

# APPLYING KLEROS TO VENTURE FINANCE PRESENT AND FUTURE

Milad Mohammadi 2021



## Table of Contents<sup>1</sup>

#### **Abstract**

- 1. Traditional Venture Capital (VC) Disputes
- 2. Kleros Implementation Considerations
- 3. Traditional Venture Capital (VC) Dispute Business Case
- 4. Decentralized Autonomous Organization (DAO) Based VC
- 5. DAO Dispute Business Case
- 6. Conclusion

**Works Cited** 

<sup>&</sup>lt;sup>1</sup> Milad Mohammadi holds a B.A. from New York University and is a technology consultant focused on the communications, media, and technology sectors at a Fortune 500 firm. Before his current role, he worked at one of the most preeminent global law firms specializing in venture capital.



### **Abstract**

Venture finance is a type of finance that is focused on investments in startup companies. With the rise of the world wide web and eventually Web 3.0, venture finance has become ubiquitous in the public eye with investors funding a wide range of new companies. For example in 2021, Helium a blockchain based company building wireless infrastructure, received over \$111 million in investments from prominent venture capital firms like Andreessen Horowitz². Market research firm Emergen Research expects the global web 3.0 market size to reach \$81.5 billion by 2030³.

While startup companies have disrupted a wide range of industries, venture finance itself has yet to be disrupted. In particular, startup companies continue to raise funds from well-connected venture investors with trust built on top of the traditional legal system in developed countries. For instance, a survey by prominent venture capitalist Richard Kerby found that in 2018, 40% of venture capitalists attended Stanford or Harvard, schools well known for being amongst the most elite in the world<sup>4</sup>. According to Crunchbase columnist Joanna Glasner, the vast majority of venture funding happens in the US, a jurisdiction known for its established venture capital law<sup>5</sup>.

The traditional legal system presents multiple challenges, particularly with cost and global accessibility. Agreements between investors and startup leaders involve a wide range of manual contracts and disputes which are handled in slow and expensive commercial courts.

Among the most important types of disputes between investors and startup leaders are those that involve representations made to either party. Such representations for example can include a startup leader claiming to have made a certain amount of sales in the past few years.

This paper explores the potential application of Kleros to resolve these disputes.

<sup>&</sup>lt;sup>2</sup> (Ossinger, 2021)

<sup>&</sup>lt;sup>3</sup> (Emergen Research, 2022)

<sup>&</sup>lt;sup>4</sup> (Kerby, 2018)

<sup>&</sup>lt;sup>5</sup> (Glasner, 2021)



# Traditional Venture Capital (VC) Disputes

#### Introduction to Venture Capital (VC)

According to Adam Hayes a writer for Investopedia, a popular investment education website, "Venture capital (VC) is a form of private equity and a type of financing that investors provide to startup companies and small business that are believed to have long-term growth potential". The National Venture Capital Association, a major industry group in the United States, provides further clarity stating that "venture capital is quite unique as an institutional investor asset class. Venture capital funds make equity investments in a company whose stock is essentially illiquid and worthless until a company matures five to eight years down the road".

With that, venture capital financing has become ubiquitous in the internet age, where startups take advantage of its immense scale to bring products and services across the globe. As of 2021, the global venture capital investment market reached \$211.3 billion according to the market research firm imarc group<sup>8</sup>. Venture finance contrasts with traditional company financing. Investors in venture capital are not as easily able to quantify present business value. Startups frequently have limited history and as a result often lack financial statements, have little to no credit history, and are void of other material aspects that are characteristic of established companies.

Venture finance, like many forms of finance, has a repeatable deal-making process. The deal-making process involves a relatively lean flow of originating deals (often times through business and academic networks), screening, due diligence (examining the company's condition), followed by the actual investment and its lead up to an exit. The actual investment instrument and method can vary widely depending on the maturity of the company and macroeconomic factors.

<sup>&</sup>lt;sup>6</sup> (Haves, 2022)

<sup>&</sup>lt;sup>7</sup> (National Venture Capital Association, 2022)

<sup>8 (</sup>imarc group, 2022)



#### **Venture Capital Deal Process Overview**



Content Source: OneMatchVentures

Given the type of investment, venture capital investors depend heavily on the trustworthiness of startup founders, market research, and flexible projection models to determine the ability of a business to succeed in the long term. This ultimately makes venture capital investments among the highest risk class of investments in modern finance. In the United States, for instance, Harvard Business School senior lecturer Shikhar Ghosh estimates that 75% of venture-backed startups fail<sup>9</sup>.

These key aspects inevitably lead to the concern that investors can be defrauded by bad actors. Investors conducting due diligence on startup companies must accept the claims of founders at their own risk. To counteract this, the venture capital industry has developed various funding techniques aimed at mitigating the risk of losing large amounts of capital. These techniques can include for instance appointing board members and advisors to companies for increased oversight and accountability, and investing in "tranches" rather than all at once, among many other popular methods.

However, no method is foolproof in preventing company founders from defrauding investors. At the same time, startup founders are increasingly emerging from many new geographies outside of the confines of traditional startup hubs with established histories in dealing with venture capital disputes. According to analysis by Preqin, an investment data company focused on alternative assets, there are a number of emerging markets in Latin America and Sub-Saharan Africa where there is rapidly growing early stage funding <sup>10</sup>. This presents a challenge in holding startup founders accountable when there are cross-jurisdictional investments. How do investors from say Latin America, ensure they are not defrauded by founders in Eastern Europe?

