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AN ASSESSMENT OF HOW THE CALIFORNIA EXODUS IS IMPACTING VENTURE CAPITAL ACTIVITY IN CALIFORNIA



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On my honor as a student I have neither given nor received aid on this assignment.

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DISCLAIMER:

The author conducted this study as part of the program of professional education at the Frank Batten School of Leadership and Public Policy, University of Virginia. This paper is submitted in partial fulfillment of the course requirements for the Master of Public Policy degree. The judgments and conclusions are solely those of the author, and are not necessarily endorsed by the Batten School, by the University of Virginia, or by any other agency.

TABLE OF CONTENTS:

<u>Executive Summary</u>	4
<u>Background</u>	5
<u>Problem Statement</u>	7
<u>Literature Review</u>	8
<u>Assumptions</u>	11
<u>Policy Alternatives</u>	12
<u>Evaluative Criteria</u>	15
<u>Findings</u>	17
<u>Outcomes Matrix</u>	22
<u>Implementation</u>	25
<u>References</u>	30
<u>Appendix</u>	32

EXECUTIVE SUMMARY:

Venture capital has been an unrivaled catalyst of industrial change over the past fifty years. Since its introduction into the San Francisco Bay Area in the 1970s, venture capital in California has consistently ranked near the top of all venture impact regions and maintained steady interest by global investment sources. In 2019, companies originating from venture capital funding comprised nearly 24% of California's \$2.79 trillion in output, and generated returns for the state in tax revenue, employment, horizontal industry growth, and research spending (Statista, 2021). For years, entrepreneurial activity has been utilized to bolster the state's economy, support policy reform, and fund a large percentage of the annual budget. However, new trends demonstrate that venture capitalists are leaving California at a rate which could financially harm the state.

This policy analysis, conducted for the New Venture Capital Association (NVCA), seeks to determine a policy alternative effective in preserving the presence of a strong entrepreneurial economy within the state of California, as well as establish the groundwork for statewide financial stability beyond the industry. This report includes a review of existing literature covering the history of the venture capital industry, an examination of the California environment housing the industry, and a review of the relations between venture capital presence and policy reform. Findings based in the literature lead to three main conclusions: 1) the investor paradigm behind venture capital activity is changing rapidly, 2) there is an inverse relationship between different types of taxation and venture capital activity, and 3) the political and economic frameworks of California are complicating the operation of the venture capital industry.

Following the NVCA's mission of advocacy for the interests of venture capitalists, as well as their aims of maintaining the venture capital economy concentrated in California, these findings generate five alternatives for the NVCA to consider. This report examines the following five alternatives according to five primary criteria (political feasibility, cost and effectiveness, investor impact, administrative feasibility, and equity):

1. Continue According to the Status Quo
2. Decrease the Highest Marginal Income Tax Rate
3. Decrease the Capital Gains Tax Rate Within the State
4. Incentivize Entrepreneurial Activity Through Academic Spending
5. Implement Reforms to Publicize the Importance of California VCs

After a careful consideration of each alternative's impact and effectiveness per the criteria, this report recommends the NVCA pursue a combination of Alternative #3 and #4: decreasing the capital gains tax rate and providing investments in academic research to spur entrepreneurial activity throughout the state. The rationale for the composition of these alternatives is detailed in later sections of the paper, and are concluded in a proper recommendation. There is an additional final section covering concerns and points of address behind the implementation of this proposal.

BACKGROUND:

The California Exodus:

The share of U.S. venture capital activity held within California's Silicon Valley and San Francisco Bay Area is expected to fall below 20% before the end of this year (Pitchbook, 2020). Pitchbook also notes this would mark a record low along the trend of Silicon Valley venture activity decreasing every year since 2006 (Pitchbook, 2020). Venture capital (VC) investment plays a substantial role in California's real gross domestic product, comprising approximately 23.5% of the state's \$2.79 trillion in output in 2019 (Statista, 2021). However, over the past few years there has been a marked parallel departure of venture capitalists and high-income earners from the state. These trends are propelled by three main factors: the rise of telework during the pandemic, the increasingly high cost of living in the San Francisco Bay Area, and the expensive financial regulations imposed on the VC industry by the state (Pitchbook, 2020). Remote work is enabling both human and financial capital to relocate away from the state. Recent company departures have been directly linked to increased filings for unemployment within the city, the 6.4% unemployment rate being the highest since 2012 (U.S. Bureau of Labor Statistics, 2021, Appendix A). These unemployment numbers are already coupled with intense competition for hiring, as well as state level regulations imposing diversity quotas in company leadership.

Workers within Silicon Valley staples such as Oracle, Hewlett-Packard, and Tesla are leaving California for states offering lower costs of living, as well as lower corporate and income tax rates (McBride, 2020). This trend, known as the 'California Exodus,' is being felt among the citizens of the state as well. Between July 2019 and July 2020, California's population only grew by 0.05%, more people moving away from California instead of to the state (Henderson, 2021). The chart above details how California has had yearly net migration

California migration: Ins vs. Outs

Yearly count of moves to and from the state — and the net loss



since 2010. Trends within San Francisco are even more severe with a 31% increase in departures and a 21% decrease in entrances since the beginning of the COVID-19 pandemic (Holmes, 2021). Additionally, the wealthiest 10% of zip codes within the state saw an increase in departures of a stronger magnitude than the bottom 90% of zip codes (Holmes, 2021).

Research Genesis:

Back in June of 2020 I was doing preliminary market research work for a hopeful for-profit client in the venture capital space, and I learned about his personal plans to move and relocate his VC operations away from the San Francisco area within the next few months pending the results of the 2020 election. My contact detailed their reasoning for leaving the state as stemming from

fears of increased state tax rates. California already levies the highest marginal income tax and capital gains tax rates upon the state's highest income earners, and the state annually considers legislation for further increases. My contact directly spoke of his fears that the state increasing tax rates any further might cause fiscally-conscious venture capitalists to leave California. I found this claim interesting, and dove into more research.

What if they all left?

A departure of the venture capital industry would be incredibly consequential for the state of California. The state draws a predominant portion of their general revenue from the highest income tax bracket, a bracket largely composed of successful venture capitalists. The tax dollars from VC success enable the funding of a slew of state-level programs, governmental initiatives, federal jobs, and reform plans. Venture capitalists fall within a tax bracket estimated to account for nearly 40% of the state's income tax revenue, and money collected from capital gains taxes (mostly following initial public offerings of ventures) makes up close to another 10% of the state's annual budget (Frank, 2020). Additionally, California needs jobs and industries spurred by venture capital in order to employ and sustain its workers. The costs of living in California have been steadily rising, with the statewide median house price cresting \$600,000 last year, and the median house price in San Francisco is \$1,378,000 (Santarelli, 2021). This is in addition to an incredibly high cost of day-to-day life. Without venture capital gathering broad industry investment and funding for California's financial hubs, making a living would be much more difficult. Many venture jobs would necessitate relocation, quieting the busy region and disrupting its housing and services market. Nearly 44% of the Greater Bay Area citizens (3.3 million people) anticipate housing costs will cause them to leave the area or state within a few years, and this number would rise if public faith in the industry was to decrease (Woodrow, 2019).

