%	64.0%	63.0%	70.8%	48.1%	44.1%	40.3%	41.0%	45.0%
Cresco	CL:CN	2668	BUY	36	14	160%	43	129	476	837	1,177	1,463	45.4%	838	51.5%	51.5%	55.0%	55.0%	51.8%	24.4%	25.0%	31.2%	32.9%	26.1%
Columbia Care	CCHW:CN	1523	BUY	19	6	225%		77	180	509	776	1,063	80.9%	517	38.4%	47.5%	55.0%	55.0%	47.6%	-2.3%	19.3%	32.0%	34.2%	19.1%
TerrAscend	TER:CN	2050	BUY	17	14	20%	5	85	198	301	337	429	29.3%	303	54.6%	65.0%	64.5%	63.5%	66.0%	30.3%	43.4%	44.2%	45.3%	43.2%
Ayr	AYR.A:CN	1388	BUY	80	35	129%		75	155	354	695	903	79.9%	381	57.1%	50.0%	57.0%	58.0%	50.8%	36.2%	32.9%	43.1%	45.0%	33.2%
AVERAGE						**102.8%**	**58**	**151**	**388**	**712**	**1,018**	**1,273**	**52.2%**		**54.4%**	**56.2%**	**58.5%**	**58.1%**		**27.4%**	**32.8%**	**37.7%**	**39.1%**	

Source: FactSet, Jefferies

Figure 7: Jeffries Initiates Coverage on 7 US Cannabis Stocks

CAPITALIZATION

Share Price (USD):	Total	Strike	$ 8.00	$ 10.00	$ 11.00	$ 12.00	$ 13.00	$ 14.00	$ 15.00	$ 16.00	$ 17.00	$ 18.00
Current Basic Shares O/S[1]	48,493,699		48,493,699	48,493,699	48,493,699	48,493,699	48,493,699	48,493,699	48,493,699	48,493,699	48,493,699	48,493,699
Pending Shares to E7	2,400,000		2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000
Pending Shares to Houweling	10,000,000		10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000
Pro Forma Basic Shares	60,893,699		60,893,699	60,893,699	60,893,699	60,893,699	60,893,699	60,893,699	60,893,699	60,893,699	60,893,699	60,893,699
RSU	3,610,642		3,610,642	3,610,642	3,610,642	3,610,642	3,610,642	3,610,642	3,610,642	3,610,642	3,610,642	3,610,642
Options[2]	2,077,574	$ 2.70	1,375,121	1,515,612	1,566,699	1,609,272	1,645,295	1,676,172	1,702,933	1,726,348	1,747,008	1,765,373
SPAC Warrants	28,435,000	$ 11.50	-	-	-	1,184,792	3,280,962	5,077,679	6,634,833	7,997,344	9,199,559	10,268,194
GH Warrants	4,896,832	$ 10.00	-	-	445,167	816,139	1,130,038	1,399,095	1,632,277	1,836,312	2,016,343	2,176,370
Pro forma FD shares before earnouts	101,113,748		65,879,462	66,019,953	66,516,207	68,164,544	70,699,098	72,871,573	74,754,384	76,401,845	77,855,486	79,147,612
Sponsor Price-Based Earnout[3]	2,522,438		-	-	-	-	1,681,625	1,681,625	2,522,438	2,522,438	2,522,438	2,522,438
GH Price Earnout[4]	3,783,657		-	-	-	-	2,522,438	2,522,438	3,783,657	3,783,657	3,783,657	3,783,657
FD including price-based Earnout shares	107,419,843		65,879,462	66,019,953	66,516,207	68,164,544	74,903,161	77,075,636	81,060,479	82,707,940	84,161,581	85,453,707

[1] Basic Shares Outstanding includes both Exchangeable Shares and the outstanding Subordinate, Restricted, and Limited Voting shares into which the Exchangeable Shares may convert into on a one for one basis. Excludes merger holdback shares.
[2] Options shown in aggregate at a weighted average exercise price.
[3] Price-Based Earnout is fully earned upon the 20-day VWAP reaching US$15 by 6/29/23.
[4] Price-Based Earnout is fully earned upon the 20-day VWAP reaching US$15 by 6/29/23.

25

Figure 8: Glass House Capitalization (Helpful for Shares Outstanding)

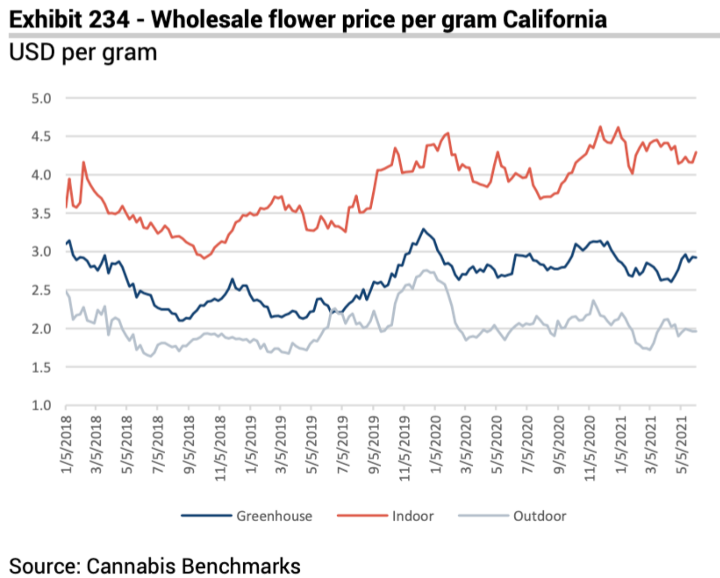


Figure 9: California Wholesale Cannabis Prices by Cultivation Type

Sources (many linked to within paper)

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