-

<sup>&</sup>lt;sup>9</sup> (McDermott, 2012)

<sup>&</sup>lt;sup>10</sup> (Pregin, 2018)



#### Startup Financing Cycle

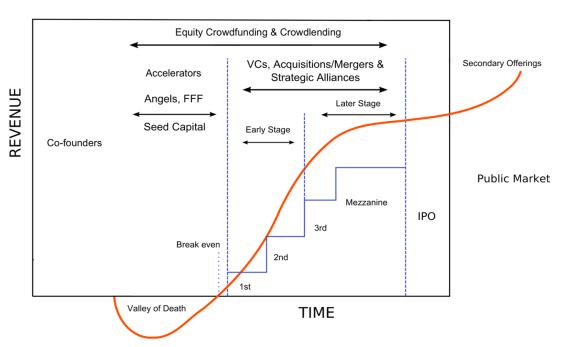


Image Source: Wikipedia

#### Introduction to Venture Capital (VC) Disputes

In venture capital, there have been numerous disputes between investors and startup leaders. Investor startup disputes can arise in a multitude of ways, including on issues of business strategy, breach of fiduciary duty, among many others. One of the most well understood and problematic forms of dispute are around alleged misrepresentations. Representations are statements that describe the condition of the company provided to investors.

As venture capital investment firms matured over time, they began to develop more standardized investment contracts to reduce uncertainty and time spent in the deal-making process. As part of these investment contracts, certain sections became dedicated to the purpose of making material representations to the other party.

In the United States, for instance, standard venture capital investment contracts typically contain a representations and warranties section and often a disclosure schedule. Below is an example clause introducing such a section in the widely popular National Venture Capital Association model Stock Purchase Agreement <sup>11</sup>:

<sup>&</sup>lt;sup>11</sup> (National Venture Capital Association, 2020)



# National Venture Capital Association (NVCA) Model Stock Purchase Agreement (September 2020)

Representations and Warranties of the Company. The Company hereby represents and warrants to each Purchaser that, except as set forth on the Disclosure Schedule attached as Exhibit C to this Agreement, which exceptions shall be deemed to be part of the representations and warranties made hereunder, the following representations are true and complete as of the date of the [initial][applicable] Closing, except as otherwise indicated...

Company representations typically include statements that material contracts have been properly fulfilled, financial conditions properly disclosed, the signatories to the deal have the appropriate authority to sign, various laws have been complied with, etc.

In the disclosure schedule, there are typically two different types of disclosures that parties make: affirmative and factual disclosures. In an affirmative disclosure, the party affirms that a certain material item has been met, such as an insurance policy having been obtained. In a negative disclosure, the party lays out any material exceptions to their affirmations and representations, such as that an insurance policy doesn't cover certain important claims that may arise with the company.

Company founders are considered to have made misrepresentations to investors when they make knowingly untrue representations for their own gain. For instance, a company might claim to have secured a key contract or deal with a client which they know was not signed or was voided. If an investor alleges a misrepresentation, they may file a claim in a traditional court. A textbook example of such a case would be CBS v. Ziff-Davis Publ. Co. (1990), where the investing party alleged that the company misrepresented its financial condition<sup>12</sup>

To bring this issue into more widely known contexts, in the high-profile Theranos case, investors alleged that the startups founders defrauded them by making claims about the company's products that were untrue<sup>13</sup>. This case went on to become one of the most famous venture fraud cases in recent history.

To address these issues, Kleros can be utilized as an alternative dispute settlement mechanism. In the event that a party disputes a representation, a Kleros court can examine, and review documents submitted by both sides to determine if a misrepresentation took place.

This can be done by first directing such disputes to be arbitrated in Kleros in investment documents. The below would be a sample clause that could be added to a Stock Purchase Agreement for instance:

<sup>12 (</sup>CBS v. Ziff-Davis Publ. Co., 1990)

<sup>&</sup>lt;sup>13</sup> (Weaver, 2016)



**Arbitration.** Any controversy, dispute or claim arising out of or relating to this agreement or the breach thereof shall first be settled through good faith negotiation. If the parties are unsuccessful at resolving the dispute through negotiation, the parties agree to arbitration administered by the Kleros arbitration service or its successor protocol subject to the protocol's rules. Judgment on the Award may be entered in any court having jurisdiction.

Unlike a Decentralized Autonomous Organization (DAO) which will be discussed later in this paper, parties would simply initiate cases manually through Kleros Dispute Resolver. Case parameters can be agreed to beforehand and cases would then proceed through the normal user flow. By utilizing Kleros, investors and founders would no longer be limited by the traditional legal methods available to them. Kleros can also serve as a tool to optimize traditional legal dispute settlement, by functioning as a way to establish the validity of facts in a particular case. This would have the potential to open up startups in less well-established jurisdictions with greater opportunities to obtain investments.

# 2. Kleros Implementation Considerations

#### **Case Parameters**

Parameters such as the number of jurors, permissible documents, etc would need to be established. These would be required to ensure consistency and predictability to dispute resolution, without favoring one party unfairly by allowing them to set partial parameters that favor them.

Some example key parameters to set would include:

Parameter	Description
Kleros Court to be utilized	The Kleros court to handle the type of case
Number of appeals (if any) permitted	Number and if appeals are allowed
Permissible and impermissible questions to resolve	Decide on the category and types of questions that could be resolved through Kleros
Permissible and impermissible forms of evidence	Evidence that may or may not be submitted and what forms
Usage of expert witnesses	When and how expert witnesses can be



	utilized
Time period to hire outside counsel and expert witnesses	Time given to hire counsel and expert witnesses

Over time, it is likely that such parameters would be standardized for the most common types of cases.

#### **Enforceability**

As a new form of arbitration available on the market, the enforceability of Kleros decisions would continue to evolve. Unlike traditional forms of arbitration, many jurisdictions would need to adopt and further accept blockchain-based dispute settlement protocols like Kleros. In Mexico for example, a court recently chose not to object to the usage of Kleros by an arbitrator to decide a dispute<sup>14</sup>. Instances like this will provide fertile ground for continued progress in this area.