My Client: The New Venture Capital Association (NVCA)

My interest in the California Exodus put me in contact with the New Venture Capital Association (NVCA). The NVCA is a political advocacy organization that works to lobby the government on the behalf of VC interests. The NVCA is the primary collector of data governing trends in the VC space, as well as the main source of qualitative assessment within the industry. I am connected with Michael Chow, a primary researcher at NVCA. The NVCA works to diminish barriers for entrepreneurs to start businesses and create jobs, and is working specifically to make San Francisco a more accessible place for new founders to start businesses. With this in mind, the NVCA is very interested in an expansion of targeted analysis on the implications of California's tax policies on the VC industry, and subsequent externalities. They are incredibly interested in my promise to expand that initiative, and will be using my policy recommendations in August 2021 to begin a new wave of lobbying for VC interests.

Meetings with Michael Chow of the NVCA have provided me with sources of economic data on the San Francisco region, population data across VC hubs, and insight into industry trends behind venture activity. Michael has relayed my research aims to venture capitalists within the NVCA member network, and they have all expressed interest in the conclusions.

PROBLEM STATEMENT:

While the venture capital presence in California has generated immense economic returns for the state over the past fifty years, there have been few policy initiatives that directly focus on maintaining a strong presence of venture capitalists within the state. Instead, most policy reform has focused on expanding California's programmatic reach through the collection of more taxes on the venture capital industry. Misalignment between California legislature and the interests of venture capitalists have progressed to a point at which an increasing number of venture capitalists are finding it within their best interest to relocate away from California. Revenue from the venture capital industry is essential to the continuance of economic homeostasis within California, and the prevention of a large departure would save the people, government, and businesses of the area from a substantial burden.

As the primary lobbying force for venture capital activity, the NVCA must make a dedicated push for state-level policy reform to maintain and boost the entrepreneurial economy within the state, as well as tailor a new policy agenda which gives venture capitalists more agency.

A more concrete conception of the history, political relations, and economic responses of various features within the venture capital industry will inform the NVCA of how they can propose, direct, and implement policy to generate a more symbiotic relationship between venture capital and the California economy.

LITERATURE REVIEW:

Throughout the following literature review, I explore the *roots and economic effects of the venture capital industry* and *tax policies impacting VC activity*. I also give a contextual description of *operations and conditions within the state of California*. All of these things allow for a deeper understanding of the forces at work within the venture capital ecosystem.

Venture Capital Literature:

Throughout the development cycle of a business, entrepreneurs often find themselves needing additional funding to finance the continuation of their projects. The solution is a venture capitalist (VC) or VC firm. Venture capital firms will often take an equitable stake of a company in exchange for a risk-based investment in the company's growth (Gompers, 1994). Venture capital funding occurs in various industries, and is often a force of success behind whether or not a company will grow to the point of an initial public offering (IPO).

According to the "The Rise and Fall of Venture Capital" by Paul Gompers, venture capital stems from two legislative changes occurring in the 1970s. First, the 1978 Revenue Act decreased the capital gains tax rate from 49.5% to 28% (Gompers, 1994). And second, pensions funds were allowed to be used for VC investment, dramatically increasing the industry (Gompers, 1994).

Venture capitalists make money in one of two ways: either they receive carried interest on a fund's returns, or they receive a fee for managing a fund's capital (Johnson, 2017). If a company reaches the point of merging with another company or being put up for an IPO, the investors are paid their fractional share of the company's value (Johnson, 2017).

From a comprehensive report done in 2008, venture capital-backed companies were estimated to employ more than 12 million people, and generate nearly \$3 trillion in annual revenue (NVCA, 2011). This same report demonstrated venture capital activity accounted for 11% of private sector employment and 21% of GDP within the United States (NVCA, 2011). Venture capital consistently outperforms private sector market growth, and benefits all fields of work. For years the successes of venture capital within the United States has made the created industry an international magnet, attracting business and curiosity from around the world.

According to a study conducted by Stanford University, VC-backed companies made up over 44% of all research and development spending in the United States with over \$115 billion (Ben, 2019). A firm's ability to dedicate so much time to research and development is what truly makes venture capital one of the most creative industries for our country. Another study conducted by the Dalberg Global Development Advisors determined that each dollar invested into venture capital can make returns of around \$6.45 in economic activity, which is more profitable than any other avenues of investment (Ben, 2019).

California ranks at the top among venture impact regions, and has consistently maintained momentum in the field due to the diverse industries attracting VC investment. The cycle of investment is being tactically utilized by the state to bolster the economy and prevent the downturn of specific industries. California has developed three venture hubs: San Diego, Orange County, and the largest in Silicon Valley. Since 1970, there has been an estimated \$200 billion of venture investment for Californian companies. This investment has led to the realization of benefits across the country.

The main takeaway from this examination of literature surrounding venture capital as an industry is that the field is essential to continued economic growth in the United States, and should be heavily considered upon the drafting of new policies which could impact the activity of venture capitalists. I hope to use this section as an argument to later justify how tax modifications should be cognizant of the venture capital industry prior to enactment.

Tax Policy Literature:

There are conflicting opinions on the connections between venture capital and capital gains tax, each being on different sides of the preliminary economic model. First, a reduction in capital gains tax rates could generate an increase in the supply of available VC funds as investors decide to target VC instead of dividends or interest-based incomes (Poterba, 1989). Conversely, a reduction in capital gains tax rates could generate an increase in demand for VC funds as more people subsequently decide to start businesses (Poterba, 1989). Research shows decreases in capital gains taxes have not led to direct increases in the VC industry, suggesting there is an effective tax rate which motivates entrepreneurs to enter the market in search of VC funding.

The impacts of an increased capital gains tax have also been studied. Multiple summarizations of research report an increase to the rate of capital gains tax negatively impacts both the effort of entrepreneurs and the support of venture capitalists (Keuschnigg & Nielsen, 2004). This implemented policy subsequently leads to a welfare loss. A suggested alternative by the same author is to tax the base salary of a venture capitalist instead of their capital gains, as this has been found to stimulate entrepreneurial welfare. Due to the construction of the entrepreneurial market, there is a need for governmental intervention to properly tax the industry.

Tax competition is important to examine with regards to the venture capital industry and the incomes of venture capitalists. Competition between states and localities amongst tax rates may lead to an increase in the availability of local public goods and welfare for the areas with lower tax rates, and it is hard to counteract this with policy-based incentives (Chirinko, 2017). Conversely, a state with higher cumulative totals of tax is likely to experience negative externalities for both the economy and individuals within the state. There are mixed research findings covering the salience of tax competition related to capital gains tax, but the literature surely suggests that tax rates do indeed impact decisions of taxpayers to stay in one locality.

The main takeaways from this examination of the literature surrounding tax policies related to venture capital investment are as follows:

- 1) Reducing the capital gains tax rate spurs entrepreneurial drive.
- 2) There is an effective tax rate to impose on entrepreneurs.
- 3) Such taxes could be imposed on base salaries.
- 4) There is evidence of negative tax competition which could likely impact venture capital.

California Specific Literature:

There is some literature discussing the importance of venture capital to the workforce within California, but not much literature pertaining to revenue metrics from the industry (aside from budgetary reports). The state of California draws a significant portion of their tax revenue from top earners in the venture capital industry, allowing for the funding of a slew of governmental programs, jobs, and reforms. Venture capitalists make up almost all of the top 0.5% of earners within the state, amounting for more than 40% of the state's income tax revenue (Frank, 2020). This places venture capitalists in a critical position to hold up the state's economy.

