# Table of contents

- Executive summary .................................................................................................................. 2
- Section 1: Cannabis 101 ........................................................................................................ 3
- Section 2: Projected growth of the cannabis market ............................................................... 7
- Section 3: The politics of cannabis in the U.S. ....................................................................... 11
- Section 4: Unique characteristics of the cannabis industry as an investment opportunity ........... 16
- Section 5: The public cannabis markets ................................................................................... 19
- Section 6: Investors in ancillary businesses can avoid several risks that plant-touching investors will face today.... 23
- Section 7: Conclusion .............................................................................................................. 26
Executive summary

In 2012 Colorado and Washington State pioneered the legalization of adult-use cannabis at a time when federal cannabis legalization was still a farfetched concept. Fast forward — as of September 2019, 33 states and the District of Columbia have legalized medical cannabis, and 11 states and the District of Columbia have legalized adult-use cannabis. Today, we believe that the lift of federal prohibition of cannabis is inevitable as the regulatory momentum continues to accelerate in favor of legalization.

We’ve seen countless pro-cannabis events occur over the past year in both the investment and political spaces. In August of 2018, Constellation Brands announced the largest ever cannabis investment in the well-known Canadian cannabis company Canopy Growth. This $4 billion investment by Constellation Brands was larger than all previous legal investment in private U.S. cannabis companies combined. Shortly thereafter, in October of 2018, we saw Canada become the first G7 nation to legalize recreational cannabis at the federal level. The federal legalization of adult-use cannabis in Canada turned heads across the U.S., and the topic of U.S. federal legalization began gaining momentum and popular support. Canada’s move was truly a landmark milestone, as it brought the topic to the forefront for U.S. politicians and offered a blueprint for U.S. federal legalization. In December of 2018, the U.S. Congress passed the Farm Bill to legalize hemp and hemp-derived cannabidiol (CBD) nationwide. The SAFE Banking Act, a piece of legislation aimed at preventing federal banking regulators from punishing banks for working with cannabis-related businesses that are obeying state laws, was introduced to the U.S. Congress in April of 2019. By May the legislation had a whopping 172 co-sponsors in the House and 25 co-sponsors in the Senate. Many familiar with the SAFE Banking Act have indicated it is likely to pass within the next year.

*Illinois recently legalized recreational cannabis. The law will go into effect on January 1st, 2020.

Medical & Recreational Cannabis Legalization Since 1996

In this white paper, we analyze the growth of the U.S. cannabis market and explain why we believe it is one of the most attractive investment opportunities of our generation. We identify the characteristics of the U.S. cannabis market and the unique advantages of investment in U.S. cannabis companies as compared to other alternative investments. We have concluded that given the projected growth of the cannabis industry, the existing large funding gap in the cannabis market and the apparent inevitability of federal legalization, investors in cannabis businesses today will have the opportunity to achieve superior risk-adjusted returns compared to other asset classes.

Section 1: Cannabis 101

Hemp versus marijuana

One of the most important and frequently misunderstood distinctions in the cannabis industry is that of hemp versus marijuana. Semantically, hemp refers to cannabis bred for a variety of commercial items and industrial uses, including paper, clothing, biodegradable plastics and biofuel. Marijuana, on the other hand, refers to cannabis strains bred for the potent, resinous glands that grow on the flowers and leaves.

From a legal perspective, the distinction is much more complicated. The delineation is based on the levels of the two most commonly known cannabinoids: CBD and delta-9 tetrahydrocannabinol (THC). CBD is the non-psychoactive cannabinoid that has been shown to lessen the psychoactive components of THC and provide significant medical benefits. THC, on the other hand, is the psychoactive cannabinoid that gets consumers high.

The generally accepted, international definition of hemp refers to cannabis strains with less than 0.3% THC, levels so low that no one could get high from smoking it. Moreover, since industrial hemp is high in CBD, THC’s psychoactive effects are counteracted to a certain degree in the plant. Despite this fact, since 2001 until recently, the Drug Enforcement Agency (DEA) had banned all products sourced from hemp containing any trace amount of THC. As such, in the U.S. there had been no legal distinction between hemp and marijuana, and 98% of DEA-destroyed cannabis is hemp (by definition), which, as stated above, has no ability to get consumers high and could instead be used for a variety of industrial purposes. In an influential turn of events in September of 2018, the Food and Drug Administration (FDA) approved and the DEA subsequently rescheduled Epidiolex, a CBD-based medicine used for treatment of patients with certain forms of epilepsy.

That brings us to the Farm Bill, passed by the U.S. Senate and the House of Representatives in December of 2018. Once President Trump signed the bill into law, the bill decriminalized hemp nationwide. The bill disaggregates the legal definition of hemp from marijuana and redefines hemp as cannabis with less than 0.3% THC. Additionally, it allows hemp farmers to use the U.S. banking system and to ship their product across state lines.
The move is a giant leap in the right direction toward clarifying this historic legislative misconception and toward creating a legal market for hemp farmers nationwide.

**Dispensary products**

People use cannabis and its medicinal compounds, called cannabinoids, for both medical and recreational purposes. As stated in the previous section, the two most well-known cannabinoids are THC (delta-9 tetrahydrocannabinol) and CBD (cannabidiol). They have different effects, most notably that THC has a psychoactive effect, while CBD does not. Every product on a dispensary shelf today will contain varying levels of both CBD and THC and will induce a different effect when ingested:

- **Psychoactive**: High THC, low CBD (e.g., 10-30% THC, trace amounts of CBD)
- **Less psychoactive**: Balanced CBD/THC (e.g., 5-15% THC and CBD)
- **Nonpsychoactive**: High CBD, low THC (e.g., 5-20% CBD, trace amounts of THC)

Products with a high CBD and low THC generally reduce anxiety, control pain/inflammation and leave the consumer functional. Products with high THC and low CBD generally have a more euphoric effect that leaves the consumer high.

When thinking about how to invest in the cannabis market, it is important to become familiar with the types of products offered in dispensaries, as these products will drive the growth of the entire ecosystem of cannabis businesses going forward. The below list highlights the different types products a customer is likely to see when walking into a dispensary today:

- **Flower**: The traditional marijuana flower buds are cut, dried and cured for consistency and consumption. The flower is often rolled into joints or smoked out of glass pipes.
- **Concentrates**: Concentrates are highly potent cannabis extracts. They come in a variety of forms, including wax, shatter, hash and resin, that are quite strong and require the use of special equipment to burn. Concentrates are generally smoked by heavier marijuana users.
- **Vaporizers**: The most common vaporizers are battery-powered, pen-shaped devices that are more discreet than other methods of smoking. They are usually odorless and portable, and the device vaporizes marijuana oil (out of a cartridge), releasing the active compounds and leaving behind the contaminates found in smoke. Because no combustion takes place, inhaling from a vaporizer is not as harsh on the throat and lungs due to the lower temperature of the smoke.
- **Edibles**: Edibles are a method of consuming marijuana without smoking it. Generally, edibles are easier to dose and are discreet. They come in the form of gummy candy, chocolate, beverages or capsules with premeasured amounts of CBD and THC in each serving. Edibles generally have stronger effects than smoking but take longer to enter the bloodstream since digestion is required.
• **Prerolls**: Prerolls are simply joints that have already been rolled before they are sold. They come in a wide variety of different strains.

• **Topicals**: Topicals are balms, lotions, creams, sprays, patches and bath products used solely for external application on the skin. Generally, topicals are non-psychoactive and are good for consumers who prefer a high-CBD and low-THC product, usually for pain relief on a specific area of the body.

• **Drops**: Drops are concentrated cannabis-infused tinctures. If a user does not want to smoke or prefers a low-calorie alternative to edibles, drops are a good option.