#### Confidentiality

There are certain aspects of venture capital that require special consideration. One of those, in particular, would be confidentiality. Many representations made by early-stage startup companies are intended to be kept private. This is due to the sensitive nature of many of these representations, which could include information that could potentially be used by competitors. In the traditional legal system, sensitive business information can be redacted, and non-disclosure agreements can be utilized. It will be interesting to see further developments in the area to protect sensitive business information from being circulated. Some example methods can be, for instance: securing and tracking sensitive documentation on the blockchain with unique IDs, having funds held in time locked smart contracts that would prevent their release in the event of a data leak, as well as reputational trust scores for jurors through the Proof of Humanity blockchain 15. With the first example of securing and tracking sensitive documentation on the blockchain, this technique has already been established even before the advent of blockchain. For instance, publishers of monetized PDFs and academic articles have put identifiers in PDFs timestamping the time, IP address, account, and other information about the document, in order to prevent piracy for years. These techniques can and have been used to secure sensitive business information, especially in the legal industry. In the second example of time locked smart contracts, funds to jurors can be held in a escrow smart contracts, and only released upon the conclusion of the case and after it has been confirmed for a specified period of time that no data leaks have taken place. With the third example, the Proof of Humanity blockchain, which was developed to verify real human identities, offers a strong method for assigning trust scores to jurors. Key to this is

<sup>&</sup>lt;sup>14</sup> (Ast, Kleros Project Update - February 2022, 2022)

<sup>15 (</sup>Proof of Humanity, 2021)



the Proof of Humanity's key feature of identifying unique humans, as to prevent jurors from creating many duplicate juror accounts in the event their reputational score is reduced for leaking sensitive business data.

#### **Expertise**

Some representations may require a level of familiarity and expertise with the subject matter. These could be for instance representations about the company's financial state, product, etc. For example, a juror with expertise in accounting and financial statements would be better suited for cases involving claims of faulty financial statements. To some degree, this is already reflected in the choice of varying courts such as the Translation and Data Analysis courts. This is done by allowing jurors into these courts whom possess the right domain knowledge on these subject areas. Further research will be needed to understand the best methods for ensuring jurors have adequate knowledge on specialized areas of expertise.

# 3. Traditional Venture Capital (VC) Dispute Business Case

Determining the business case for transitioning disputes to Kleros for traditional VCs requires comparing the time and cost of handling disputes on Kleros compared to methods in the traditional legal system.

In the traditional legal system there are two primary methods are used for resolving disputes. Litigation in the courts or third-party arbitration services. Commercial litigation in the courts typically involves the investing party suing the company they allege has made misrepresentations to them in a contractual agreement. Third-party arbitration typically involves both the investors and the company founders agreeing to use a commercial dispute settlement arbitration service. Some popular organizations that provide such services in the case of the U.S. include JAMS or the AAA <sup>16</sup>.

#### Time savings

Calculating time savings of resolving disputes in Kleros compared to litigation or traditional arbitration requires making many simplifications and assumptions.

In the case of litigation, investor disputes can take place in a wide range of courts with varying jurisdictions, each with their own average time frame for disputes, caseloads, and a whole host of other factors. These variabilities make it difficult to determine the average time a VC dispute would take. Therefore, for the sake of simplicity in this paper, we will

<sup>&</sup>lt;sup>16</sup> (ADR Times, 2021)



assume that cases would take place in the United States (as it is the largest VC market in the world)<sup>17</sup> within the state of Delaware (the most popular state for incorporating corporations and where most shareholder based disputes occur)<sup>18</sup>, and lastly that such disputes are handled by the Delaware Court of Chancery (the United States' preeminent business court)<sup>19</sup>. In taking a snapshot and analyzing the most recent 2021 docket (totalling 96 decided cases)<sup>20</sup>, the average commercial dispute in the Delaware Chancery Court took approximately 83 days<sup>21</sup>.

In order to make a form a basic comparison, we will also need to understand the time benefits that arbitration affords to cases. According to a 2018 study by the American Arbitration Association, Federal District Court cases that we handled in arbitration instead took approximately 12 months less (24.2 months versus 11.6 months)<sup>22</sup>. Using this as a rough proxy, we can assume that traditional arbitration for the same commercial dispute takes half as long.

When looking at Kleros arbitration, we see that according to the Klerosboard Dashboard the average dispute took 13.9 days<sup>23</sup>.

The below table shows the average days elapsed based on these assumptions.

	Litigation	Traditional Arbitration	Kleros Arbitration
Average Days Elapsed (2021)	83	41.5	13.9

Based on this preliminary comparison, we can infer that Kleros arbitration is 5.97 times faster at resolving its cases compared to litigation and 2.99 times faster at resolving cases compared to traditional arbitration.

However, this simple comparison does not tell us the whole story. Cases resolved in the different methods have varying degrees of complexity. Cases for instance in litigation can be substantially more complex than those resolved in traditional arbitration or Kleros arbitration. What additionally complicates matters is that judges in litigation or arbitrators in traditional arbitration can be specialized in the subject matter of the dispute. Furthermore, a significant portion of litigation matters settle before a decision is rendered by the court. Lastly, caseload and operations are another major aspect of how long disputes may take. Some courts may deal with substantially more cases than other courts or there may be large differences in court staffing. Additional research will need to take place to further explore caseload and operations, some potential research

<sup>&</sup>lt;sup>17</sup> (Vanham, 2015)

<sup>&</sup>lt;sup>18</sup> (Crockett, 2021)

<sup>&</sup>lt;sup>19</sup> (State of Delaware, n.d.)

<sup>&</sup>lt;sup>20</sup> (Delaware Courts, n.d.)

<sup>&</sup>lt;sup>21</sup> Table of Chancery Court Analysis Provided in Works Cited Section

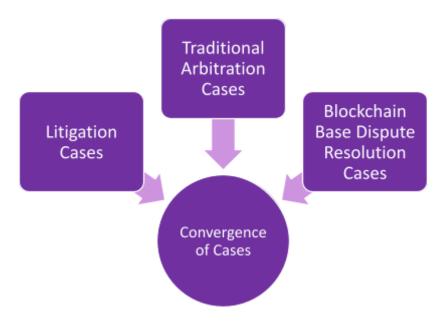
<sup>&</sup>lt;sup>22</sup> (Singer, 2020)

<sup>&</sup>lt;sup>23</sup> (Kleros, 2021)



techniques can include system dynamics and predictive modeling.

This comparison primarily serves to begin a discussion on comparing blockchain-based dispute resolution to traditional methods. Currently, blockchain-based dispute resolution is heavily focused on disputes particular to the Web 3.0 ecosystem and internet based commerce. This emphasis can be seen for instance, with the focus on issues such as cryptoasset escrow, e-commerce, and content moderation amongst Kleros's advertised use cases. However, over time blockchain-based dispute resolution will likely mature in capabilities to accommodate a wider variety of cases. These new capabilities will accommodate convergence with cases found in traditional methods, allowing for more thorough and advanced comparisons.



#### **Cost savings**

Calculating cost savings also requires making simplifications and assumptions. Litigation and arbitration fees can vary based on chosen legal counsel, court fees (which vary from court to court), and other factors. We will assume for our example, that in the case of litigation it would be handled by the Delaware Court of Chancery and in the case of arbitration, it would be JAMS.

To further simplify, we will assume that in all dispute resolution methods, each side will select a representative which would be a commercial litigation lawyer. Although a lawyer is not always legally required for arbitration unlike litigation, we will assume that lawyers will be used as venture disputes often involve substantial claims. The lawyers would bill their respective clients 8 hours a day that the dispute is taking place, for a total labor time of 16 hours a day. These simplifications are made given that attorneys usually have support staff and bill in odd increments making it difficult to judge hours expended for



clients.

We then arrive at a calculation wherein the cost for using each method is the average hourly rate of the representative, times the 16 hours a day, times the number of days the dispute is taking place. For the hourly rate, we will utilize the national average hourly rate for an attorney found on the professional services site, Thervo, which was \$225<sup>24</sup>.

For the sake of simplicity, we exclude court and arbitration filing fees. These fees can include filing costs for documents or juror fees.

#### The below table shows the average costs of utilizing each method:

	Litigation	Traditional Arbitration	Kleros Arbitration
Hourly Fee	\$225	\$225	\$225
Daily Utilization	16	16	16
by Both Parties	00		40.0
Average Number of Dispute Days	83	41.5	13.9
Elapsed			
Dispute Cost	\$298,800	\$149,400	\$50,040

This comparison is only meant to provide a starting point in understanding potential cost savings in one market. It is also worth mentioning that Kleros may not necessarily have to be used to resolve the entirety of a dispute. It may be utilized to resolve certain factual questions or provide expert witness type guidance on particular areas.

# 4. Decentralized Autonomous Organization (DAO) Based VC

According to CoinDesk's crypto journalist Alyssa Hertig, decentralized autonomous organizations (DAOs) are a blockchain-based form of organization or company that are governed by a native cryptocurrency token<sup>25</sup>. The cryptocurrency tokens that govern the DAO can be seen as analogous to company shares, which can have voting/staking rights attached to them. This allows investors to purchase tokens of DAO projects which they believe have strong growth potential and influence their trajectory.

An early famous example of a successful DAO is MakerDAO, which is a DAO focused on

<sup>25</sup> (Hertig, 2021)

<sup>&</sup>lt;sup>24</sup> (Thervo, 2022)

governing a popular DeFi stablecoin called DAI<sup>26</sup>. Since then, DAOs have exploded into an enormous ecosystem encompassing an incredible number of use cases. According to API company Alchemy's Bud Hennekes, popular DAO use cases include; protocols, investments, social, and media DAOs<sup>27</sup>.

When it comes to DAOs taking place of traditional corporate entities, DAOs provide numerous advantages. Traditional corporate entities require considerable manual processes to govern, while DAOs have the ability to make use of smart contracts to automate governance. However, utilizing DAOs in venture capital has thus far been limited due to the issue of dispute resolution. This can be seen with the strong interest in projects such as The LAO and other DAO LLC hybrid entities which allow the DAO to be governed by smart contracts, while pushing dispute resolution to the traditional corporate legal system<sup>28</sup>. This is why venture capital funds continue to prefer traditional legal entities, even when they are investing in the web 3.0 space. Unlike traditional corporate entities, DAO accountability is limited (unless registered as a traditional corporate entity such as a Wyoming DAO LLC) since investors in tokens have little they can do if the project sponsors misrepresent their project accomplishments. This has unfortunately allowed for numerous types of scam tokens to be created that are merely pump and dump schemes covered in clever marketing. An example of a infamous scam token would be the "Squid Game Token", where unsuspecting buyers purchased a token based on its false association with a popular streaming series<sup>29</sup>. These incidents are popularly referred to as "pump and dumps". According to Rajeev Dhir at the popular investment education site Investopedia, pump and dumps "a manipulative scheme that attempts to boost the price of a stock or security through fake recommendations. These recommendations are based on false, misleading, or greatly exaggerated statements. The perpetrators of a pump-and-dump scheme already have an established position in the company's stock and will sell their positions after the hype has led to a higher share price"30. Rajeev Dhir further adds that "the burgeoning popularity of cryptocurrencies has resulted in the proliferation of pump-and-dump schemes within the industry"31.

As described by Federico Ast, a milestone-based system where a smart contract holds investor funds to be distributed upon milestone completion may be a great approach to build trust in DAOs and secure investments<sup>32</sup>. Past milestones can function as representations that have already been met, and if they come into question, investing token holders may initiate a dispute through Kleros to dispute a milestone. Designated investor token holders (such as those forming a certain majority of the token) may vote to approve such a dispute. DAO smart contracts can be integrated with Kleros utilizing its APIs. We will not discuss technical implementation in this paper as it is out of scope,

<sup>&</sup>lt;sup>26</sup> (MakerDAO, n.d.)

<sup>&</sup>lt;sup>27</sup> (Hennekes & Lau, 2022)

<sup>&</sup>lt;sup>28</sup> (The LAO, 2021)

<sup>&</sup>lt;sup>29</sup> (Stokel, 2021)

<sup>30 (</sup>Dhir, 2022)

<sup>&</sup>lt;sup>31</sup> (Dhir, 2022)

<sup>&</sup>lt;sup>32</sup> (Ast, Kleros: Fighting Scams and Abuse in Token Sales, 2017)



however, we can say that token purchase smart contracts can be made arbitrable and linked to Kleros. One key technical implementation consideration to note would be interoperability. Ensuring that disputes can be settled on Kleros irrespective of the choice of platform will be important in ensuring widespread acceptance. Otherwise, we could see fragmentation in the field where each DAO platform will have its own dispute settlement protocol rather than utilize universal protocols.

# 5. DAO Dispute Business Case

At this time, there are few alternative functioning platforms for disputing DAO cases aside from Kleros. Two other prominent dispute settlement protocols include Aragon Court and Jur<sup>33</sup>. As of the writing of this paper, few cases have been resolved on these other protocols to allow for comparison. It will be interesting to see the adoption and development of other dispute settlement protocols in comparison to Kleros. RMIT University's Allen et al. offers an interesting glimpse at the emerging methods for resolving disputes by different blockchain based platforms<sup>34</sup>. Some of these methods for instance do not even utilize juries and instead work by utilizing smart contract algorithms. There are also varying sub-methods within arbitration methods. William George at Kleros writes about how UMA for instance is another service used for dispute resolution which has a different take on utilizing schelling points which Kleros depends on<sup>35</sup>. Ultimately it is likely that in the future each protocol will fulfill its particular target market needs. At that point differentiation in time savings and cost would be able to be made.

As mentioned in the previous section on interoperability, it is also possible that DAO platforms could utilize their own dispute resolution protocols in place of separate services like Kleros. However, setting aside prior mentioned interoperability concerns, another key issue would be the independence of these internal dispute resolution protocols and their impact on the fairness of their dispute resolution outcomes. Scholar Gungmian Kung writes eloquently that integrated dispute resolution protocols could lead "to what some has called the reverse agency problem, where the obligation to protect the DAO's capital pools is often at odds with the duty to use these pools of capital to compensate insurees for their losses" Such issues with ensuring fair outcomes will likely mean a potentially competitive market for 3rd party dispute resolution services in the near future.

<sup>&</sup>lt;sup>33</sup> (Yann Aouidef, 2021)

<sup>&</sup>lt;sup>34</sup> (Allen et al., 2020, 75-101)

<sup>&</sup>lt;sup>35</sup> (George & Ast, 2022)

<sup>&</sup>lt;sup>36</sup> (Kung, 2022)



### 6. Conclusion

Modern venture capital has always been dependent on a trusted legal system under rule of law. It has been long understood that investors are more willing to invest in newer ventures when capital markets are supported by a fair system for resolving disputes. This has meant that those who live in states which are more corrupt and lacking in rule of law are more limited in their ability to secure investments. At the same time, individuals in such states are often in most need of capital over other components of enterprise such as labor and resources. Through decentralized arbitration, these individuals will be better able to secure investment capital without being fully dependent on their imposed legal systems. By opening up venture capital investment to more people around the world, this would lead to faster development of developing economies and reduced global inequality between countries.

There are many areas to conduct further research on applying Kleros for venture capital arbitration. These can be broadly categorized into research on the legal, business, and technical applications of Kleros on venture capital. On the legal side, it would be critical to further research how clauses allowing for Kleros arbitration could be added to the different aspects of venture capital deals, both on the investment/buy side and on the company/sell side. These clauses would also have to suit the particularity of different investment instruments whether they be debt, equity, or a combination of both types of instruments.

On the business aspects of venture capital, it would be important to look at how Kleros would impact levels of trust in investments, especially around web 3.0 based deals. Understanding how aspects of Kleros could provide greater confidence to investors would be a major area to explore.

For the technical side, building APIs and integrations for technologies already employed by the venture capital scene would be of great importance. Tools such as Carta and Sydecar are just a few examples amongst the hundreds of big names in venture capital investment technology and fund administration<sup>37</sup>.

.

<sup>&</sup>lt;sup>37</sup> (Han, 2022)



### **Works Cited**

ADR Times. (2021, April 12). Top Alternative Dispute Resolution (ADR) Institutions of 2021.

ADR Times. Retrieved July 29, 2022, from

https://www.adrtimes.com/top-alternative-dispute-resolution-institutions/

Allen, D., Poblet, M., & Lane, A. (2020, April).

\\jciprodo1\productn\H\HNR\25-1\HNR103.txt unknown Seq: 1 13-APR-20 13:36 The Governance of Blockchain Dispute Resolution. Harvard Negotiation Law Review, 25, 75-101.

https://www.researchgate.net/publication/340827439\_The\_Governance\_of\_Blockchain\_ Dispute\_Resolution\_-\_Harvard\_Negotiation\_Law\_Review\_Vol\_25

Ast, F. (2017, November 27). Kleros: Fighting Scams and Abuse in Token Sales. Retrieved from Medium:

https://medium.com/kleros/kleros-a-tool-against-abuse-in-token-distribution-92421774 6c16

Ast, F. (2022, February 25). Kleros Project Update - February 2022. Retrieved from Kleros: <a href="https://blog.kleros.io/kleros-project-update/">https://blog.kleros.io/kleros-project-update/</a>

CBS v. Ziff-Davis Publ. Co., 75 N.Y.2d 496 (New York Court of Appeals April 3, 1990).

Crockett, Z. (2021, April 10). Why Delaware is the sexiest place in America to incorporate a company. Retrieved from the Hustle:

https://thehustle.co/why-delaware-is-the-sexiest-place-in-america-to-incorporate-a-company/

Delaware Courts. (n.d.). Opinions and Orders . Retrieved from Delaware Courts: <a href="https://courts.delaware.gov/opinions/index.aspx?aq=court%200f%20chancery">https://courts.delaware.gov/opinions/index.aspx?aq=court%200f%20chancery</a>

Dhir, R. (2022, January 13). Pump-and-Dump Definition. Investopedia. Retrieved August 7, 2022, from <a href="https://www.investopedia.com/terms/p/pumpanddump.asp">https://www.investopedia.com/terms/p/pumpanddump.asp</a>

Emergen Research. (2022, May). Web3 Industry Share | Web 3.0 Market Forecast by 2030. Emergen Research. Retrieved July 23, 2022, from <a href="https://www.emergenresearch.com/industry-report/web-3-market">https://www.emergenresearch.com/industry-report/web-3-market</a>

<u>ntips.// www.emergenresearch.com/industry-report/web-3-market</u>

Falkon, S. (2017, December 24). The Story of the DAO — Its History and Consequences. Retrieved from Medium:

https://medium.com/swlh/the-story-of-the-dao-its-history-and-consequences-71e6a8a



#### 551ee

George, W., & Ast, F. (2022, June 30). Kleros and UMA. Kleros. Retrieved August 7, 2022, from

https://blog.kleros.io/kleros-and-uma-a-comparison-of-schelling-point-based-blockcha in-oracles/

Glasner, J. (2021, November 2). These Countries Have The Most Startup Investment For Their Size. Crunchbase News. Retrieved July 23, 2022, from https://news.crunchbase.com/startups/countries-most-startup-investment/

Hayes, A. (2022, February 26). Venture Capital. Retrieved from Investopedia: <a href="https://www.investopedia.com/terms/v/venturecapital.asp">https://www.investopedia.com/terms/v/venturecapital.asp</a>

Han, Y. (2022, April 20). Here's how 2 former Cooley lawyers plan to take on market leaders AngelList and Carta with their new VC investing platform. Business Insider. Retrieved August 7, 2022, from

https://www.businessinsider.com/sydecar-venture-capital-vc-investing-lawyer-angellist-carta-seed-funding-2022-4?international=true&r=US&IR=T

Hennekes, B., & Lau, I. (2022, April 6). The 8 Most Important Types of DAOs You Need to Know. Alchemy. Retrieved August 7, 2022, from <a href="https://alchemy.com/blog/types-of-daos">https://alchemy.com/blog/types-of-daos</a>

Hertig, A. (2021, November 24). What Is a DAO? Retrieved from CoinDesk: <a href="https://www.coindesk.com/learn/what-is-a-dao/">https://www.coindesk.com/learn/what-is-a-dao/</a>

imarc group. (2022). Venture Capital Investment Market. Retrieved from imarc: <a href="https://www.imarcgroup.com/venture-capital-investment-market">https://www.imarcgroup.com/venture-capital-investment-market</a>

Kerby, R. (2018, July 30). Where Did you Go to School? The lack of diversity within venture... | by Richard Kerby. Medium. Retrieved July 23, 2022, from <a href="https://medium.com/@kerby/where-did-you-go-to-school-bde54d846188">https://medium.com/@kerby/where-did-you-go-to-school-bde54d846188</a>

Kleros. (2021). Klerosboard. Retrieved from Klerosboard: <a href="https://klerosboard.com/">https://klerosboard.com/</a>

Kung, G. (2022, June 2). Building an Independent Judiciary for Sovereign DAOs. Kleros. Retrieved August 7, 2022, from

https://blog.kleros.io/independent-judiciaries-for-sovereign-daos/

McDermott, J. (2012, September 20). Report: 75% of Venture-backed Start-ups Fail. Retrieved from Inc.:

https://www.inc.com/john-mcdermott/report-3-out-of-4-venture-backed-start-ups-fail.



National Venture Capital Association. (2020, September). Model Legal Documents. Retrieved from National Venture Capital Association: https://nvca.org/model-legal-documents/

National Venture Capital Association. (2022). What is Venture Capital? Retrieved from National Venture Capital Association: <a href="https://nvca.org/about-us/what-is-vc/">https://nvca.org/about-us/what-is-vc/</a>

Singer, D. C. (2020, December 23). Commercial Arbitration is Alive and Well in New York. Retrieved from Law.com:

https://www.law.com/newyorklawjournal/2020/12/23/commercial-arbitration-is-alive-and-well-in-new-york/?slreturn=20220422234114

State of Delaware. (n.d.). Litigation in the Delaware Court of Chancery and the Delaware Supreme Court. Retrieved from Delaware:

https://corplaw.delaware.gov/delaware-court-chancery-supreme-court/

The LAO. (2021, March 9). What is the LAO? The LAO. Retrieved August 14, 2022, from <a href="https://docs.thelao.io/">https://docs.thelao.io/</a>

MakerDAO. (n.d.). MakerDAO | An Unbiased Global Financial System. Retrieved August 7, 2022, from <a href="https://makerdao.com/en/">https://makerdao.com/en/</a>

Ossinger, J. (2021, August 10). Andreessen-Backed 5G Blockchain Network Raises \$111 Million. Bloomberg.com. Retrieved July 23, 2022, from

https://www.bloomberg.com/news/articles/2021-08-10/andreessen-backed-5g-blockchain-firm-helium-raises-111-million

Preqin. (2018, May). VENTURE CAPITAL IN EMERGING MARKETS. Preqin. Retrieved July 23, 2022, from

https://docs.preqin.com/reports/Preqin-Venture-Capital-In-Emerging-Markets-May-201 8.pdf

Proof of Humanity. (2021). Proof Of Humanity. Retrieved July 24, 2022, from <a href="https://www.proofofhumanity.id/">https://www.proofofhumanity.id/</a>

Stokel, C. (2021, November 2). How a Squid Game Crypto Scam Got Away With Millions. WIRED. Retrieved August 7, 2022, from

https://www.wired.com/story/squid-game-coin-crypto-scam/

Thervo. (2022). How Much Are Attorney Fees? Retrieved from Thervo: <a href="https://thervo.com/costs/attorney-fees">https://thervo.com/costs/attorney-fees</a>

Vanham, P. (2015, July 28). Which countries have the most venture capital investments?



Retrieved from World Economic Forum:

https://www.weforum.org/agenda/2015/07/which-countries-have-the-most-venture-capital-investments/

Weaver, C. (2016, October 10). Major Investor Sues Theranos. Retrieved from The Wall Street Journal: <a href="https://www.wsj.com/articles/major-investor-sues-theranos-1476139613">https://www.wsj.com/articles/major-investor-sues-theranos-1476139613</a>

### **Delaware Chancery Court Analysis:**

Case	Submission	Decision	Number
	Date	Date	of Days
Charter Communications Operating, LLC v. Optimyze, LLC, et al.	15-Oct-20	4-Jan-21	81
P.C. Connection, Inc. v. Synygy Ltd., et al.	20-Nov-20	7-Jan-21	48
<u>Harris v. Harris FRC Corporation</u>	31-Dec-20	7-Jan-21	7
<u>Andrew C. Durham v. Grapetree, LLC</u>	15-Oct-20	11-Jan-21	88
Scott D. Wollard v. Yoder and Sons Construction, LLC	17-Dec-20	15-Jan-21	29
Currax Pharmaceuticals LLC v. OptiNose AS, et al.	23-Oct-20	22-Jan-21	91
2500k, Inc. f/k/a 2500k, LLC v. Message Systems, Inc., a/k/a SparkPost	17-Nov-20	22-Jan-21	66
In re CBS Corporation Stockholder Class Action and Derivative Litigation	17-Sep-20	27-Jan-21	132
Sanjiv Mehra, et al. v. Jonathan Teller, et al.	8-Oct-20	29-Jan-21	113
Golden Rule Financial Corporation v. Shareholder Reperesentative Services	30-Oct-20	29-Jan-21	91
LLC			
Firefighters' Pension System of the City of Kansas City, Missouri Trust v.	29-Oct-20	29-Jan-21	92
Presidio, Inc., et al.			
McDonald's Corporation v. Stephen J. Easterbrook	13-Nov-20	2-Feb-21	81
Wood v. U.S. Bank National Association et al.	13-Jan-21	4-Feb-21	22
Carla Lacey v. German Larrea Mota-Velasco, et al.	23-Oct-20	11-Feb-21	111
Adrian Dieckman v. Regency GP LP, et al.	15-Sep-20	15-Feb-21	153
	4-Dec-20	1-Mar-21	87
Endowment Research Group, LLC v. Wildcat Venture Partners, LLC, and Bill	18-Dec-20	5-Mar-21	77
Ericson			
Bragdon v. Bayshore Property Owners Association, Inc.	11-Dec-20	11-Mar-21	90
Giesecke+Devrient Mobile Security America, Inc. v. NXT-ID, Inc.		16-Mar-21	76
	26-Feb-21	18-Mar-21	20
	15-Jan-21	30-Mar-21	74
	2-Sep-20	30-Mar-21	209
	11-Jan-21	14-Apr-21	93
	19-Mar-21	19-Apr-21	31
	15-Feb-21	22-Apr-21	66
ID Experts, et al.		<b>'</b>	
Maverick Therapeutics, Inc. vs. Millennium Pharmaceuticals, Inc. v. Harpoon	17-Dec-20	23-Apr-21	127
Therapeutics, Inc.	,		ĺ
	15-Apr-21	23-Apr-21	8
	14-Jan-21	29-Apr-21	105
	2-Mar-21	30-Apr-21	59
In re Appraisal of Regal Entertainment Group	1-Apr-21	13-May-21	42
		19-May-21	15
	25-Feb-21	25-May-21	89
	18-Feb-21	25-May-21	96
	19-Jan-21	28-May-21	129
	15-Feb-21	28-May-21	102
	5-Feb-21	1-Jun-21	116
	2-Mar-21	1-Jun-21	91
	26-Jan-21	7-Jun-21	132
	18-Feb-21	16-Jun-21	118
Johney Eriorgy Eri, et al. v. Albert Adriani, et al.	10-1 CD-51	10-2011-51	1110



The Raj and Sonal Abhyanker Family Trust v. Mason Blake, et al. and	4-Mar-21	17-Jun-21	105
<u>UpCounsel</u>	0.5.1		1
In re Oracle Corporation Derivative Litigation	16-Feb-21	21-Jun-21	125
Novarus Capital Holdings, LLC v. AFG ME West Holdings, LLC, et al.	18-Mar-21	23-Jun-21	97
Michael M. Goldberg, M.D. v. Claudine Bruck, Michael Rice, and Macrophage Therapeutics, Inc.	16-Mar-21	23-Jun-21	99
Simple Global, Inc. v. Banasik	4-Mar-21	24-Jun-21	112
CLP Toxicology, Inc. v. Casla Bio Holdings LLC, et al.	18-Mar-21	14-Jun-21	88
Wilmington Trust Company v. Mills, et al.	26-Apr-21	25-Jun-21	60
<u>Deborah Pettry v. Frederick W. Smith, et al. (FedEx Corporation, Nominal</u> Defendant)	6-Apr-21	28-Jun-21	83
Paul-Emile Berteau v. David E. Glazek et al.	23-Mar-21	30-Jun-21	99
Joshua J. Angel v. Warrior Met Coal Inc., et al.	16-Mar-21	30-Jun-21	106
Deutsche Bank AG v. Devon Park Bioventures, L.P., et al.	22-Feb-21	30-Jun-21	128
In re Cadira Group Holdings, LLC Litigation	14-Apr-21	12-Jul-21	89
Skye Mineral Investors, LLC, et al. v. DXS Capital (U.S.) Limited, et al.	13-Apr-21	15-Jul-21	93
Aaron Houseman, et al. v. Eric S. Sagerman, et al.	4-Mar-21	20-Jul-21	138
Daniel Feldman et al. v. AS Roma SPV GP, LLC et al.	13-Apr-21	22-Jul-21	100
John Campanelli and Mary Campanelli v. The Coffee Run Condominium	29-Apr-21	23-Jul-21	85
Council and The Coffee Run Condominium Council Inc.	25 7 (8: 22		
Continental Investors Fund LLC v. Tradingscreen Inc., et al.	11-May-21	23-Jul-21	73
Skye Mineral Investors, LLC, et al. v. DXS Capital (U.S.) Limited, et al.	13-Apr-21	28-Jul-21	106
Stone & Paper Investors, LLC v. Richard Blanch et al.	6-Apr-21	30-Jul-21	115
	23-Apr-21	30-Jul-21	98
Buttonwood Tree Value Partners, L.P., et al. v. R.L. Polk & Co., Inc., et al.	15-Apr-21	30-Jul-21	106
	15-Apr-21	12-Aug-21	119
<u>et al.</u>	· ·		
Suzanne Flannery v. Genomic Health Inc., et al.	18-May-21	16-Aug-21	90
Matthew Sciabacucchi, et al. v. John Malone, et al.	5-May-21	18-Aug-21	105
Soo Hyun Kim v. Coupang, LLC f/k/a Forward Ventures, LLC	1-Jun-21	19-Aug-21	79
Joint Stock Company Commercial Bank PrivatBank v. Igor Valeryevich Kolomoisky, et al.	21-Jul-21	23-Aug-21	33
<u>Hawkins v. Daniel, et al.</u>	10-Aug-21	24-Aug-21	14
<u>Servaas, et al. v. Ford Smart Mobility LLC, et al.</u>	3-Jun-21	25-Aug-21	83
In re Zimmer Biomet Holdings, Inc. Derivative Litigation	15-Jun-21	25-Aug-21	71
<u>Yatra Online, Inc.v. Ebix, Inc., et al.</u>	17-May-21	30-Aug-21	105
Teamsters Local 237 Additional Security Benefit Fund et al. v. Dan Caruso	19-May-21	31-Aug-21	104
Joseph Lawrence Ligos v. Isramco, Inc., et al.	21-May-21	31-Aug-21	102
Abbvie Endocrine Inc. v. Takeda Pharmaceutical Company Limited	3-Aug-21	7-Sep-21	35
IMO The Estate of Meredith L. Sullivan	2-Sep-21	16-Sep-21	14
GMF ELCM Fund L.P., et al. v. ELCM HCRE GP LLC, et al.	3-Jun-21	22-Sep-21	111
AbbVie Endocrine Inc. v. Takeda Pharmaceutical Company Limitead	3-Aug-21	22-Sep-21	50
<u>In re Cellular Telephone</u>	28-Jul-21	28-Sep-21	62
Genworth Financial. Inc. Consolidated Derivative Litidation	18-Jun-21	29-Sep-21	103
Robert A. Feuer v. Mark Zuckerberg, et al. and Facebook, Inc.	1-Oct-21	5-Oct-21	4
<u>In re Altaba, Inc.</u>	20-Jul-21	8-Oct-21	80
Ocean Bay Mart, Inc. v. The City of Rehoboth Beach	9-Sep-21	13-Oct-21	34
Pacira Biosciences. Inc. et al. v. Fortis Advisory LLC et al.	2-Jun-21	25-Oct-21	145
inTeam Associates, LLC v. Heartland Payment Systems, LLC	2-Jul-21	29-Oct-21	119
In re The Chemours Company Derivative Litigation	19-Jul-21	1-Nov-21	105
Hollywood Firefighters' Pension Fund, et al. v. John C. Malone, et al.	5-Oct-21	8-Nov-21	34
Bandera Master Fund L.P. et al., v. Boardwalk Pipeline Partners, L.P. et al.,	14-Jul-21	12-Nov-21	121
Knott Partners L.P. v. Telepathy Labs, Inc.	4-Nov-21	23-Nov-21	19
Equity-League Pension Trust Fund, derivatively on behalf of Wayfair, Inc. v. Great Hill Partners, L.P., et al.	23-Aug-21	23-Nov-21	92
In the Matter of the Jeremy Paradise Dynasty Trust and The Andrew Paradise Dynasty Trust	16-Nov-21	29-Nov-21	13
Amaine Technologies (US). Inc. v. