How to Value a Cannabis Business

An Introduction to the Principles and Industry Specific Issues Unique to Valuing Cannabis-Related Businesses, including Dispensaries, Cultivators, Processors, Manufacturers, Suppliers, and Service Providers

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How to Value a Cannabis Business

To begin with it is important to note that the valuation methods used to value a cannabis or marijuana business are the same as valuing businesses in other industries. It is the inputs or assumptions used in each of these approaches that are unique to the cannabis industry. In this white paper we discuss each valuation method and the industry specific issues or facts that need to be considered in a valuation of a cannabis related business.

There are three major valuation approaches used to value a business.

Asset Method of Valuing Cannabis Companies

The Asset Method estimates the fair market value of a company by subtracting total liabilities from the total assets of the entity, after adjusting the balance sheet to fair market value.

Comparable Company Method of Valuing a Cannabis Company

The Comparable Company Method estimates the value of a business by comparing it to similar transactions that have sold or traded in an open and unrestricted market.

Income Method of Valuing a Cannabis Company

The Income Method estimates the value of a business based on the present value of the company's expected future cash flows. The income approach projects a company's cash flow stream for a given time period and applies a discount rate based on the anticipated risk and growth potential to determine the value of the company.

The Asset Method of Valuing a Cannabis Company

The Asset Method estimates the fair market value of a company by subtracting the total liabilities from the total assets of the firm, after adjusting the balance sheet to fair market value. This is usually the least accurate valuation method for going concern companies because it does not capture the value of any intangible assets, like goodwill, created by the company. As a result, the Asset Method typically provides a minimum value.

When valuing a cannabis or marijuana business, the asset approach is often used to value the following types of companies:

- Holding companies that lease real estate or equipment to marijuana businesses;
- Cannabis/marijuana cultivators (in some cases); and,
- Any marijuana businesses operating at a loss with an expectation that those losses would continue for the foreseeable future.

Holding companies that lease real estate to operating companies can realize a higher value by selling the property than by collecting future lease payments. This is the case when high property values exist relative to low monthly lease payments. In other words, the property may not be put to its highest and best use when leased to a cannabis or marijuana business. If this is the case, we use the Asset approach to value real estate holding businesses. However, if a marijuana cultivator is using land or commercial real estate that could not generate a higher income, the rent payments received may represent the real estate's highest and best use. If this is the case, the asset approach would not be appropriate, and we would value the real estate holding company using the Income Method instead.

Cannabis Industry Issues When Using the Asset Method

Cannabis cultivators and growers are some of the most capital-intensive companies in the marijuana supply chain. The facilities and equipment needed to grow commercial grade marijuana includes indoor grow rooms, intelligent LED grow lights, air filtration systems and exhaust fans, air conditioning, temperature and humidity control systems, CO2 emitting devices, and hydroponic systems. In short, growing commercial grade marijuana can require a significant investment in equipment and facilities before the operation has generated any revenue, much less realized a profit.

Changing regulations, like the imposition of more stringent pesticide testing protocols, can significantly impact the profitability of a cannabis growing operation. Equipment and procedures that were compliant one day can become non-compliant the next day. If the cultivator's products test positive for pesticides, the entire crop can become worthless. For example, in 2016 the State of Washington changed the regulations about the amount of pesticides that could be in cannabis. At the end of that month, The Portland Business Journal reported that out of 72 marijuana businesses in the state, 16 were shutting down and 11 planned to lay off between five and 25 employees due to new these new costly testing requirements.

For cannabis cultivators that are unable to meet changing regulatory requirements, the Asset Method is an appropriate valuation method. The assets assembled by the original owners still have value and can be attractive to companies that have been able to comply with the testing thresholds.

Similarly, marijuana dispensaries that are unable to generate positive cash flow still have value in their underlying tangible and intangible assets. For example, there are two types of intangible assets that often do not show up on a cannabis company's balance sheet: the value of the company's permits and the value of the company's lease.

First, all cannabis related companies are highly regulated and require a variety of different licenses and approvals to operate. Securing these licenses can often take years and cost up to $100,000, including application fees and professional fees. As a result, these licenses and often a significant intangible asset for most cannabis related businesses.

Second, a cannabis related company's lease may represent a valuable intangible asset. In many states, regulations require that marijuana cultivators, processors, and dispensaries be located 1,000 feet from another dispensary and 1,000 feet from a K–12 school. These locations can be difficult to find. As a result, building leases in desirable areas are demanding a premium in the market.

The Comparable Company Method of Valuing a Cannabis Business

The Comparable Company Method, or Comparable Transactions Method, values a marijuana or cannabis related business by comparing it to actual transactions involving comparable companies in an active market. The challenge to using this approach is finding true market comps. To begin with, it is unlikely any two businesses will be similar in all respects. Second, it is extremely difficult to get accurate financial data on closed transactions unless the companies involved were both public companies. Even when the buyer is public, they often don't disclose enough information about the transaction, or the companying being acquired, to allow valuation professionals to calculate how the buyer valued the company.

Even when this information is available, there are three additional shortcomings to this method. First, comparing a publicly traded company to a private owned company requires significant, subjective adjustments on the part of the analyst so the comparison is highly subjective and hence, fundamentally flawed.

Second, the Comparable Company Method assumes the public market is always right. With so much hype and uncertainty around the marijuana industry, market valuations are all over the map and the value of cannabis company stocks changes dramatically from day-to-day. As a result, at Jackim Woods & Co, we rarely use this valuation approach due to the volatility in the public market.

Third, most of the transactions completed to date have occurred during the infancy of an emerging multi-billion-dollar industry. Valuation analysts need to sort through the impact of this unstable period and think about whether any adjustments would be necessary to account for industry fervor and possible strategic acquisitions that have occurred.

At this point, we believe there is insufficient data to use the Comparable Company Method to value a marijuana business. This means that the best way to value a cannabis business is using the Income Method.

The Income Method to Valuing a Cannabis Related Business

The Income Method values a cannabis or marijuana related business by calculating the present value of expected future income or cash flow the company is expected to generate. The two most common variations of this approach are the Capitalization of Earnings Method and the Discounted Cash Flow ("DCF") Method.

The Capitalization of Earnings Method calculates the value of a business by dividing a single year's cash flow by a risk and growth adjusted required rate of return (the "capitalization rate"). The income stream used most often is earnings before interest, taxes, depreciation and amortization, or EBITDA for short. This variation is appropriate when the company's past performance is a good indication of its future performance.

For marijuana businesses, including growers, retailers/dispensaries, and manufacturers, it is unlikely that past performance is indicative of future performance. The industry is growing rapidly but is already experiencing disruptions caused by changes in local and national legislation and regulation, technology, and increased competition. Most of the marijuana companies we have worked with are projecting significant growth in future years, as the industry matures, and their operations improve, but also expect significant volitivity in revenue and earnings.

For businesses that have experienced volatile historical earnings and those undergoing (or projecting) rapid growth, the Discounted Cash Flow or DCF Method is the preferred valuation approach. The DCF Method estimates the value of a business by projecting the company's future cash flows over a discrete time period, and then discounts these cash flows back to their present value using a risk-adjusted rate of return (the "discount rate").

When using the DCF method, the valuation professional relies on management's projections of the company's future revenues, expenses, earnings, and cash flows. At Jackim Woods & Co we like to use a project projection period of three to five years. Projection periods of longer than this become highly unreliable.

It is essential that the forecast used is reliable, supported by specific facts, and checked by an objective, third party. As valuation experts, we work with management to review and test the company's projections before using them in a valuation. This step is crucial, so we'll devote the next section of this white paper to some important areas to consider when creating a management forecast for a cannabis related business.

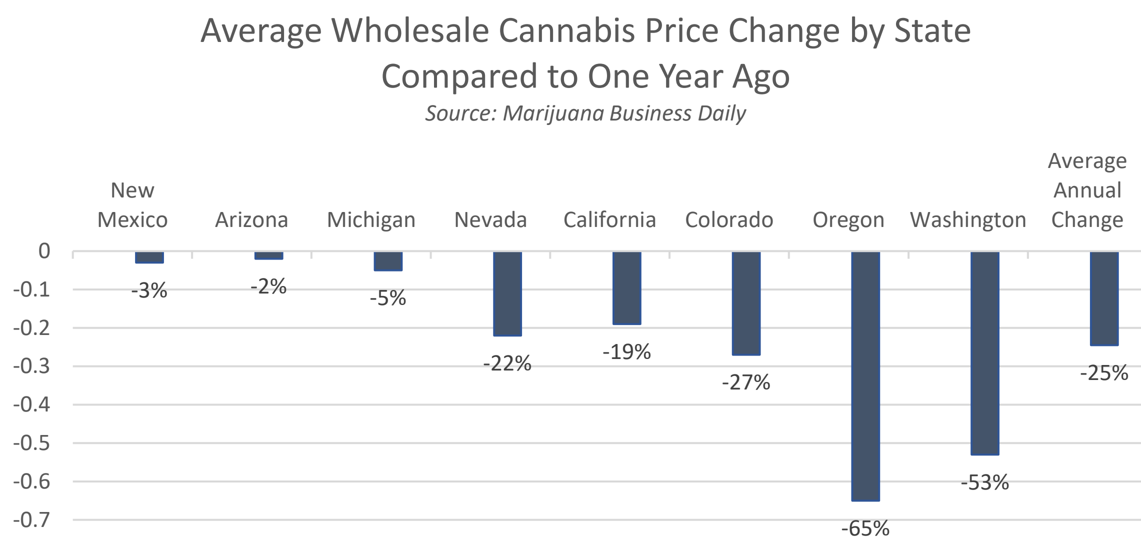
Factors to Consider When Projecting Future Earnings of a Cannabis Business

The following is a list of factors management should consider when putting together a set of projected earnings for a cannabis related business.

1. Growth rate - This could be higher or lower than the historic growth rate. Any assumed growth rate should be supported by specific assumptions. Changes in the competitive landscape and a downward trend in wholesale marijuana prices will have a direct impact on this growth rate.

2. Margins - Margins change as companies grow due to increase operating costs and increased working capital requirements. Any assumed margins should be supported by specific assumptions.

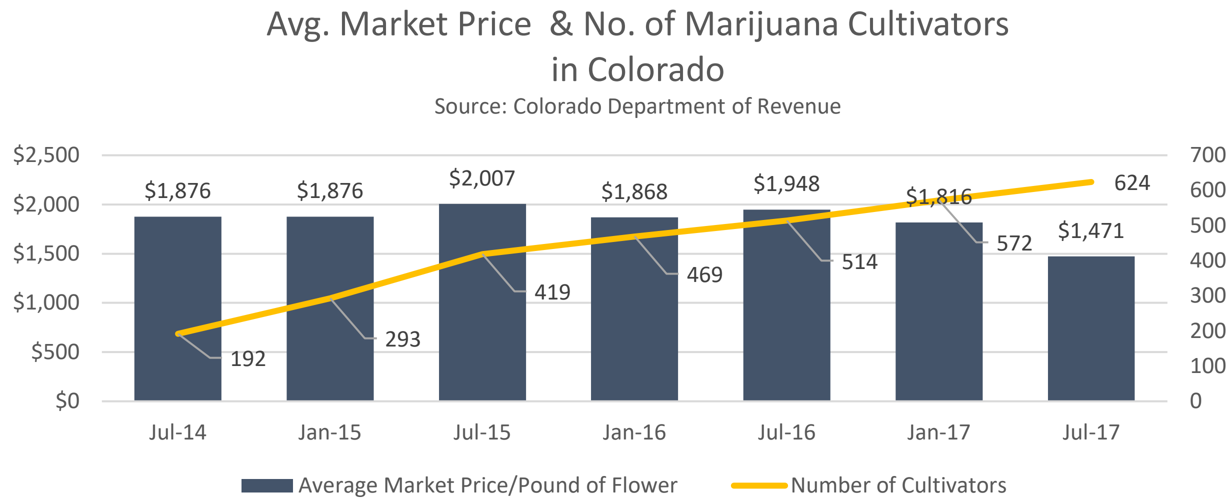
3. Competition - The cannabis/marijuana market is changing rapidly. This means the competitive environment in three years will be very different than it is today. For example, in Oregon, the number of cannabis producer licenses grew from 6 in April 2016 to 848 in November 2017 and the wholesale price of marijuana in Oregon dropped by 65% that year. On average, the wholesale price of cannabis nationwide has decreased by 25% between 2017 and 2018.



4. CAPEX - The largest capital investments are required when you start a business, but each time a company goes through a growth spurt, it may need to expand its physical location or invest in new equipment. Any assumptions about revenue growth should include specific assumptions about the CAPEX and working capital required to support that growth.

5. Changing regulations - The regulatory environment in the cannabis industry can have a significant impact on margins and profitability. Any assumptions about future growth or margins should include an analysis of the potential impact of any pending or proposed regulations.

6. Price of marijuana – The price of marijuana is a major factor in the revenues of a marijuana cultivator or retailer. Increasing cannabis supply could drive prices down from the current wholesale price of $1,000 – $2,000 per pound. The long-term trend suggests that wholesale prices will drop to below $1,000 per pound in 2018. Management's projections should include an assumption that marijuana prices continue this downward trend.



7. Plants – Management should be able to tell the valuation analyst how many plants are growing, the different strains being grown, and the historic dollar yield per plant at the company.

8. Number of days in a crop cycle – In addition to understanding the number of plants being grown, the valuation analyst needs to consider the number of days a crop takes from seed to sale. Cannabis strains take anywhere from 8 weeks to 7 months to flower, so it is important for the valuation analyst to understand which strains are being grown and where each crop is in the cultivation schedule. Using the length of the crop cycle combined with the plant and price information, a valuation analyst should be able to use the build-up method to verify projected revenues.

9. Crop failures – It is important that an analyst consider the company's history with crop failures. Depending on the company, a crop failure could impact anywhere from a few dozen plants to an entire crop. Some of the most common reasons for failures include:

- Accidental introduction of male cannabis plants to female crop
- Excess application of pesticides
- Insect infestations
- Power failures
- Mold development

Depending on the size of a cultivation operation, a crop failure can be devastating – especially if crop failures have not been included in the projections.

10. Regulatory changes – As explained above – in 2016, state regulators in Oregon changed the pesticide testing rules which caused many cannabis cultivators to go out of business. Management should be aware of any pending regulatory changes and what impact they might have on the company's future operations.

Calculating a Discount Rate for Cannabis Companies

When valuing a cannabis company using the Discounted Cash Flow method, the second key assumption is calculating an appropriate discount rate. The discount rate reflects the required rate of return by investors considering the time value of money and the uncertainty associated with the company's future cash flows. The greater the uncertainty, the higher the risk and the higher the discount rate. A high discount rate means a lower value. Correspondingly, the lower the risk, the lower the discount rate, and the higher the value.

Companies in the cannabis industry are pioneers in one of the fastest evolving industries in the world. The rules and regulations are changing all the time. As a result, in addition to the risk factors that apply to businesses in general, the following cannabis or marijuana industry risks must also be considered when valuing a business within the marijuana industry:

1. Competitive Risk – the cannabis industry is a highly fragmented market, making it difficult to determine who the winners and losers will be.

2. Small-Company Risk – generally smaller companies are riskier than larger companies and the majority of marijuana companies today are small, privately owned businesses.

3. Regulatory Risk – the federal government has been a passive bystander as states have legalized medical and recreational marijuana despite the fact that marijuana is still listed as a Schedule 1 drug. It is currently within the federal government's power to prosecute marijuana growers and retailers, although with the passage of the 2018 Farm Bill and the legalization of hemp at the federal level as an agricultural crop, many investors believe that marijuana will be legalized at the federal level within 5 years.

4. Financial Institution Risk – Very few banks are willing to work with companies in the cannabis industry for fear that the federal government could revoke a bank's FDIC status. While this seems unlikely, the mere threat of losing FDIC status has kept most national banks from allowing cannabis related businesses to open business accounts or provide loans to marijuana businesses. Without support from financial institutions, many private equity funds have been reluctant to get involved as well. Marijuana businesses are left with a few state-chartered banks and non-traditional lenders as well as private investors as the primary source of funding for the entire industry.

5. Barriers to Entry Risk – The barriers to entry in the cannabis industry are relatively high given the highly regulated nature of the industry and the fact that there are a limited number of licenses for dispensaries and cultivators in each state. That said, the barriers to entry are likely to be different in the future as regulations ease and the number of licenses increases.

6. Distribution channels – It is important to understand a company's distribution channel and customer base. A cannabis grower that is dependent on just a few retail stores or one distributor has high risk.

7. Supply Chain – When valuing a recreational marijuana store or a dispensary it is also important to understand the company's suppliers to evaluate how reliable the source of supply is; a suppliers' ability to pass pesticide testing; and any redundancies in the supply chain if there is a disruption in the primary supplier's business.

8. Changing Tax Status – When valuing a marijuana dispensary, it is important to understand the tax risk associated with Section 280E of the Federal Tax Code. Section 280E states that:

> *"No deduction or credit shall be allowed for any amount paid or incurred during the taxable year in carrying on any trade or business if such trade or business … consists of trafficking in controlled substances (within the meaning of schedule I and II of the Controlled Substances Act) which is prohibited by Federal law or the law of any State in which such trade or business is conducted."*

In other words, deductions for tax purposes are limited to only Cost of Goods Sold ("COGS") for schedule I and II drugs. For marijuana growers, most expenses can be pushed to COGS, but for marijuana dispensaries, COGS is limited to the actual cost of the marijuana product. All expenses, including salaries, rent, advertising, etc. are not deductible. As a result of Section 280E, a cannabis business could be taxed on more than its net earnings.

9. Form 8300 Audits – Form 8300 is used to report cash payments over $10,000 received in a trade or business. Because of state and federal banking limitations, many transactions in the marijuana industry are still done in cash, and there have been many audits related to companies failing to file the appropriate Form 8300.

10. Reliability of Data – Recreational marijuana stores and dispensaries are involved in many small cash transactions that can be difficult to track. Growers are generally involved in fewer, larger cash transactions. In either case, working with cash increases the risk that not all cash is being tracked properly. A good valuation analyst will understand the company's revenue generating and tracking ability.

After considering these risks, many valuation analysts agree that marijuana company discount rates should be as high as 40-45%. That is high compared to a typical small business that has a discount rate of between 15 – 35%. But in our practice, we've observed discount rates for marijuana companies have ranged from 15% to 50%. The bottom line is the discount rate is company specific so it is important to work with a valuation professional who understands the cannabis industry and your business in order to determine the appropriate discount rate.

Cannabis Industry Valuation Rules of Thumb

Rules of thumb are easy to use but notoriously inaccurate because they don't consider any risk factors unique to the business being valued. That said, because they are easy to apply, they are often used to get a ballpark idea of value.

There are two rules of thumb in the cannabis industry that we often hear.

Value = 4 to 6 times EBITDA

Value = 1-2 times Revenue

Of course, where a company is within this range depends on its specific facts. For example, a company with a 20-25% EBITDA margin and flat growth would likely sell at the bottom end of this range. Whereas the same company with slightly lower margins but a 30% annual growth rate might sell at the high end of this range.

The Strategic Value of a Cannabis Related Company

So far, this white page has focused on what is referred to as fair market value. This is a hypothetical value based on what a willing buyer and a willing seller, might agree to. However, in the real world, when one company acquires another company, the purchase price is often well above fair market value. We've all read headlines about cannabis companies that are losing money that sell for tens of millions of dollars. This is where the concept of strategic value kicks in.

According to Rich Jackim, managing partner at Jackim Woods & Co., "strategic buyers can, and often do, pay more than fair market value because they expect to realize synergies and economies of scale from the companies they acquire. These synergies can result from eliminating redundant expenses, cross-selling products and services, or gaining access to new markets. Each of these can potentially increase future cash flows."

Strategic value depends on what the buyer can do with the company being acquired. As a result, the strategic value of a company will be different for each buyer since each brings a different set of opportunities to the table. Strategic buyers who already own companies in the cannabis or related industries are much more likely to be able to realize this strategic value than a financial investor. In the cannabis industry, the headlines have been filled with examples of vertical integration strategies with many growers acquiring dispensaries to control their retail distribution channel. The inverse is also true. Companies that own chains of dispensaries have been buying cultivators to ensure they have a steady supply of product.

When preparing a valuation for a buyer in the cannabis industry, we adjust the target company's existing and projected cash flows to account for any synergies or economies of scale the strategic buyer expects to make to the business.

As you might expect, buyers are reluctant to pay a seller for the synergies the buyer brings to the table, but according to Jackim, "that's where the negation starts. There is often a middle ground that allows the seller to realize full value for his company, while protecting the buyer by having the seller share in the risk that the potential synergies may not be realized. That's why working with an M&A advisor with experience in the cannabis industry is so important when you're selling a cannabis-related business."

These are just a few thoughts on the Income Method and consideration of discount rates for a marijuana business. If you'd like to know more, please contact us. We'd be happy to have a conversation with you.

By Rich Jackim, Managing Partner at Jackim Woods & Co.

Jackim Woods & Company is a boutique mergers and acquisitions firm that serves buyers and sellers of cannabis-related companies. With over 25 years of experience, the principals at Jackim Woods & Co have been involved in over 70 transactions with a combined market value of over $2 billion. If you would like to explore your options, please contact Rich Jackim at 224-513-5142 or rjackim@jackimwoods.com for a free, confidential consultation.