**Medical marijuana**

While many consumers use cannabis recreationally, what separates the cannabis market from other comparable markets like beer, wine or tobacco is that cannabis is believed to have medicinal applications. Up to this point, little research has been done around the medicinal uses of cannabis because the federal government currently classifies it as a Schedule I substance, which makes researching the plant extremely difficult. For someone to conduct research on a Schedule I drug in the U.S., three federal agencies must approve the study before it moves forward to a clinical trial: the DEA, the FDA and the National Institute on Drug Abuse. After a study is conducted, for cannabis to be approved for medicinal use, there must be at least one randomized, double-blind, placebo-controlled clinical trial that proves cannabis is effective in treating a specific medical condition.

Below are the most common (but still unproven) uses for medical cannabis in the U.S. today:

1. **Pain control**: Cannabis is not strong enough for severe pain (broken bones, post-surgical pain) but is effective for the chronic pains that plague millions of Americans. Cannabis is considered safer and less addictive than opiates and can also be taken as an alternative to NSAIDs, such as Advil or Aleve.

2. **Multiple sclerosis**: Currently, there are few effective options to treating nerve pain other than Neurontin, Lyrica or highly sedating opiates. Patients have claimed cannabis allows them to resume the activities of daily living while not feeling overwhelmed by the side effects of powerful pharmaceutical drugs. It has been reported that cannabis is an extremely effective muscle relaxant.

3. **Epilepsy**: The FDA recently approved a drug called Epidiolex (derived from CBD) as a method to treat people with severe seizures. Some people show a large drop in the frequency of their seizures while taking the drug.

4. **Parkinson’s disease (tremors)**: As stated, cannabis is known as an effective muscle relaxant, and many people with Parkinson’s disease are convinced that it significantly lessens their tremors.

5. **Post-traumatic stress disorder (PTSD)**: Many veterans and their therapists have reported cannabis to significantly help in the management of PTSD.

6. **Anorexia, nausea and weight loss**: THC reaches the area of the brain that affects appetite and subsequently stimulates eating. While this effect has translated into the non-medical slang term *marijuana munchies*, it also provides a treatment option for eating related conditions.
Interestingly, the reason cannabinoids have so many potential medical uses is because they have a similar chemical makeup to the chemicals the human body naturally produces that are involved in memory, appetite, movement and pain. After the lift of federal prohibition, institutions will no longer be required to receive DEA approval to perform research studies. This will open the door to medical marijuana funding and enable proper research of the plant. Until this funding is available, it remains hard to estimate exactly how large the medical cannabis market could grow.

In our opinion, given that only two of over 113 identified active cannabinoids are discussed today, it is reasonable to assume at least some additional medical uses will be discovered once studies can be commissioned freely. However, due partly to the current regulatory risk associated with investment in the medical cannabis space, KEY Investment Partners LLC has decided to focus our investment strategy on the high growth subsectors within adult-use cannabis while we wait for cannabis to become federally legal.

“It Remains Hard To Estimate Exactly How Large The Medical Cannabis Market Could Grow”
Section 2: Projected growth of the cannabis market

Global cannabis spending

According to BDS Analytics’ *State of the Legal Cannabis Markets, 7th Edition* market report, between when Colorado first legalized adult-use cannabis in 2014 and 2018, legal cannabis sales rose from $3.4 billion to $10.9 billion (33.8% CAGR). Since then, the gradual rollout of legalization in other state markets has put the industry in a position for steady growth over the next six-plus years. Global legal consumer spending is expected to accelerate to a 36% year-over-year growth rate in 2019. Additionally, BDS Analytics has projected global legal consumer spending to grow from $10.9 billion in 2018 to $40.6 billion in 2024, a 24% CAGR (see chart below).

North America will continue to dominate the vast majority of legal spending as more U.S. states transition from medical only (limited patient pool) to adult use (all adults over age 21). In 2018 legal cannabis spending in North America was estimated to be around 95% of total global spending. By combining an analysis of historical trends with their forecast for the future, BDS Analytics indicates that the cannabis market is slated for massive growth over the next six-plus years. A few of their findings:

- U.S. consumer spending will grow from $9.8 billion in 2018 to $30 billion in 2024 (a 20% CAGR over a six-year period).
- Global medical spending will grow from $4.8 billion in 2018 to $13.9 billion in 2024 (19% CAGR over a six-year period).
- Adult-use spending will be the primary force that pushes the growth of the industry. Adult-use sales were 56% of total sales in 2018; BDS Analytics expects this number to grow to 66% of total sales by 2024.

![Projected Global Consumer Spending By 2024: $40.6 Billion](chart)
**U.S. adult-use market snapshot**

The legal U.S. adult-use markets continue to generate large amounts of revenue, a trend that we expect to continue over the next six-plus years. In 2018 California and Massachusetts began sales of adult-use cannabis; however, these states did not meet original expectations. California had several issues with confusing regulations and high taxation that has stunted the growth of legal cannabis sales ($2.5 billion 2018 actual sales vs. $3.7 billion projected sales). Additionally, in California the black market continues to be a huge problem for the state. According to an article written by CNBC earlier in 2019, Cameron Wald (EVP of Project Cannabis) claims that illegal dispensaries can sell the same product as a legal store for nearly 40% less. Massachusetts missed the start deadline to sell adult-use cannabis and didn’t begin sales for the year until December. Although it took longer than expected for both states to kick off their adult-use programs, we expect both markets to grow in 2020 and drive U.S. adult-use sales, as they remain two of the largest markets in the globe.

Per the figure below, BDS Analytics expects the number of states with legal adult-use cannabis to more than double over the next five years.

**Projected Adult-use State Legalization Through 2023**

For illustrative purposes only. Actual results may vary.

Source: KEY Investment Partners, 2019

Key Investment Partners LLC | Denver, Colorado
CONFIDENTIAL: NOT INTENDED FOR GENERAL DISTRIBUTION
U.S. medical market snapshot

In 2019 we expect five states to begin their sales of medical marijuana: Ohio, West Virginia, Louisiana, North Dakota and Arkansas. One unique characteristic of medical marijuana state markets is that medical spending generally decreases over time once adult-use cannabis is legalized in the same state. Given the current political momentum, BDS Analytics believes there is a “strong likelihood” that all U.S. states and four of its territories will have medical marijuana programs by the end of 2024 as shown in the figure below.

Projected Medical State Legalization Through 2023

Source: KEY Investment Partners, 2019
For illustrative purposes only. Actual results may vary.
How do cannabis markets develop?

As with many other markets, a new cannabis market can be characterized by three separate phases: 1) inception, 2) hypergrowth and 3) maturity.

1. **Inception phase**: In the inception phase, state governments outline the basic rules and regulations of the market. This phase varies in length since states take different amounts of time to set regulations. California, for example, took considerably longer than most other states due to the restrictive laws and confusing regulations between jurisdictions. Oklahoma, on the other hand, had a short inception period due to few regulatory obstacles.

2. **Hypergrowth phase**: After the supply chain is regulated, there is normally a spike in growth of the cannabis market — the hypergrowth phase. During this phase, more advanced and recognizable products, like vaporizer pens, THC gummies and topicals, appear on dispensary shelves. At this point in the development of the market, it’s not uncommon for issues to arise between state and local governments.

3. **Maturity phase**: A mature cannabis market is quite similar to any other mature market: As the market becomes saturated, growth slows and the price of flower decreases heavily. Usually this is accompanied by low single-digit year-over-year growth rates. It is not uncommon for once profitable mom-and-pop dispensaries and cultivators to go out of business due to larger players entering the market.
Section 3: The politics of cannabis in the U.S.

**Why is cannabis federally illegal in the first place?**

To understand the cannabis legislative environment today, it’s important to understand why cannabis was outlawed in the first place. There was no such thing as an illegal drug in the U.S. until the early 20th century. Cannabis was in the *United States Pharmacopoeia* from 1854 to 1941. It was one of the three ingredients most used in patent and prescription drugs, and it was produced by many leading pharmaceutical companies, including Squibb, Merck, Parke-Davis and Eli Lilly.

In 1914 the Harrison Narcotics Tax Act became the first federal law criminalizing the nonmedical use of drugs. The act outlawed the sale of cocaine and opiates but did not include anything about cannabis usage. However, the government’s laissez faire approach to cannabis would change over the coming years.

From 1910 to 1920, Mexico underwent a series of conflicts known collectively as the Mexican Revolution, which drove tens of thousands of Mexicans north into the United States looking for safety and work. This influx of laborers created a backlash from white farmers and ranchers who could not keep up with the larger ranchers who economically benefitted from this cheaper Mexican labor. During this time, several Southwestern states passed economically and racially motivated anti-marijuana laws since marijuana was widely used among Mexican workers. Enforcing these laws provided a way to force cheap Mexican labor back across the border to gain a leg up on their competition. It was during this time that anti-drug proponents swapped the commonly used term *cannabis* for *marijuana* or *marihuana*.

In 1930 Harry Anslinger was appointed as the first director of the U.S. Treasury Department’s Federal Bureau of Narcotics (no DEA existed) that was tasked with enforcing the prohibition of alcohol and illicit drugs. Alcohol prohibition began in 1920 with the passage of the 18th Amendment to the U.S. Constitution. Anslinger’s critics claim that once it was repealed in 1933, he needed a new target to ensure a prominent future for his department, and cannabis seemed like the natural choice. He was a known racist who made several inflammatory statements, including:

*There are 100,000 total marijuana smokers in the U.S., and most are Negroes, Hispanics, Filipinos and entertainers. Their Satanic music, jazz and swing result from marijuana use. This marijuana causes white women to seek sexual relations with Negroes, entertainers and any others.*

Anslinger launched a national campaign to assail the so-called evils of marijuana that culminated in 1937 with the passage of the Marijuana Tax Act. The act imposed such heavy restrictions that it effectively outlawed cannabis and was passed despite the American Medical Association’s (AMA) testimony to the House Ways and Means Committee. “The AMA knows of no evidence that marijuana is a dangerous drug,” stated the AMA’s spokesman, Dr. William Woodward. “We cannot understand yet, Mr. Chairman, why the bill should have been prepared in secret for two years without any intimation, even to the profession, that it was being prepared.” However, when the discussion was brought to the full floor of the House of Representatives, Representative Fred Vinson of Kentucky turned Dr. Woodward’s testimony upside down by claiming that the AMA fully supported the Marijuana Tax Act.
This effective ban on cannabis was codified into law in 1970 via the Controlled Substances Act (CSA) and was followed by Richard Nixon’s infamous formal declaration of the “War on Drugs” in 1971. The CSA divided drugs into five schedules, from least medically useful and most susceptible to abuse, to more medically valuable with less abuse potential. Cannabis was placed in the most restrictive category, Schedule I. This was intended to be a temporary designation until Nixon and Congress’ appointed commission (the National Commission on Marijuana and Drug Abuse) completed its report on effective drug policies. The report came out in 1972 and recommended legalizing the recreational use of cannabis, concluding,

_The most notable statement that can be made about the vast majority of marijuana users — experimenters and intermittent users — is they are essentially indistinguishable from their non-marijuana using peers by any fundamental criterion other than their marijuana use._

Nixon disregarded the recommendation of the report and kept cannabis classified as a Schedule I substance anyway. One of Nixon’s aides, John Ehrlichman, later provided context as to why the administration went against the commission’s recommendation:

_The Nixon campaign in 1968, and the Nixon White House after that, had two enemies: the antiwar left and black people ... We knew we couldn’t make it illegal to be either against the war or black, but by getting the public to associate the hippies with marijuana and blacks with heroin, and then criminalizing both heavily, we could disrupt those communities ... We could arrest their leaders, raid their homes, break up their meetings and vilify them night after night on the evening news. Did we know we were lying about drugs? Of course we did._

The wheels of regulatory change finally started to turn in 1996 when California became the first state to legalize the medicinal use of cannabis. In 2012 Colorado and Washington became the first states to legalize recreational use of cannabis. Thirty-three states and Washington, D.C., had legalized medicinal use of cannabis by September 2019, and 11 states and Washington, D.C., had legalized recreational use of cannabis by then.

However, because marijuana remains a Schedule I substance under the Controlled Substances Act, an inherit conflict still exists between federal law and state law in these states.

---

**America’s War on Drugs – A Timeline**

1971 - Richard Nixon declares a war on drugs, calling drug abuse “a public enemy number one.”

1973 - The Drug Enforcement Agency (DEA) is created to help other agencies combat drug abuse.

1984 - Nancy Reagan begins the “Just Say No” campaign for children to avoid drug use.

1986 - The signing of the Anti-Drug Abuse Act of 1986 creates mandatory legal penalties for various drug offenses, which many criticize as contributing to racial disparity in prisons.

1989 - Crack cocaine is involved in 46% of all arrests in New York City.

1992 - The number of illegal drug users in the U.S. drops to 12 million. This number would rise to 16 million in 2001.

2008 - The Office of National Drug Control Policy finds that illegal drug use among middle and high schoolers has dropped to a low of 14.8%.

2012 - Colorado and Washington state legalize the use of marijuana. They are followed by Alaska and Oregon in 2014.

Source: Mirimar, 2015
**When and how could cannabis become federally legal?**

The political mechanism most often associated with cannabis legalization is an amendment to the Controlled Substances Act of 1970. Officially, the U.S. federal government still considers marijuana to be a Schedule I controlled substance — something with “no accepted medical use” and a high possibility of abuse and physical or psychological dependence. That one legal designation alone has far-reaching consequences on cannabis operations because it restricts not only human consumption, but also industrial uses of the plant material and research into further applications. To change this, Congress would need to amend this part of the law.

An amendment to the law could take several forms, but regardless of the form, a sponsor would first have to draft and introduce it in either the House or Senate. From there, the bill would make its way through various committees as lawmakers agreed on the specific statutes within the law.

If the bill clears the committee, it would then need to be brought to the floor of its chamber of origin for debate and a full vote. Assuming politicians in the original chamber agreed on the letter of the law and passed the bill, it would then go to the other chamber of Congress for the same process. This can often be a drawn-out affair as politicians use this time to introduce their own pet projects and negotiate between their respective constituencies. After the bill passes both houses of Congress, it would go to the president’s desk for his signature or veto.

Although this is the most traditional way cannabis could experience legalization, it could also take the longest. Something more benign and commerce related, such as banking reform or strengthening the 10th Amendment, are alternatives.

Another stepping-stone toward legalization could be passing the Marijuana Opportunity Reinvestment and Expungement (MORE) Act. The MORE Act, introduced in July of 2019 by Rep. Jerrold Nadler (D-N.Y.) and Sen. Kamala Harris (D-Calif.), is the latest bipartisan bill attempting to decriminalize marijuana at the federal level by removing it from the Controlled Substances Act. The new act will effectively allow states to set their own policies regarding marijuana regulation.

The MORE Act is distinguished from the commonly known Marijuana Justice Act through the MORE Act’s additions of social justice provisions. Expungement of prior marijuana-related convictions and the initiation of a 5% sales tax on marijuana products to create an opportunity trust fund to provide social and economic support for communities most damaged by the War on Drugs are just a couple aspects hailed by cannabis advocacy groups. Despite clear roadblocks, the MORE Act and the Marijuana Justice Act can be viewed as significant regulatory stepping-stones. The 116th Congress is arguably the most marijuana-friendly Congress to date,
with “no fewer than 61 cannabis-focused bills filed in the first seven months of Congress,” according to Forbes’ Tom Angell, a 15-year veteran of the cannabis law reform movement.

Another pathway toward federal legalization is more gradual: As an increasing number of states legalize cannabis each year, legislation like the STATES Act continue to progress. States are technically able to pass their own cannabis legalization measures — as many have. The resulting legal contradictions between state and federal laws place this issue firmly under the purview of the 10th Amendment.

In simple terms, the 10th Amendment states that any powers not explicitly outlined by Congress are left to the states and to the people; in other words, it defines the separation of powers between federal and state governments. In states where cannabis is legal and thus in direct contradiction of federal law, the 10th Amendment is naturally at the forefront of the discussion.

What is the federal government’s policy on states where cannabis is legal? The answer starts in a memorandum issued on August 29, 2013, by then Deputy U.S. Attorney General James M. Cole during the presidency of Barack Obama. The memo, nicknamed the Cole Memo, stated that given its limited resources, the Department of Justice would not enforce federal marijuana law in states that had legalized its use in some form, essentially giving state-legal cannabis businesses the green light to operate in compliance with their state’s law.

However, after Jeff Sessions became attorney general in 2016, he rescinded the Cole memo. That leaves the U.S. in a grey area today and exemplifies the uncertainty cannabis entrepreneurs and investors find themselves in.

In response to the rescinding of the Cole Memo, cannabis advocates, led by Sen. Cory Gardner (R-Colo.), drafted the Strengthening the Tenth Amendment Through Entrusting the States (STATES) Act. It would formally recognize the legality of cannabis businesses operating in states where it was legal, and prevent the federal government from harassing them or shutting them down — essentially codifying the Cole Memo into law.

The effect would be to standardize the federal government’s policy toward cannabis in a way that would transcend the changing political climate and shifting partisanship from administration to administration. Even more promising is the fact that President Trump, Treasury Secretary Mnuchin and Attorney General William Barr have all voiced their endorsement for the STATES Act.
Even without the passage of the STATES Act or the MORE Act, or an amendment to the Controlled Substances Act, cannabis capital markets could experience a windfall on the heels of cannabis banking reform. It would allow federally chartered financial institutions to invest in the state-legal cannabis industry that is already generating annual revenues of over $10 billion in the U.S. alone.

The current operations of legal cannabis businesses could almost be mistaken for their black market predecessors insofar as they are forced to operate in cash. Current federal legislation exposes any banks that do business with cannabis companies to the risk of losing their federal charters, and cannabis companies are unable to access the services of major payment processors such as Visa, Mastercard and PayPal. The effect of having all this cash on hand quickly becomes a burden shared by many. Not only do cannabis companies have to invest heavily in security that other businesses do not need, the IRS has even had to build “cash rooms” to accommodate the sheer volume of cash inflows made by cannabis companies paying their taxes. Federal legislators are finally realizing just how problematic this is.

*In May of 2019, the House Financial Services Committee voted 45-15 in favor of a bill that would prevent the federal government from revoking the federal charters of banks and credit unions for accepting cannabis businesses, including an amendment extending those protections to insurers. Known as the SAFE Banking Act, the bill boasts 165 co-sponsors, including 17 Republicans. In addition to the efforts in the House, Sens. Cory Gardner and Jeff Merkely (D-Ore.) filed companion legislation in the Senate that would shield banks that hold accounts for state-legal cannabis businesses.*

The SAFE Banking Act has broad support, including from the American Bankers Association, Credit Union National Association, Independent Community Bankers of America, Law Enforcement Action Partnership, the Electronic Transactions Association, the National Cannabis Industry Association, Mid-Size Bank Coalition of America, The Real Estate Roundtable, and various U.S. trade associations, such as the American Land Title Association, American Property Casualty Insurance Association and the Reinsurance Association of America. PayPal, Constellation Brands and 18 other corporations are engaging in lobbying efforts to support the bill as well. Additionally, on April 15, 2019, financial regulators from 25 states, both red and blue, signed a letter to Congress urging them to support the measure:

*It is incumbent on Congress to resolve the conflict between state cannabis programs and federal statutes that effectively create unnecessary risk for banks seeking to operate in this space. The looming threat of civil actions, forfeiture of assets, reputational risk, and criminal penalties is not conducive to a legal, regulated marketplace. We urge Congress to consider legislation that creates a safe harbor for financial institutions to serve a state-compliant business or entrusts sovereign states with the full oversight and jurisdiction of marijuana-related activity. Establishing a safe harbor for banks to serve these entities would help reduce the risk associated with large cash-and-carry operations and bring the safeguards, activities, and sales associated with this business into the regulatory reporting compliance framework. We must work together to look for solutions rather than ignoring the new policy landscape.*

It’s clear that there are many different legal mechanisms that would open up the cannabis markets for the consumer and retail industry, as well as for the financial services industry and business-to-business economy. What many do not fully appreciate today is the sheer amount of activity around these reforms, both on Capitol Hill and in capitol rotundas at the state level across the country.
Section 4: Unique characteristics of the cannabis industry as an investment opportunity

There are several unique characteristics of cannabis companies and the U.S. cannabis market that make investments in the space attractive today. We believe these characteristics have created a window of opportunity that will exist only for a short period, likely over the next three to six years.

1. The global cannabis market has an embedded black market demand of approximately $90 billion. In an emerging market, an investor typically spends a significant amount of time estimating the total addressable market for the product or service a target company provides. Even with thorough analysis, it is difficult to evaluate how large an emerging market will grow to maturity. Unique to the cannabis industry is the fact that there is a relatively good idea of the demand for the product since the plant has existed in the illegal market for the past one hundred or so years. Understanding the total embedded demand in the market de-risks cannabis investments since an investor can more accurately estimate the total addressable market in the future. Additionally, when thinking about how large the market may become at maturity, we must factor in the additional demand from new form factors not readily available on the black market as well as new consumers who want cannabis but refuse to purchase it illegally. In other words, since black market demand estimates consider only the amount of flower demand from consumers who are willing to purchase marijuana illegally, we believe the transition of illegal demand to legal demand is greater than a 1:1 ratio.

2. The cannabis industry is constrained for capital, which has created a material funding gap. Private U.S. cannabis companies have annual capital needs of $13 billion to $23 billion but are receiving only approximately $4 billion in funding (approximately 15 to 30% of their capital needs) today. This material funding gap creates an opportunity for early investors, as it allows access to deals that may not be available in an industry with access to enough capital.

For comparison, a similar emerging industry such as artificial intelligence (AI) has far more institutional dollars chasing

---

Estimated Global Cannabis Market

Estimated Global Cannabis Market based on average of two estimates: 1) The Cannabis Compendium: Cross-Sector Views on a Budding Industry by The Cowen Group and 2) Jefferies equity research (Owen Bennett), 2019

---

1) For illustrative purposes only. Source: The Marijuana Business Factbook 2018, Viridian Capital Advisors. Private companies, which are primarily in the U.S., raised $4,056 million comprising 222 capital raises in 2018. Based on estimates, 25,000-35,000 companies in the U.S. focus entirely on the cannabis industry or derive a sizable portion of their revenue from it. Assuming the low end of 30% of 25,000 companies are seeking $1.5 million would result in $1.5 billion of capital needs. Assuming a slightly higher percentage of companies, 40%, and capital raises of $2 million would result in $2.5 billion of capital needs.
deals, driving up valuations and limiting access to the best opportunities. According to the latest PwC MoneyTree Report, AI start-ups experienced their best funding year ever in 2018, raising a record $9.33 billion — nearly 10% of 2018’s total venture capital investments that reached $99.5 billion, an 18-year high since the dot-com era.

- **Cannabis companies, especially plant-touching businesses, face policy barriers in the U.S. banking system.** According to an article in CNN Business earlier this year, only about one in 30 banks or credit unions across the U.S. will accept cannabis businesses as customers. If they do, these banks generally charge large monthly account and transaction fees to offset the extra costs incurred to comply with federal government regulations. There are no laws that say banks cannot do business with cannabis companies, however banks are required to file reports with the federal government detailing any illegal activities they believe are going on with their account holders. These are time-consuming and costly reports that if filed incorrectly can expose the bank to the possibility of large fines. This risk is often enough for banks to have a no-cannabis policy today. As a result, the annualized cost of capital for a U.S.-based cannabis company has been as high as 30-40% (after factoring in the value of warrants or unregistered shares), according to Forbes. This unreasonably high cost of capital has forced cannabis companies to access the equity market instead, which traditionally is considered a last resort, given raising equity capital is dilutive to existing ownership.

- **Vice clauses will prevent some in-flow of capital even after prohibition has been lifted.** Many venture capital and private equity funds operate under what are known as vice clauses. These restrictions imposed by limited partners, usually large institutions, such as public pension funds and ME sovereign wealth funds, prevent them from investing in certain sectors, such as alcohol, tobacco, firearms, pornography and cannabis (“sin-related” industries). Even after the lifting of federal prohibition, many funds with vice clauses will still stay away from cannabis, lessening the amount of total capital pursuing cannabis opportunities. Even in cases where limited partners do not insist on vice clauses, many of the largest private equity and venture capital firms do not invest in sin-related industries to protect their own reputation.
3. Many early-stage cannabis companies have similar business models to mature companies in non-cannabis industries, increasing the visibility into strengths and weaknesses. This generally reduces the risk of a potential investment since the company in the mature industry can be used as a comparable when evaluating the strengths, weaknesses and financial performance of the target cannabis company prior to making an investment. The table below shows illustrative examples of non-cannabis businesses and their comparable counterparts in the cannabis industry.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Non-cannabis business</th>
<th>Ancillary cannabis business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Analytics</td>
<td>Market research company providing CPG clients with consumer, shopper and retail market intelligence</td>
<td>Market research company providing clients with cannabis &amp; CBD consumer and retail market intelligence</td>
</tr>
<tr>
<td>Delivery Services</td>
<td>Online food ordering service for delivery and takeout from restaurants</td>
<td>Online marketplace that helps provide legal access to cannabis through safe and convenient delivery</td>
</tr>
<tr>
<td>Legal Services</td>
<td>Provider of personalized, online legal solutions and legal documents for small businesses and families</td>
<td>Provider of legal solutions for startup companies in the legal cannabis industry</td>
</tr>
<tr>
<td>Value-add Packaging</td>
<td>Hybrid packaging company supplying wholesale bottles, containers, innovative design, and supply chain services</td>
<td>Sells child-proof packaging, containers, and other ancillary products for the cannabis industry</td>
</tr>
<tr>
<td>HR Services</td>
<td>Global provider of human resources management software and services</td>
<td>Provider of human resources management software and services for cannabis companies</td>
</tr>
<tr>
<td>Ag-tech</td>
<td>Provider of products and solutions to help farmers achieve global food security and sustainability</td>
<td>Provider of high-performing plants and seed to cannabis growers</td>
</tr>
</tbody>
</table>

Source: KEY Investment Partners, 2019
4. **Mature U.S. companies are reluctant to expand their business into the cannabis space, reducing competition for early-stage cannabis companies.** Although mature U.S. companies may be interested in cannabis and may be actively researching cannabis, generally they would rather wait for federal legalization prior to expanding into the space due to the over-loomng risk that the federal government may never lift prohibition. This presents an opportunity for cannabis entrepreneurs and investors alike, as it allows them to build businesses without facing direct competition from large U.S. corporations. Early-stage companies in emerging, *federally legal* industries, such as blockchain technology or AI, will be forced to fight the uphill battle that is the direct competition of large U.S. corporations that are better capitalized and have access to far greater resources. For example, many AI start-ups will have to compete with Google AI, Google’s research and development branch for AI applications. Similarly, many blockchain start-ups will go head-to-head with top developers at IBM. In an article earlier this year ranking market leaders in blockchain technology development, Forbes ranked IBM first, stating “IBM’s blockchain solutions efforts are supported by some 1,500 experts, with the company participating in more than 500 blockchain projects.”

5. **Mature U.S. companies that are currently reluctant to expand into cannabis will likely acquire cannabis companies operating in a similar sector within cannabis as the regulatory environment continues to ease.** Since cannabis companies often have similar business models to mature companies in non-cannabis industries, we find it easier to identify future exit scenarios when underwriting an investment in a cannabis company as compared to their non-cannabis industry peers. We believe partnerships formed between mature non-cannabis companies and early-stage cannabis companies are often a precursor to a later acquisition. Forming a partnership today allows a non-cannabis company to start building relationships with a cannabis company in a similar sector. A clear example of this can be found when looking at two recently formed partnerships in the data analytics space:

- **IRi partnered with BDS Analytics** to “leverage the IRi Liquid Data® technology platform and rest-of-market understanding with industry-leading BDS Analytics’ GreenEdge™ cannabis dispensary point-of-sale data and insights, to provide users with the most comprehensive understanding of today’s hemp and marijuana cannabinoid purchasing trends,” according to a press release announcing the partnership in May of 2019.
- **At the same time, Nielsen partnered with Headset** to “provide insights into market trends, segments, brands and products in the legal marijuana economy as well as study consumer attitudes, product preferences and others within CPG categories,” according to an article in MJ Business Daily announcing the partnership in March of 2019.
Section 5: The public cannabis markets

Public cannabis stocks listed on U.S. exchanges are overvalued due to unrealistic projections of future earnings

In 2018 the legal cannabis industry generated over $12 billion of revenues. That figure is projected to grow to $57 billion by 2027 — close to five times market growth — and investors have taken notice. Most days, names like Canopy Growth, Tilray, Aurora and Cronos are in CNBC’s headlines. These Canadian licensed producers now command massive valuations as publicly traded companies. But are these valuations justified today? Let’s look at their market caps as a multiple of 2018, 2019 and 2020 projected revenues:

<table>
<thead>
<tr>
<th>Company</th>
<th>Ticker</th>
<th>Stock Price</th>
<th>Market Cap. (m)</th>
<th>Revenue FY'18</th>
<th>Revenue FY'19</th>
<th>Revenue FY'20</th>
<th>P/Sales FY'18</th>
<th>P/Sales FY'19</th>
<th>P/Sales FY'20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cannabis Comps</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canopy Growth</td>
<td>CGC</td>
<td>$25.3</td>
<td>$8,035</td>
<td>59</td>
<td>171</td>
<td>627</td>
<td>136.8x</td>
<td>47.1x</td>
<td>12.8x</td>
</tr>
<tr>
<td>Aurora Cannabis</td>
<td>ACB</td>
<td>$5.0</td>
<td>$4,968</td>
<td>42</td>
<td>187</td>
<td>649</td>
<td>119.4x</td>
<td>26.6x</td>
<td>7.7x</td>
</tr>
<tr>
<td>Tilray</td>
<td>TLRY</td>
<td>$29.0</td>
<td>$2,783</td>
<td>43</td>
<td>179</td>
<td>343</td>
<td>64.6x</td>
<td>15.5x</td>
<td>8.1x</td>
</tr>
<tr>
<td>Cronos Group</td>
<td>CRON</td>
<td>$10.3</td>
<td>$3,228</td>
<td>12</td>
<td>62</td>
<td>272.8x</td>
<td>52.2x</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td></td>
<td>$4,098</td>
<td>$42</td>
<td>$175</td>
<td>$627</td>
<td>$128.1x</td>
<td>$36.8x</td>
<td>$8.1x</td>
<td></td>
</tr>
</tbody>
</table>

* Market Data as of 09/20/2019 per Yahoo finance, USDm except stock price, converted at 1.32703 USD/CAD FX rate

Now let’s compare them to the valuations of established alcohol and tobacco companies relative to their multiples and projected revenues:

<table>
<thead>
<tr>
<th>Company</th>
<th>Ticker</th>
<th>Stock Price</th>
<th>Market Cap. (m)</th>
<th>Revenue FY'18</th>
<th>Revenue FY'19</th>
<th>Revenue FY'20</th>
<th>P/Sales FY'18</th>
<th>P/Sales FY'19</th>
<th>P/Sales FY'20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Branded Products Comps</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annheuser-Busch InBev</td>
<td>BUD</td>
<td>$96.3</td>
<td>$187,713</td>
<td>54,619</td>
<td>55,110</td>
<td>56,410</td>
<td>3.4x</td>
<td>3.4x</td>
<td>3.4x</td>
</tr>
<tr>
<td>Constellation Brands</td>
<td>STZ</td>
<td>$205.1</td>
<td>$39,292</td>
<td>7,585</td>
<td>8,116</td>
<td>7,910</td>
<td>5.2x</td>
<td>4.8x</td>
<td>4.8x</td>
</tr>
<tr>
<td>Molson Coors Brewing</td>
<td>TAP</td>
<td>$56.3</td>
<td>$12,190</td>
<td>10,770</td>
<td>10,600</td>
<td>10,600</td>
<td>1.1x</td>
<td>1.2x</td>
<td>1.2x</td>
</tr>
<tr>
<td>Phillip Morris International PM</td>
<td>PM</td>
<td>$71.2</td>
<td>$111,008</td>
<td>29,625</td>
<td>29,940</td>
<td>31,410</td>
<td>3.7x</td>
<td>3.7x</td>
<td>3.7x</td>
</tr>
<tr>
<td>Altria Group</td>
<td>MO</td>
<td>$40.8</td>
<td>$74,893</td>
<td>19,627</td>
<td>19,810</td>
<td>20,020</td>
<td>3.8x</td>
<td>3.8x</td>
<td>3.8x</td>
</tr>
<tr>
<td>Median</td>
<td></td>
<td>$74,893</td>
<td>$19,627</td>
<td>$19,810</td>
<td>$20,020</td>
<td>$3.7x</td>
<td>$3.7x</td>
<td>$3.7x</td>
<td></td>
</tr>
</tbody>
</table>

* Market Data as of 09/20/2019 per Yahoo finance, USDm except stock price, converted at 1.32703 USD/CAD FX rate

As the above tables illustrate, these Canadian licensed producers have massive growth already priced into their valuations. In the case of Canopy Growth, its market cap is 2/3rds that of Molson Coors despite having 1/183rd as much revenues in 2018. Our view is that many investors are choosing to buy shares in these licensed producers based on pure speculation rather than on fundamental analysis, which could be creating a valuation bubble in the public cannabis market like the one tech experienced in the late 1990s and cryptocurrency in 2017.
Investors in public cannabis stocks listed on the Canadian Securities Exchange are exposed to unnecessary risk

To date, there are about 400 publicly traded cannabis companies and fewer than 20 are traded on the major U.S. exchanges. Although the number of cannabis companies listed on the NASDAQ and NYSE are increasing, most publicly traded U.S. cannabis companies are listed on the Canadian Securities Exchange (CSE) today.

When going public on the CSE, companies don’t have to meet the same stringent requirements that they would encounter when attempting to list on a major U.S. exchange. These lighter requirements make the CSE an attractive option for U.S. cannabis companies looking to raise equity capital, especially for those who have poor accounting policies and unrealistic projections of future earnings. Additionally, these companies can save significant time and money raising public equity via the now common reverse-takeover merger (RTO) as opposed to the traditional initial public offering (IPO). An RTO involves the acquisition of a shell corporation (an inactive company used as a vehicle for various financial maneuvers) combined with the shifting of the private company’s operations into the shell of the public entity. The RTO avoids the costs, regulatory requirements and time constraints often associated with an IPO.

We believe listing on the CSE is a temporary solution for U.S. cannabis companies looking to raise capital quickly while the U.S. cannabis market remains federally illegal and capital constrained. While many investors have been eager to ride the growth of the cannabis market by investing equity in cannabis stocks on the CSE, we believe these investors are exposed to unnecessary risks because the exchange is thinly traded and highly volatile, and it lacks reliable information. Large bid-ask spreads reduce liquidity and make executing trades a difficult and drawn-out process, while lack of information makes the determination of reliable
future projections of any company traded on the exchange exceptionally challenging. We believe investment in the CSE is especially unattractive when compared the private markets on a relative value basis.

The chart below shows the price of the CSE Composite Index over the five-year period ending September 2019. The CSE Composite Index is a broad indicator of market activity for the CSE. It includes approximately 75% coverage of all equities listed on the CSE and is a uniquely positioned gauge of the Canadian small cap market. The index provides a far different risk/return profile than comparable indexes on any major U.S. exchange or an equity investment in the private markets.

When thinking about the CSE Composite Index as it relates to cannabis, it's important to understand that when referring to “75% coverage,” we are not referring to 75% of the 520 listed stocks, but rather 75% of the total market capitalization on the exchange. If we look more closely at the details, we see that the top 10 stocks that compose the CSE Composite Index make up 55.77% of the market cap of the index, and more importantly, they are all cannabis stocks.
The less stringent requirements of the CSE and the cost and time savings of the RTO combined with Canada’s federal legalization of cannabis in 2018 have made the CSE the exchange of choice for many cannabis companies and their investors. It's no mystery why the CSE has been dubbed the “Cannabis Securities Exchange.”

Historically, when an emerging industry is experiencing rapid growth, public stocks often soar based on the hype around the industry rather than the fundamentals of the underlying businesses — think dot-com boom of the 1990s. After analyzing simple metrics, it seems likely this is happening today in public cannabis stocks across all exchanges, not just the CSE.

If we combine the risk associated with investing in a federally illegal and highly regulated emerging industry with the risk associated with investing in a thinly traded, nontransparent and highly volatile exchange, we believe the total risk an investor must assume when underwriting an investment in the CSE is generally not worth the potential return.

| Returns for CSE Composite Index (as of at Market Pre-Open September 20, 2019) |
|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 1 month                       | 3 months                      | 6 months                      | 1 year                        | Since launch                  |
| 0.40%                         | -20.20%                       | -34.60%                       | -46.80%                       | -45.90%                       |

Source: thecse.com, 2019

“We Believe The Total Risk An Investor Must Assume When Underwriting An Investment In The CSE Is Generally Not Worth The Potential Return”
Section 6: Investors in ancillary businesses can avoid several risks that plant-touching investors will face today

BDS Analytics estimates that global consumer spending on cannabis will quintuple over the six-year period between 2018 and 2024, growing from $10.9 billion in 2018 to $40.6 billion in 2024. Many investors we’ve spoken with up to this point have had some level of experience with the private cannabis industry but have struggled to get comfortable with how to approach the sector. Since there is such a wide spectrum of early-stage cannabis businesses raising capital in an industry that is so rapidly changing, we’ve found that even the most sophisticated investors struggle to develop an investment thesis. The question is: How does an investor manage risk in an industry that is constantly evolving? The goal of this section is to help investors understand why we’ve chosen to focus on the ancillary space, given the status of the cannabis market today.

It is first important to understand that cannabis companies are normally classified as either ancillary or plant-touching. The names are self-explanatory. Plant-touching businesses deal directly with the plant (cultivators, dispensaries, branded products), while ancillary businesses support the plant-touching businesses (B2B software, mobile applications, POS systems, data analytics companies). While we are confident both the ancillary and plant-touching sectors will experience rapid growth over the next five to 10 years, we believe that investing primarily in the ancillary space now will achieve superior risk-adjusted returns when compared to the plant-touching space. This is primarily because of a few core views we have developed:

1. Ancillary businesses have less regulatory risk than plant-touching businesses do. Plant-touching businesses are generally subject to the strictest regulations facing the industry, and many must navigate complicated licensing processes before they can get started. Because companies in the ancillary market don’t have any direct involvement with the cannabis plant itself, they aren’t subject to the same regulations or legislation that plant-touching companies are. The 2019 Marijuana Business Factbook found 90% of ancillary businesses serving the marijuana industry have access to banking, compared with 76% of plant-touching companies, for example. Additionally, an investment in a branded cannabis product will expose an investor to an increased risk of product liability claims, especially since the U.S. insurance industry has distanced itself from cannabis due to the complicated regulatory environment. As the cannabis market matures and larger players with deeper pockets enter the space, we expect that many claims will be filed for either product contamination or bodily injury damages due to cannabis’ psychoactive effects. This is reminiscent of the dietary supplement industry in the early 1990s.

---

Forty-one of the top 150 marijuana ancillary businesses in the US called Colorado home in 2017, according to Cannabis Business Executive, an industry trade publication. That was more than any other state. California was a far second with 35.

---

<table>
<thead>
<tr>
<th>Estimated number of cannabis businesses in the U.S. 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dispensaries</td>
</tr>
<tr>
<td>Cultivators</td>
</tr>
<tr>
<td>Infused Products</td>
</tr>
<tr>
<td>Testing Labs</td>
</tr>
<tr>
<td>Ancillary Services</td>
</tr>
<tr>
<td>Plant-Touching Total</td>
</tr>
<tr>
<td>Industry Total</td>
</tr>
</tbody>
</table>

Source: The Marijuana Business Factbook 2018

---
2. **Ancillary businesses can conduct business across state lines, while plant-touching businesses cannot.** Plant-touching businesses generally have difficulty scaling efficiently since they are currently not able to ship their products across state lines, even in conjoining states where recreational use is legal in both. Cannabis products produced in legal state markets cannot be shipped to other legal states, as crossing state boundaries constitutes interstate commerce and falls under federal jurisdiction. This exposes any investment in a plant-touching business to additional regulatory risks and costs. In addition, an investor in a plant-touching business may be exposed to higher duration risk since much of the value creation in these businesses (and subsequent return on investment) may be dependent on if, when and how quickly state and federal governments legalize cannabis. On the other hand, ancillary businesses will generally have an easier time growing as long states continue to legalize cannabis and the overall global cannabis market continues to grow, regardless of which states legalize and what their regulatory environments look like. Moreover, until federal legislation becomes more plant-friendly many plant-touching businesses will remain wildly inefficient without the opportunity to consolidate their operations. A multistate operator, for example, must have separate cultivation, distribution, manufacturing and retail operations in each state they operate in, as opposed to a big alcohol company that can manufacture all product in one central location and distribute it to retail stores across the nation via a more efficient supply chain.

3. **Section 280e of the U.S. tax code bars businesses that sell scheduled substances from taking deductions beyond the COGS.** As defined by the Controlled Substances Act, plant-touching businesses cannot deduct otherwise ordinary business expenses associated with the “trafficking” of scheduled substances. Ancillary businesses do not touch the plant, so they can take advantage of deductions just like businesses in the non-cannabis space.

4. **Generally, ancillary businesses have lower start-up costs and are more scalable than plant-touching businesses.** Cultivators, dispensaries, extraction companies and distributors often need to purchase expensive equipment up front to start their operation. To start a cultivation facility, for example, a large amount of up-front CapEx is required. A cultivator needs: real estate, artificial lighting (if indoors), temperature control and ventilation (fans, humidifier, HVAC), some type of growing medium (soil or hydroponic systems), nutrients, a license to grow and security features (cameras, walled exteriors). The figure to the right shows the typical cost of setting up a cultivation facility per square foot.
5. **The price of flower declines sharply as state markets mature, which makes cultivation and dispensary investments unattractive in the long term.** In January of 2014 in Colorado, the average market rate of wholesale flower was $1,876 per pound per the Colorado Department of Revenue. Four years later in January of 2019, that number had decreased 41.6% to $781 per pound. This rapid decline in price is typical and is mainly due to an influx of supply shortly after a state market legalizes adult-use cannabis and enters the hypergrowth phase. Cultivators and dispensaries are often successful at the beginning of the hypergrowth phase due to a lack of supply and high demand. However, as this equilibrates, many of these same businesses suffer from downward pressure on the pricing of flower. Over time, we believe cultivation will become an agricultural commodity business, and the success of most dispensaries will be dependent on their real estate rather than their brand.

For the above reasons, KEY believes that on a risk-adjusted basis, investments in the ancillary space today will generally perform better than investments in the plant-touching space, since an investor can sidestep many of the risks associated with an emerging, federally illegal industry like cannabis.
Section 7: Conclusion

Given the current status of the U.S. political landscape and the large funding gap in the cannabis capital markets today, we believe that the cannabis market is at an inflection point. Many investors understand the window of opportunity in front of them and are anxious to put capital to work, however it is important that when evaluating investments, these investors don’t make the mistake of relying more on the projected growth on the industry than they rely on thorough due diligence and analysis. In an emerging, federally illegal industry with a constantly changing regulatory environment, the need for thorough due diligence and analysis is greater than ever.

Due to the massive growth expected to occur in the cannabis industry over next five to ten years, it is reasonable to assume that cannabis investments collectively will outperform many other mature asset classes such as real estate, private equity, public equities, or fixed income. The question is, which early-stage companies today will be responsible for driving this outperformance?

Based on our analysis of the U.S. cannabis market and the wide array of investment opportunities we have seen to date, we conclude that companies which exhibit the following characteristics generally will provide the best risk-adjusted returns in the cannabis industry.

The company should:

- Exist in the ancillary space;
- Be led by an exceptional management team with a proven track record of success (generally outside the cannabis industry);
- Show potential for high growth and the ability to scale;
- Be able to sustain their competitive differentiation over time;
- Generally, not be taking too much speculative risk by investing heavily in R&D;
- Be expected to benefit from the lift of federal prohibition (i.e., the business should not be solving a problem that no longer exists after the lift of federal prohibition); and
- Have relatively good visibility into an exit via the identification of a likely strategic acquirer that exists in the non-cannabis space and/or strong likelihood for an IPO on a major exchange.

Cannabis prohibition only lifts once!
Contact information

About KEY Investment Partners LLC:
Headquartered in Denver, Colo., KEY Investment Partners LLC is a venture capital fund manager focused exclusively on providing capital to the cannabis industry. KEY provides institutional-quality investment management services, connecting investors to early-stage cannabis companies backed by exceptional management teams. To learn more about KEY Investment Partners LLC, please visit www.keyinvestmentpartners.com or reach out via email at contact@keyinvestmentpartners.com.

About BDS Analytics:
Headquartered in Boulder, Colo., BDS Analytics provides businesses with comprehensive, actionable, and accurate cannabinoid market intelligence and consumer research. The company provides a holistic understanding of the cannabinoid market by producing insights from tracking and categorizing millions of individual consumer transactions, extensive and detailed consumer research and generating market-wide cannabinoid industry financial projections, all delivered through its market-leading GreenEdge™ platform. To learn more about how you can utilize BDS Analytics' industry-leading market research, please visit www.bdsanalytics.com. BDS Analytics is a portfolio company of KEY Investment Partners LLC.
DISCLAIMERS

THE INFORMATION CONTAINED HEREIN IS FOR INFORMATIONAL AND DISCUSSION PURPOSES ONLY, AND IS NOT, AND MAY NOT BE RELIED ON IN ANY MANNER AS LEGAL, TAX, OR INVESTMENT ADVICE OR AS AN OFFER TO SELL OR A SOLICITATION OF AN OFFER TO BUY AN INTEREST IN ANY FUND MANAGED BY KEY INVESTMENT PARTNERS (COLLECTIVELY THE “FUND”). THE INFORMATION CONTAINED HEREIN IS HIGHLY CONFIDENTIAL AND IS BEING PROVIDED TO YOU AT YOUR REQUEST. INTERESTS OF THE FUND, MANAGED BY KEY INVESTMENT PARTNERS LLC, OR ONE OF ITS AFFILIATES (THE “MANAGEMENT COMPANY”), ARE OFFERED TO SELECT INVESTORS ONLY BY MEANS OF A COMPLETE OFFERING MEMORANDUM AND RELATED SUBSCRIPTION MATERIALS WHICH CONTAIN SIGNIFICANT ADDITIONAL INFORMATION ABOUT THE TERMS OF AN INVESTMENT IN ANY FUND (SUCH DOCUMENTS, THE “OFFERING DOCUMENTS”.

AN INVESTMENT IN ANY STRATEGY, INCLUDING THE STRATEGY DESCRIBED HEREIN, INVOLVES A HIGH DEGREE OF RISK. THERE IS NO GUARANTEE THAT THE INVESTMENT OBJECTIVE WILL BE ACHIEVED. PAST PERFORMANCE OF THE MANAGEMENT COMPANY OR THESE STRATEGIES IS NOT INDICATIVE OF FUTURE RESULTS. THERE IS THE POSSIBILITY OF LOSS AND ALL INVESTMENT INVOLVES RISK INCLUDING THE LOSS OF AN INVESTOR’S PRINCIPAL. INTERESTS OF THE FUND ARE NOT REGISTERED WITH ANY REGULATORY AUTHORITY, AND ARE OFFERED PURSUANT TO EXEMPTIONS FROM SUCH REGISTRATION, AND ARE SUBJECT TO SIGNIFICANT RESTRICTIONS.

INFORMATION IN THIS PRESENTATION WAS PREPARED BY THE MANAGEMENT COMPANY AND IS BELIEVED BY IT TO BE RELIABLE, INFORMATION HAS ALSO BEEN OBTAINED FROM THIRD PARTY OR PUBLIC SOURCES BELIEVED TO BE RELIABLE. THE MANAGEMENT COMPANY MAKES NO REPRESENTATION AS TO THE ACCURACY OR COMPLETENESS OF SUCH INFORMATION. OPINIONS, ESTIMATES, AND PROJECTIONS IN THIS PRESENTATION CONSTITUTE THE CURRENT JUDGMENT OF THE MANAGEMENT COMPANY, HAVE NOT BEEN VERIFIED, CONFIRMED, OR OTHERWISE REVIEWED BY ANY THIRD PARTY, AND ARE SUBJECT TO CHANGE WITHOUT NOTICE. ANY PROJECTIONS, FORECASTS, OR ESTIMATES CONTAINED IN THIS PRESENTATION ARE NECESSARILY SPECULATIVE IN NATURE AND ARE BASED UPON CERTAIN ASSUMPTIONS. IT CAN BE EXPECTED THAT SOME OR ALL OF SUCH ASSUMPTIONS WILL NOT MATERIALIZE OR WILL VARY SIGNIFICANTLY FROM ACTUAL RESULTS. ACCORDINGLY, ANY PROJECTIONS ARE ONLY ESTIMATES AND ACTUAL RESULTS WILL DIFFER AND MAY VARY SUBSTANTIALLY FROM THE PROJECTIONS OR ESTIMATES SHOWN. THE MANAGEMENT COMPANY HAS NO OBLIGATION TO UPDATE OR AMEND THIS PRESENTATION OR TO OTHERWISE NOTIFY A READER THEREOF IN THE EVENT THAT ANY MATTER STATED HEREIN, OR ANY OPINION, PROJECTION ON, FORECAST, OR ESTIMATE SET FORTH HEREIN, CHANGES BECOMES INACCURATE.

CERTAIN INFORMATION CONTAINED IN THIS PRESENTATION CONSTITUTES “FORWARD-LOOKING STATEMENTS,” WHICH CAN BE IDENTIFIED BY THE USE OF FORWARD-LOOKING TERMINOLOGY SUCH AS “MAY,” “WILL,” “SHOULD,” “EXPECT,” “ANTICIPATE,” “TARGET,” “PROJECT,” “ESTIMATE,” “INTEND,” “CONTINUE,” OR “BELIEVE,” OR THE NEGATIVES THEREOF OR OTHER VARIATIONS THEREON OR COMPARABLE TERMINOLOGY. THESE STATEMENTS ARE ONLY PREDICTIONS BASED ON CURRENT EXPECTATIONS AND PROJECTIONS ABOUT FUTURE EVENTS. DUE TO VARIOUS RISKS AND UNCERTAINTIES, ACTUAL EVENTS, RESULTS, OR PERFORMANCE MAY DIFFER MATERIALLY FROM THOSE REFLECTED OR CONTEMPLATED IN SUCH FORWARD-LOOKING STATEMENTS. ALTHOUGH THE MANAGEMENT COMPANY BELIEVES THE EXPECTATIONS REFLECTED IN THE FORWARD-LOOKING STATEMENTS ARE REASONABLE, IT CANNOT GUARANTEE FUTURE RESULTS, LEVEL OF ACTIVITY, PERFORMANCE OR ACHIEVEMENTS. MOREOVER, NEITHER THE MANAGEMENT COMPANY NOR ANY OTHER PERSON ASSUME RESPONSIBILITY FOR THE ACCURACY AND COMPLETENESS OF ANY OF THESE FORWARD-LOOKING STATEMENTS OR HAVE ANY DUTY TO UPDATE SUCH FORWARD-LOOKING STATEMENTS. INVESTORS SHOULD NOT RELY ON FORWARD-LOOKING STATEMENTS IN MAKING THEIR INVESTMENT DECISIONS. INTERNAL REVENUE SERVICE CIRCULAR 230 NOTICE: TO ENSURE COMPLIANCE WITH INTERNAL REVENUE SERVICE CIRCULAR 230, PROSPECTIVE INVESTORS ARE HEREBY NOTIFIED THAT: (A) ANY DISCUSSION OF FEDERAL TAX ISSUES CONTAINED OR REFERRED TO HEREIN IS NOT INTENDED OR WRITTEN TO BE USED, AND CANNOT BE USED, BY PROSPECTIVE INVESTORS FOR THE PURPOSE OF AVOIDING PENALTIES THAT MAY BE IMPOSED ON THEM UNDER THE INTERNAL REVENUE CODE; (B) SUCH DISCUSSION IS WRITTEN IN CONNECTION WITH THE PROMOTION OR MARKETING BY A FUND OF THE TRANSACTIONS OR MATTERS ADDRESSED HEREIN; AND (C) PROSPECTIVE INVESTORS SHOULD SEEK ADVICE BASED ON THEIR PARTICULAR CIRCUMSTANCES FROM AN INDEPENDENT TAX ADVISOR.

ANY INVESTMENT DISCUSSED HEREIN HAS NOT BEEN RECOMMENDED OR APPROVED BY ANY U.S. FEDERAL OR STATE OR ANY NON-U.S. SECURITIES COMMISSION OR REGULATORY AUTHORITY. FURTHERMORE, THE FOREGOING AUTHORITIES HAVE NOT PASSED UPON THE ACCURACY OR DETERMINED THE ADEQUACY OF THIS PRESENTATION. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE. THE DISTRIBUTION OF THIS PRESENTATION IN CERTAIN JURISDICTIONS MAY BE RESTRICTED BY LAW. THIS PRESENTATION IS ONLY DIRECTED AT PERSONS TO WHOM IT MAY BE LAWFULLY DISTRIBUTED, AND ANY INVESTMENT ACTIVITY TO WHICH THIS PRESENTATION RELATES WILL ONLY BE AVAILABLE TO SUCH PERSONS. IT IS THE RESPONSIBILITY OF ANY POTENTIAL INVESTOR TO SATISFY ITSELF AS TO THE FULL COMPLIANCE WITH APPLICABLE LAWS AND REGULATIONS OF ANY RELEVANT JURISDICTION, INCLUDING OBTAINING ANY GOVERNMENTAL OR OTHER CONSENT AND OBSERVING ANY OTHER FORMALITY PRESCRIBED IN SUCH JURISDICTION. ADDITIONAL INFORMATION IS AVAILABLE UPON REQUEST.

CANNABIS IS A SCHEDULE I SUBSTANCE UNDER THE CONTROLLED SUBSTANCES ACT AND IS ILLEGAL UNDER FEDERAL LAW. EVEN IN THOSE STATES IN WHICH THE USE OF CANNABIS HAS BEEN LEGALIZED, ITS USE REMAINS A VIOLATION OF FEDERAL LAWS.