According to a study conducted by UC Berkeley's Institute of Governmental Studies, more than half of the state's registered voters admit to having serious (24%) or some (28%) thought to leaving California within the past year (DiCamillo, 2019). Among those marking interest in leaving, Republicans and conservatives were found to be a higher percentage of concentration by more than three times that of Democrats and liberals (DiCamillo, 2019). This suggests that there are political environments in the state that are isolating particular political preferences. These partisan differences are expected to widen, and further research should be conducted into the partisan tendencies of people involved in the venture capital industry. 58% of respondents also cited high tax rates as a reason to leave California (DiCamillo, 2019).

The main takeaways from an examination into the entrepreneurial environment in California are:

- 1) The economy is closely tied to the success of the venture capital industry.
- 2) California is increasingly becoming an expensive place to live and do business.
- 3) There are increasing rates of state voters considering leaving the state.
- 4) These decisions are hinged on political preference and tax perspectives.

ASSUMPTIONS:

In order to make proper determinations between the effectiveness of differing tax policies, I had to make a couple of assumptions about the future behavior of venture capitalists with regards to their paying of taxes, as well as their motivations to be altruistic with their money.

For the calculations of all taxable income figures, there is an assumption that venture capitalists (and all other taxpayers where applicable) are paying their taxes according to a full and complete rate without using any improper methodologies to avoid them. Though there are plenty of legal ways to shield income levels, this analysis does not factor those in either, instead aiming to identify trends among tax streams rather than specific figures. There is a common public stigma against wealthy earners concerning their tendency to avoid income taxes or hide their money in other avenues. However, an account for this stigma with regards to venture capitalists, moralistic tendencies of humans, and amounts of money unpaid would be too complicated for the purposes of this analysis. Additionally, all of the tax rates throughout this report are calculated prior to any income tax deductions and use taxable income figures rather than gross income.

For interpretations on the equitable nature of potential policy reforms, this analysis operates under the assumption that if venture capitalists are subject to a policy granting them more take-home pay, then they will invest at least some of those additional earnings back into the venture capital industry or state economy. A specific percentage of additional earnings is not given, however this analysis assumes that rate to be greater than zero.

POLICY ALTERNATIVES:

This section of the technical report outlines five potential policy solutions developed based on a review of the literature and consideration of the political and economic forces within California.

Alternative #1: Continue According to the Status Quo

Though there has yet to be a clear rival hub to Silicon Valley within the United States, venture capitalists surveyed by Bloomberg are reporting an increasing number of arguments to leave the area (McBride, 2020). The rise of telework capabilities, high costs of living, and steep business regulations top the list, but the surge of departures have brought about other factors impacting these decisions. Many VCs believe San Francisco improperly utilizes its \$13.6 billion (FY2020) budget, as the city is repeatedly unable to make progress in reducing homelessness, increasing public safety, or properly maintaining the electrical grid (McBride, 2020).

In September 2020, Governor Gavin Newsom signed AB 979, a mandate requiring VC boards to be inclusive of underrepresented minorities. This was seen by Californian governance as a first step in making the industry more inclusive, but venture capitalist opponents saw this to be unnecessary political regulation of private business. California additionally has the highest top marginal income tax rate in the United States of 13.3%, which the state attempted to raise last year (Glover, 2020). Due to venture capitalists making money through both personal income and capital gains tax (after the realization of initial public offerings), states like Florida, Texas, and Washington have provided incentives to relocate with their lack of state income tax. According to California's Franchise Tax Board, the top 0.5% percent of California's taxpayers (who are largely venture capitalists in tech) comprise 40% of the state's tax revenue (Frank, 2020). In 2019, CA collected over \$188 billion in tax revenue, twice that of any other state (Duffin, 2020).

Though a complete departure of venture capital from California is unlikely, such a loss in revenue would leave no money for the entire California Department of Education (currently funded at a level of \$76 billion). Gradually increasing losses in this direction are surely concerning, and will financially constrain the state. The findings component of this project intends to calculate expected decreases to GDP for both San Francisco and the entire state of California, and quantify effects on unemployment and living conditions within the state. Another point of analysis will include GSP fluctuations based upon tax rates of the Bay Area (and state), as well as Florida, Texas, and Washington.

Alternative #2: Decrease the Highest Marginal Income Tax Rate

According to an analysis conducted by the Tax Foundation, California has the highest marginal tax rate in the United States with a 12.3% tax rate on income over \$814,659. Income over \$1 million is subject to an additional one percentage point tax rate to fund state level mental health services, making a total tax rate of 13.3% for the highest income earners within the state. Venture capital general partners or managing directors make a salary between \$500,000 to \$2 million on

average (excluding bonuses and etc.), depending on the firm's size, performance, and more (DeChesare, 2020). VCs involved in the initial public offerings of major companies such as Airbnb or DoorDash (CA-based companies), are poised to make up to five times that through those deals alone later this year. Averaging \$500,000 and \$2 million is \$1.25 million, which will serve as a downwardly-biased estimate of the mean VC salary in California. Calculations for take-home pay are shown below (as well as in Appendix C):

Tax Type	Marginal Tax Rate	Effective Tax Rate	2020-2021 Taxes
Federal	39.35%	36.68%	\$458,451
State	13.30%	11.21%	\$140,171
Total Income Taxes	-	47.89%	\$598,622
Income After Taxes	-	-	\$651,378

Applying this same income level to Texas, take-home pay would amount to \$791,549 with the effective tax rate being only 36.68%. A difference of \$140,171 is a significant amount of money.

This alternative recommends a decrease in the highest marginal tax rate to that of New York's, the state containing the second highest level of venture capital activity, additionally in which the activity is increasing. New York's highest marginal tax rate is 8.82%, and a decrease in tax rates would hopefully incentivize the continued retention of venture capital activity within the state. This would decrease the effective tax rate on venture capitalists to 43.62%, with income tax contributions being \$545,301, and take-home pay at \$704,699. Generalizing this income to all top 0.5% of income earners in the state, such a change would consequently lead to a would number to a decrease in tax revenue of around \$50 billion, or a 25% decrease (from \$188 billion). This would necessitate the cutting of state programs, difficult for California. The operational feasibility of such a decrease will be assessed in the findings section of this report.

Alternative #3: Decrease the Capital Gains Tax Rate Within the State

This alternative recommends a decrease in the state-level capital gains tax on entrepreneurs and venture capitalists. A reduction in capital gains tax rates would generate an increase in the supply of available venture capital funds as investors decide to target venture capital instead of dividends or interest-based incomes, therefore compelling more entrepreneurs to enter the business (Poterba, 1989). California's capital gains tax rate is also the highest of any state, at 13.3%, similar to the state's top marginal income tax rate. This alternative recommends a decrease in the capital gains tax rate to that of New York's, which is 8.82% like the aforementioned state income tax rate. Money collected from capital gains taxes (mostly on venture capitalists) makes up close to 10% of the state's overall general fund revenue (CA DOF, 2020). However, if California was to reduce capital gains tax rates and incentivize the realization

of initial public offerings within the state, there would be increased potential for earnings via corporate income tax rates.

Alternative #4: Incentivize Entrepreneurial Activity Through Academic Spending

This alternative recommends the state of California allocate a one-time stimulus \$60 million to schools within the University of California network for academic research partnerships with venture capital firms. Multiple academic reports identify government investment in academic research and development to positively impact and grow the pool of venture capital investment in an economy, and therefore generate positive economic returns. According to a previously cited study conducted by the Dalberg Development Advisors, each dollar invested into venture capital can generate lifetime returns of around \$6.45 in economic activity (Ben, 2019). Applying this factor to a \$60 million investment in academic research could yield returns of over \$380 million to the state of California. The figure of \$60 million is an amount typical for a one-time budgetary grant to the school system, and would serve as an effective test case for governmental involvement in boosting VC activity in the state.

Alternative #5: Implement Reforms to Publicize the Importance of California VCs

In an effort to avoid the trend of venture capitalists departing from the state of California, the NVCA should 1) work to publicly advocate for how the venture capital industry benefits the state of California, and 2) establish a governmental connection between the venture capital community and policymakers. These two steps combined would have externalities that ensure both the general public and venture capital community about the state of California and its policy reforms, and would hopefully limit continued effects of the ‘Californian Exodus.’ The first component of this alternative recommends the NVCA request Governor Newsom send a thank you letter to venture capital firms raising over \$20 million in capital each year, describing how their work is benefiting the state. This second component recommends Governor Newsom institute an NVCA-appointed advisor on venture capital issues to the Governor’s Office of Business and Economic Development.

EVALUATIVE CRITERIA:

In order to assess all of the aforementioned alternatives and develop a final recommendation for the NVCA, I will consider the costs and benefits associated with each of the alternatives, and the opinions of all the stakeholders involved in implementing such a policy. This section establishes five main points of assessment for each alternative, and allows the NVCA to rank each alternative by order of impact given a criterion. Though all five of the criterion are useful in the determining of an ideal policy action, it should be noted not each criterion is weighted equally in the subsequent outcomes matrix of this analysis. Given the political dominance of liberal thought throughout the state, and the common associations between venture capital activism being a conservative push, political feasibility is given a higher degree of import than any other criterion. The alternatives are listed in order of weight below, with the specific numbers and weighted values attached in the outcomes matrix. The units of each individual criterion are to be transposed onto a one-to-five scale: one being lowest or worst, three being moderate to neutral, and five being the best or highest. These scores will then be weighted and averaged to establish a final recommendation for the NVCA on which alternative to pursue.

Political Feasibility:

This criterion will estimate the ability of each policy alternative to gather support from the different political forces and stakeholders at work within the state of California. This criterion will account for the political composition of the California legislature, California executive branch, and California public sentiments to attribute a value and direction of political polarity for each of the alternatives. This section will identify and examine the positions of prominent advocates for and against each alternative, and make an informed decision upon the political feasibility. The level of feasibility will ultimately be assessed on a high, moderate, or low scale, and each alternative will be ranked in comparison to the others.

Cost & Effectiveness:

This criterion will estimate the expense of implementing each policy, and judge the amount by which each policy is likely to increase or decrease the gross state product (GSP) of the venture capitalist industry within California through changes in the overall venture capital population. This analysis will determine the overall cost of implementing each alternative, and then assess the percentage of funding needed to be reallocated from current budgetary levels in order to facilitate the implementation of such a policy. Within examination, this criterion will involve making a reasonable estimation as to the direction of effect each alternative will have upon the population of venture capitalists. These costs will be evaluated quantitatively along with the direction of effect in order to give them a value for this section. An alternative with lower costs and higher effectiveness would tend towards five on the scoring system, an alternative with no effectiveness would fall at a three, and an alternative with high costs and low effectiveness would approach one.

Investor Impact:

This criterion will estimate how each alternative is likely to impact the earnings of high net-worth venture capitalists within the state of California. For the purposes of this criteria item, 'high net-worth' will be defined as having earning levels at or above the average \$1.25 million annual income rate for venture capitalists. This analysis will consider each policy's impacts on a VC's take-home pay and percentage of pay lost to taxes. If a policy decreases the amount of money a venture capitalist loses to taxes, it will be assumed the alternative promotes the retention of venture capitalists within the state. The force of retention will be subjectively considered given each alternative, and then combined with present and future earnings potential for a high net-worth individual under the alternative. An alternative with increased earnings potential and higher retention would tend towards five on the scoring system, an alternative with no retention would fall at a three, and an alternative with decreased earnings potential and low effectiveness would approach one. Each alternative will be ranked in comparison to the others.

Administrative Feasibility:

This criterion will estimate the likelihood of the California state government to implement, direct, and continuously monitor each policy alternative. Policies with a lot of infrastructure for support may be difficult for the NVCA to assist in the administration of, and require the NVCA to work carefully with the California state legislature and Governor Gavin Newsom for their oversight. Some of the previously mentioned reforms need a research and implementation team, mandate the drafting of new legislation, or are doomed to fail without gubernatorial support. Factors within the consideration of each alternative's administrative feasibility will include the amount of human capital required to manage the policy effectively, the degree of cooperation required between actors residing within different government agencies, communication and planning required at the outset of implementation, and the level of attention needed throughout the implementation and execution of the policy. These factors will be qualitatively assessed to generate an administrative duress score, allowing for an informed decision upon the administrative feasibility. An alternative with no administrative duress would tend towards five on the scoring system, an alternative with low administrative duress would fall at a three, and an alternative with high administrative duress would approach one.

Equity:

This criterion will assess the impacts of each alternative upon the state's population not involved in the venture capital investment industry. For the purposes of this analysis, everyone in an industry other than venture capital will be considered as one group, and the impacts of venture capital on that group as a whole will be evaluated on aggregate. Points of evaluation for this criterion will include broad impacts on stability in finances, health, or livelihood, as well as impacts on multiple levels of socio-economic and business infrastructure. An alternative with strong positive externalities for those not in venture capital would tend towards five on the scoring system, an alternative with no impact would fall at a three, and an alternative with negative impact would approach one.

FINDINGS:

This component of the technical report assesses each alternative according to the previously described criteria. In order to develop a final recommendation for the NVCA, the section weighs both the interests of the venture capital community and that of the state of California, in the short-term and long-term future. Though the criteria list and assessment per each alternative is not exhaustive, it will provide an effective generalization on the outcomes associated with the given policy alternative.

Alternative #1: Continue According to the Status Quo

The policy of continuing according to the status quo involves the NVCA taking no action to influence state-level policies or limit the departure of venture capitalists from California.

Criterion:	Rating:
<i>Political Feasibility:</i> Following long-standing trends of annual tax hikes within the state of California, it is likely for governmental leaders and bodies (which are liberally controlled) to maintain directions of reform and continue to isolate VCs.	4/5
<i>Cost & Effectiveness:</i> This policy will have no costs to either the NVCA or state of California, and subsequently will not require any budgetary cuts for operation. However, this alternative will continue a negative effect on California's population of venture capitalists. This alternative will lower the VC activity's gross state product in accordance with current trends, and not serve the aims of the NVCA.	2/5
<i>Investor Impact:</i> This alternative will have the worst impact on the earnings level of high net-worth venture capitalists within the state of California. The effective tax rate on average-earning VCs will continue to equate to 47.89% of all income going to taxes, which is the largest of any state and unlikely to promote retention.	1/5
<i>Administrative Feasibility:</i> No administrative resources are required for the implementation or management of this alternative.	5/5
<i>Equity:</i> As the broader population of California depends on the business infrastructure brought by VCs, their departure will raise unemployment in dense areas, decrease the average and median salaries across the state, lower the available loans market for small business, limit welfare reforms, and have a consequential impact on the livelihood of all citizens within the state. This alternative would likely lead to a further increase in the state's net-migration loss.	3/5

Alternative #2: Decrease the Highest Marginal Income Tax Rate

This alternative recommends a decrease in the highest marginal tax rate to 8.82% (which is that of New York). As documented within Appendix E, this would decrease the effective tax rate on venture capitalists (and all top income earners) to 43.62%, with income tax contributions being \$545,301, and take-home pay at \$704,699. Generalizing this income to all top 0.5% of income earners in the state, such a change would consequently lead to a would number to a decrease in tax revenue of over \$50 billion for the state of California, or a 33% decrease.

<i>Criterion:</i>	<i>Rating:</i>
<i>Political Feasibility:</i> Since 1994, California legislature has been strongly liberal. Both the State Assembly and Senate are over 75% Democratic, the governor is a Democrat, and Democrats outnumber Republicans within the state 2:1. A conservative tax cut policy would be low in political feasibility.	2/5
<i>Cost & Effectiveness:</i> This plan would cost the state of California a ⅓ decrease in annual tax revenue, and would require the NVCA to commit resources to lobbying for a policy change. However, this policy is estimated to increase the population of venture capitalists within California by 5.216%, subsequently increasing the GSP of the industry within California (Appendix F).	2/5
<i>Investor Impact:</i> This policy will fuel retention of VCs, as well as attract more to California and lead to an increase of the available funds for venture capital investment. The change in tax rates results in an increase in VC take-home pay by approximately \$50,000 or 8%, and an effective tax rate decrease to 43.6% from 47.9%. This is deemed to have the most positive impact on VC investors.	5/5
<i>Administrative Feasibility:</i> No administrative resources are required for the implementation or management of this alternative.	5/5
<i>Equity:</i> This policy would decrease state tax revenue by around \$50 billion, which would necessitate the cutting of state programs that provide support to marginalized populations or a reduction in funds applied to state-level infrastructure such as education. However, this would allow for venture capitalists to make more investments in the economy which would generate positive returns for all citizens of California, and allow for offsetting positive impacts on the livelihood of the state.	3/5

Alternative #3: Decrease the Capital Gains Tax Rate Within the State

This alternative recommends a decrease in the capital gains tax rate to that of New York's, which is 8.82% like their state income tax rate. A reduction in capital gains tax rates would increase the supply of available VC funds as investors decide to target venture capital instead of dividends or interest-based incomes, therefore compelling more entrepreneurs to enter the business.

Criterion:	Rating:
<i>Political Feasibility:</i> As previously stated, tax cuts are associated with conservative policies, therefore making this alternative low in political feasibility. However, due to the amount of revenue lost being \$4.65 billion instead of \$50 billion, this alternative is more politically feasible than decreasing the marginal income tax rate.	3/5
<i>Cost & Effectiveness:</i> This alternative would result in a \$4.65 billion decrease in annual revenue collected from the tax, equating to a 3.3% reduction in total California state revenue. This policy would also require the NVCA committing resources to lobbying for a policy change, those likely including both personnel and publicity campaigns. This policy is estimated to increase the population of venture capitalists within California by 0.484%, subsequently increasing the GSP of the industry within CA (Appendix F).	3/5
<i>Investor Impact:</i> This policy will retain VCs, as well as attract more to the state due to the greater potential to conduct an initial public offering in the state. This alternative will not have a direct impact on annual take-home pay for individual VCs, but the realization of capital gains upon sale of an IPO can involve millions of dollars, in which such a small percentage change becomes highly important. This is deemed to have the second most positive impact on VC investors.	5/5
<i>Administrative Feasibility:</i> This alternative will not require any additional oversight or management upon implementation as legislation, nor any cooperation between agencies. For this reason administrative feasibility is ranked as high.	5/5
<i>Equity:</i> This policy would decrease state tax revenue by over \$4.65 billion, which would have slight impacts on the operation of annual state programs. However, this would lead more businesses to make IPOs in California, thereby generating positive returns for all citizens through employment opportunities and available salary funds, allowing for positive impacts on livelihood. The alternative is ranked moderate for this section.	4/5

Alternative #4: Incentivize Entrepreneurial Activity Through Academic Spending

This alternative recommends the state of California allocate a one-time stimulus \$60 million to the University of California for academic research partnerships with venture capital firms.

<i>Criterion:</i>	<i>Rating:</i>
<i>Political Feasibility:</i> This alternative is viable if marketed as an investment of education. Expenditures of this magnitude are commonly implemented for the state's university system, and they are bipartisanly supported. For this reason, political feasibility for this alternative is ranked as very high.	5/5
<i>Cost & Effectiveness:</i> This plan would require a \$60 million budget reallocation. This policy would also require the NVCA committing resources to lobbying for a policy change, those likely including both personnel and publicity campaigns. This policy's effects on the population of venture capitalists within California will be difficult to measure, but all literature suggests an increase upon investment in academic partnerships. This leads to an assumed increase in the GSP of venture capital within California.	4/5
<i>Investor Impact:</i> This policy will likely retain VCs, and attract more due to the academic investment in the industry. This alternative will not impact take-home pay for individual VCs, but it will enable their investment in a broad array of new industries. This is deemed to have a moderately positive impact on VC investors.	4/5
<i>Administrative Feasibility:</i> This alternative would require oversight of the University of California system to ensure money is being properly allocated to R&D spending, and proportionately distributed amongst schools. This would likely require the hiring of someone specific to manage the dispersal and implementation of funds throughout their deployment. For this reason administrative duress is moderate.	3/5
<i>Equity:</i> This alternative's grant for academic spending will drive positive innovation in a diverse group of sectors and industries across the state, leading to increased benefits and returns for both investors and common citizens. The industry improvements will lead to decreases in unemployment, salary increases, educational opportunities, and availability of small business partnership opportunities for people within the state.	5/5

Alternative #5: Implement Reforms to Publicize the Importance of California VCs

This alternative recommends the NVCA work to 1) publicly advocate for how the venture capital industry benefits the state of California, and 2) establish a governmental connection between the venture capital community and policymakers.

<i>Criterion:</i>	Rating:
<i>Political Feasibility:</i> Due to the low costs and moderate nature of this policy, there would likely be minimal opposition against it. There are no changes to fiscal policy, and would only require having another person in the room for discussion. For this reason, political feasibility is high.	4/5
<i>Cost & Effectiveness:</i> The costs of drafting and mailing letters to venture capital firms within the state of California is almost negligible, a high estimate of costs being under \$1,000. The hiring of someone to the Governor's Office of Business and Economic Development at the average salary rate would be approximately \$73k. Positive affirmations have been shown to be linked with comfortability in a particular environment, allowing for a soft assumption this policy will decrease the rate of VCs leaving California.	3/5
<i>Investor Impact:</i> This alternative may retain venture capitalists, and will have no impact on their take-home pay or income levels. Instead, this alternative aims to justify the state income tax rates and appeal to the conscience of venture capitalists to not move due to their positive impacts on state-level programming, and make them feel like their needs are being considered politically. Investor impact is moderate to low in this case.	2/5
<i>Administrative Feasibility:</i> This alternative necessitates strong administrative cooperation between the Governor of California and the NVCA in order to assure an appropriately representative delegate of venture capitalist concerns gets appointed to the role. There would likely be an initial lack of respect for the appointee's opinions due to the newness of appointment. For this reason, administrative duress is high.	1/5
<i>Equity:</i> This alternative will have no impact on the level of funding available for welfare and aid programs, meaning there will be no negative effects to the normal citizens of California. Outcomes in this criterion will likely end up similar to that of the status quo alternative.	1/5

OUTCOMES MATRIX:

The following chart provides a weighted analysis of all five policy alternatives. Due to the extremely liberal political framework of California, Political Feasibility was given the highest weighting (30%). Cost & Effectiveness as well as Investor Impact were determined to be equally as important, and both more important than administrative feasibility and equity. Cost & Effectiveness and Investor Impact were each given weights of 20%, and the following categories were each given 10%. These weights were multiplied by the score from the findings section, and used to calculate a total score. A recommendation follows on the next page.

	Political Feasibility (30%)	Cost & Effectiveness (20%)	Investor Impact (20%)	Administrative Feasibility (10%)	Equity (10%)	Total Score
1. Status Quo	4 * (0.3) = 1.2	2 * (0.2) = 0.4	1 * (0.2) = 0.2	5 * (0.1) = 0.5	3 * (0.1) = 0.3	2.6
2. Decrease Marginal Income Tax Rate	2 * (0.3) = 0.6	2 * (0.2) = 0.4	5 * (0.2) = 1.0	5 * (0.1) = 0.5	3 * (0.1) = 0.3	2.8
3. Decrease Capital Gains Tax Rate	3 * (0.3) = 0.9	3 * (0.2) = 0.6	5 * (0.2) = 1.0	5 * (0.1) = 0.5	4 * (0.1) = 0.4	3.4
4. Increase Academic Spending	5 * (0.3) = 1.5	4 * (0.2) = 0.8	4 * (0.2) = 0.8	3 * (0.1) = 0.3	5 * (0.1) = 0.5	3.9
5. Public Advocacy	4 * (0.3) = 1.2	3 * (0.2) = 0.6	2 * (0.2) = 0.4	1 * (0.1) = 0.1	1 * (0.1) = 0.1	2.4

Power Ranking of Alternatives According to Outcomes Matrix:

1.	<i>ALT #4: Incentivize Entrepreneurial Activity Through Academic Spending</i>
2.	<i>ALT #3: Decrease the Capital Gains Tax Rate Within the State</i>
3.	<i>ALT #2: Decrease the Highest Marginal Income Tax Rate</i>
4.	<i>ALT #1: Continue According to the Status Quo</i>
5.	<i>ALT #5: Implement Reforms to Publicize the Importance of California VCs</i>

RECOMMENDATION:

This analysis recommends the NVCA pursue a combination of Alternative #3 and #4: decreasing the capital gains tax rate and providing investments in academic research to spur entrepreneurial activity throughout the state. Though Alternative #4 performs better than #3 according to the outcomes matrix above due to higher political feasibility, a decrease in capital gains taxes could be argued as a much more viable alternative than a decrease in traditional income tax rates. At a time of a legislature beginning to push back against increased tax rates, this could be a first step in allowing for a more fiscally conservative tax policy.

Reductions to the capital gains tax rate and academic spending both have different strengths according to the matrix, the latter being more politically feasible and the former being more impactful on investors. However, these differences could meld together in a legislative package that would perform well on all criteria levels. This also represents an innovative option, connections between academic spending and entrepreneurial activity theoretically supported by rigorous research, which has never been implemented at the state level before. Furthermore, this alternative has the added benefit of enabling multi-industry growth and development through research and development spending at the University level. Though this policy contains upfront costs (\$60M and $\frac{1}{3}$ decrease in capital gains tax revenue), the potential for each dollar invested in venture capital to generate \$6.45 in lifetime returns presents a clear plan to recuperate the budgetary over the next few years. Though Alternative #3 is the second least politically feasible option, it is substantially more feasible than Alternative #2 due to significantly fewer budgetary losses. Implementation will require some oversight due to the necessary governance of academic research stimulus; however oversight in this regard is common at the post-secondary level and strongly precedented.

This proposal is unique in the sense that it attempts to promote and restore the venture capital population of California through a primary investment in academic research. Though venture capital's 44% share of all R&D spending in the United States is societally beneficial, venture capital has taken a partial share of R&D motivation away from academic institutions. This has subsequently blurred the line between societal advancement and profits. Investments in academic research and development on innovative ideas have been shown to positively impact and grow the pool of venture capital investment in an economy. This subsequently generates positive returns for the economy of the state. This amount is very viable for a grant to the University of California system, as it stands just below average of typical research expenditure grants.

A reduction in capital gains tax rates would compel more entrepreneurs to enter the business. Though this would still be difficult to pass through a Democratically-controlled California legislature, there exists economic evidence of the state's budget being impacted by a decrease in capital gains funds from wealthy individuals during the last recession. This policy could enable a stabilization of the venture capital population, an increase in economic activity, and an increase in multi-industry investment, all benefitting the state in an innovative platform.

IMPLEMENTATION:

Per the recommendation above, this analysis recommends the NVCA pursue a combination of Alternative #3 and #4: decreasing the capital gains tax rate and providing investments in academic research to spur entrepreneurial activity throughout the state. This section of the report considers concerns and processes behind the implementation of each alternative individually, discusses the perspectives of relevant stakeholders, and considers some outside factors.

Decreasing the Capital Gains Tax Rate:

To move forward with implementation of a decreased capital gains tax rate, the NVCA should share all of their findings and considerations with conservative California legislators in order to seek feedback and approval on the suggestion to reduce the capital gains tax rate. In the process of gathering this feedback from government officials, the NVCA should seek support from venture capitalists in the form of personal testimony which details how such a policy change would raise their satisfaction derived from staying in California. Once a primary coalition has been built behind the idea, the NVCA can push for the policy to be introduced as a bill. However, there are few concerns associated with the implementation of this policy:

1. How fast could the policy expect to be implemented?
2. Where should the associated budget cuts be made?
3. Will there need to be future decreases in tax rates?
4. Is the rate reduction fair for industries outside of venture capital?

Increasing Academic Funding for Entrepreneurial Research:

To move forward with implementation of a grant for the University of California system devoted to entrepreneurial research, the NVCA should work to publicize all connections between academic spending and economic returns. There are clear connections between an investment in research and societal returns, and the political feasibility of gathering support for academic funding is very high. The NVCA could easily lobby for appropriations to be made for the UC system, but the main challenge would be assessing the efficacy of the investment. This raises several questions associated with the implementation of this aspect of the policy:

1. How would the funds be distributed across different schools in the UC system?
2. How will individual projects receive or apply for funding?
3. How will returns be measured across a variety of industries?
4. Is there a timeline for projects, or a mandated success rate?

Addressing Concerns Behind a Reduction to the Capital Gains Tax Rate:

There are four primary concerns to consider with regards to the capital gains tax decrease during the implementation phase. *First, how fast could the policy expect to be implemented?* Tax rate modifications are a yearly conversation amongst California legislators. During the past year, California received national attention due to a proposed tax increase in the form of Assembly

Bill 2088, a state-level wealth tax which sought to tax people beyond their residence in California if they were to move. This policy was perceived by lawmakers across the United States to be unconstitutional, and generated public pressure which resulted in the legislation being shut down alongside other tax increases. Following the tide of these sentiments, this report recommends the NVCA attempt to pass this change within the year in order to enact the legislation before the FY2022 tax collection cycle. The generation of a bill and coalition behind this decrease would be feasible for the NVCA within that window, and would draw the support of venture capitalists due to the fast-acting nature of the political action.

The second concern to consider is *where should the associated budget cuts be made?* The funding of this alternative would result in a \$4.65 billion decrease in annual revenue collected from capital gains tax, equating to a 3.3% reduction in total California state revenue. In order to afford this reduction without interrupting necessary state programming, the NVCA should look to cut programming perceived by the public as unnecessary or over-funded. According to the proposed Governor's Budget for 2021-22, the state is expecting to spend \$12.8 billion on law enforcement resources, underneath the 'Corrections and Rehabilitation' component of the state budget. Cutting funding for this component of the budget by 36% (\$4.65 billion) would only necessitate cuts in a publicly antagonized sector which liberal politics seeks to reform, and not call for the decrease in funding towards any other infrastructure.

The third concern to consider is whether *there will need to be future decreases in the capital gains tax rate?* Or additionally, could there be a need for decreases in other tax rates? Unfortunately, due to the unprecedented nature of this reform package, there are no comparable situations which could serve as an example to this case. This report predicts the capital gains tax rate change to increase the population of venture capitalists by 0.484%, while securing the revenue from some of the most successful IPOs in the state. If these prediction numbers fall short of the population change, there could be a need to increase the tax rate reduction beyond the New York rate or levy a decrease in the highest marginal income tax rate. This will need to be annually evaluated according to state-level Census data.

A fourth and final primary concern posits *is the rate reduction fair for industries outside of venture capital?* This concern will need to be addressed strongly by the NVCA in a short-term and long-term approach. At the beginning, more money is going to be given to the VC industry. However, this money over the long-term will enable investments in broader industry growth.

Addressing Concerns Behind an Increase in Academic Spending:

There are four primary concerns to consider with regards to an increase in academic funding for entrepreneurial research during the implementation phase. *First, how will the funds be distributed across different schools within the UC system.* There are 16 schools contained within the University of California system, these schools all spanning immense diversity in socio-economics of students served. Though an equal investment in all of the research programs is ideal, this report recommends building precedence through success in initial investment among

schools with already large research departments. Following this logic, the NVCA should split the \$60 million equally between UC Los Angeles and UC Berkeley, as they have the largest research budgets in addition to being proximally located to the venture hubs of Los Angeles and San Francisco, respectively. This will allow for easier measurement behind the success of projects, and increase connections between the research and existing venture capital activity.

The second concern to consider is *how will individual projects receive or apply for funding?* In order to ensure that money is only being disbursed to substantial projects, this report recommends the NVCA generate a rigorous application process for schools to submit their project proposals. Review of these proposals will likely require the hire of a new NVCA staff member who is tasked with assessing the impacts of each of the proposals on the entrepreneurial industry of the state, as well as staying in communication with current venture capitalists on rising industries. This person will disburse funds according to projects which meet a criteria of strong effectiveness, and use the opinions of VCs to prioritize investment across projects.

The third concern to consider is *how will returns be measured across a variety of industries?* As previously referenced, each dollar invested into venture capital can generate lifetime returns of around \$6.45x in economic activity (Ben, 2019). However, across a potentially diverse array of industries, how could this be measured? In order to assess returns as a result of this policy, the NVCA should look at the yearly expected returns of the top five industries in California, and calculate an economic impact in terms of gross state product based on the ultimate level of deviation from the expected return level. The top five industries in California include technology products, agriculture, aerospace, service, and motion pictures. These industries within California alone account for more economic activity than many countries. Although a sensitivity analysis based on deviance from a predicted return level could be subject to bias, it would enable NVCA to make preliminary findings necessary for the creation of an initial hypothesis behind the idea. After assessing any significant change in the GSP, the NVCA can go back and see if any new entrepreneurial activity occurred within those industries through academia.

A fourth and final concern asks: *is there a timeline for projects, or a mandated success rate?* The goal of the funds at this point in the implementation stage is to promote discovery on the true effectiveness of the investment in academic spending for entrepreneurial activity. Therefore, each funded project would be best served to have a time horizon of less than a year or two, and be subjectively assessed by the NVCA reviewer to have a high degree of success.

Stakeholders:

The NVCA must consider the following stakeholder perspectives when working to implement the recommended policy solution:

Venture Capitalists: The implementation of this policy proposal requires the cooperation of venture capitalists on two fronts: building a coalition for the capital gains tax rate and working with academic institutions on entrepreneurial projects. Some venture capitalists may be more

politically inclined than others, and more likely to express their public support for a capital gains tax reduction. Similarly, some venture capitalists may be hesitant to partner with academic research institutions on projects due to concerns about intellectual property and ownership. The NVCA should consider venture capitalists a key stakeholder in the implementation of these alternatives, and work to incorporate as much of their feedback as possible into the process.

Government Officials: The passage of academic stimulus is likely very feasible in California, but a decrease to the capital gains tax rate is going to take a significant amount of political due diligence. In order for the NVCA to craft a policy package that could even get on the voting block, they will have to carefully determine allies within the state legislature. These could more likely be representatives coming from areas with high levels of venture capital activity, or experience in the field. All allied governmental officials will need to be convinced of the economic returns associated with decreasing the capital gains tax rate, compromise on the necessary budget reductions, and follow political momentum against more tax hikes in the state.

Working Citizens: The fourth criterion, equity, intends to promote stability in finances, health, or livelihood among the average citizenry of California. In order to promote something such as livelihood, the NVCA needs to do due diligence in discovering the wants and needs as far as economic growth among the average, working citizen. This involves engaging in political discovery with people from all income brackets, informing them of how this policy package will specifically help them, and incorporating any of their suggestions or feedback into the implementation process.

Colleges and Universities: Administrators, faculty, and students will all play an essential role in the effective implementation of stimulus to entrepreneurial research. Administrators must make it a priority amongst their available resources in order to generate support from both the faculty and students, and the faculty must have a strong degree of buy-in in order to support student projects. In order to promote motivations for this kind of research, the NVCA should work to capitalize on alumni connections between venture capitalists and the funded universities, and lure support in additional career advising and job opportunities. Additionally, the NVCA can express to VCs the importance of student engagement in research as it leads to increased outcomes for their industry, and a wider array of investment opportunities. The NVCA should conduct interviews with the first primary projects in order to determine their apprehensions or questions about the process, and be able to effectively reform the process going forward.

Other Considerations:

There are a few situation constraints which are bound to impact the implementation of each policy alternative. These, which the NVCA should consider in developing an implementation strategy, are outlined below:

COVID-19: Due to the prevalence of the novel coronavirus within the state of California, as well as the activity surrounding vaccine and relief efforts, there may be difficulty in mobilizing

legislators or the general public to support the venture capital economy of the state. Given the circumstances of the pandemic, the NVCA should work in whatever capacity to tailor the positive returns of their legislation to include medical industries and the needs of marginalized groups. Perhaps academic investment can be constrained to entrepreneurial research in the medical or educational fields in order to gather stronger support.

Lack of Precedence: The policy package of this report's recommendation is marketable because it is unique. There has never been a policy proposal in the financial sector which aims to increase the population of a particular group of people within a state in order to sustain the overall state's budget. In order to combat skepticism in this regard, the NVCA should advertise the connections between this recommendation and the literature previously reviewed.

CONCLUSION:

Venture capital activity is integral to the success of California's economy. The venture capital industry comprises almost a quarter of gross state product for California, and pays significant dividends in tax revenue, employment opportunities, diverse industry growth, and research spending. The success of venture capital has made the state reliant on regulations of the industry in order to fund California's annual budget, and a rising trend of venture capitalists choosing to leave California poses threats to the state's financial stability. This report recommends the NVCA take swift action in working with legislators and members of the venture capital community to build a coalition in support of two specific reforms to encourage venture capitalists to remain within the state. These recommendations include a reduction in the capital gains tax rate, as well as an increase in money granted for entrepreneurial research.

This report reviewed literature covering the venture capital industry, examined California's environment housing the industry, and reviewed the relations between venture capital presence and political reform. Based on the findings from this literature, the report generated five potential alternatives for the NVCA to consider and then analyzed them according to criteria related to their effectiveness, impact, feasibility, and equity.

After a careful consideration of each alternative's impact and effectiveness per the criteria, this report recommends the NVCA pursue a combination of Alternative #3 and #4: decreasing the capital gains tax rate and providing investments in academic research to spur entrepreneurial activity throughout the state. This policy package would enable a stabilization of the venture capital population, an increase in economic activity, and an increase in multi-industry investment, all benefitting the state in an innovative platform.

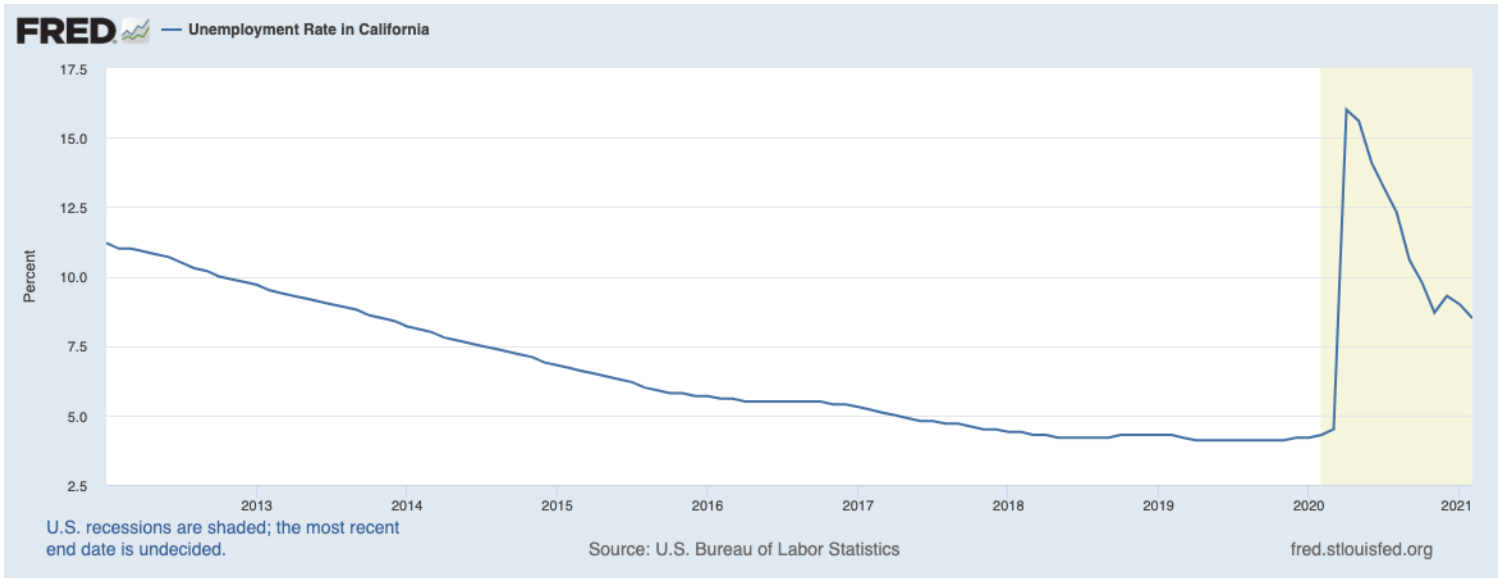
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APPENDIX:

Appendix A: Unemployment Rate in California, (January 2012 - Present)



Appendix B: Effective Tax Rate

For the purposes of this analysis, effective tax rate is defined as:

$[Total\ Tax\ Paid] / [Income\ Earned]$, calculated as a percentage.

** Therein, an effective tax rate (referenced in Appendix C - E) describes the actual percentage of taxes on payes on all of their taxable income. This is different from marginal tax rates which only apply to each additional level of income.*

Appendix C: ‘Average’ California Venture Capitalist Tax Contribution Table

Tax Type	Marginal Tax Rate	Effective Tax Rate	2020-2021 Taxes
Federal	39.35%	36.68%	\$458,451
State	13.30%	11.21%	\$140,171
Total Income Taxes	-	43.62%	\$598,622
Income After Taxes	-	-	\$651,378

Appendix D: ‘Average’ Texas Venture Capitalist Tax Contribution Table

Tax Type	Marginal Tax Rate	Effective Tax Rate	2020-2021 Taxes
Federal	39.35%	36.68%	\$458,451
State	0%	0%	\$140,171
Total Income Taxes	-	36.68%	\$458,451
Income After Taxes	-	-	\$791,549

Appendix E: ‘Adjusted’ California Highest Income Tax Contribution Table

Tax Type	Marginal Tax Rate	Effective Tax Rate	2020-2021 Taxes
Federal	39.35%	36.68%	\$458,451
State	*8.82%	6.94%	\$86,850
Total Income Taxes	-	47.89%	\$545,301
Income After Taxes	-	-	\$704,699

Appendix F: Population Calculations

Data from [Pitchbook](#), Extrapolating from 2013-2019 AUM Trends by State

1. Total Growth in Assets Under Management for New York (2013-2019)

NY AUM (2019) = \$57,073 (billion), NY AUM (2013) = \$26,977 (billion)

$$\text{Percent Change} = \frac{\$57,073}{\$26,977} = 2.116 * 100\% = 211.6\% \Rightarrow 111.6\% \text{Growth for New York}$$

2. Total Growth in Assets Under Management for California (2013-2019)

CA AUM (2019) = \$257,693 (billion), CA AUM (2013) = \$128,696 (billion)

$$\text{Percent Change} = \frac{\$257,693}{\$128,696} = 2.002 * 100\% = 200.2\% \Rightarrow 100.2\% \text{Growth for California}$$

3. Rate of Change Between States

Assuming if California had tax rates to resemble those of New York, California would experience a growth rate in AUM (written as the magnitude of change over two distinct percent changes) of approximately 5.7%.

$$\frac{2.116}{2.002} = 1.057 * 100\% = 105.7\% \Rightarrow 5.7\% \text{ Increase in AUM for the state of California.}$$

4. Division of Revenue Loss Burdens Between Income and Capital Gains Taxes

A sum of previously calculated income tax revenue losses (\$49.87B) and capital gains tax revenue losses (\$4.65B) is approximately equal to \$54.52B.

$$\text{Revenue Loss Burden from Income Tax} = \frac{\$49.87}{\$54.52} = 0.915 * 100 = 91.5\%$$

$$\text{Revenue Loss Burden from Capital Gains Tax} = \frac{\$4.65}{\$54.52} = 0.085 * 100 = 8.5\%$$

5. Extrapolation to Population Considerations

This analysis equates percentage increases in AUM per tax with a reasonable estimate of change in the population of venture capitalists within the state of California. Under this assumption, the percent change in population per each tax reduction is shown below by combining revenue loss impact factors with the previous growth rate of 5.7%.

$$5.7\% * \frac{91.5}{100} = 5.216\% \text{ Increase in VC Population for such a reduction in Income Tax Rates}$$

$$5.7\% * \frac{8.5}{100} = 0.484\% \text{ Increase in VC Population for such a reduction in Capital Gains Tax Rates}$$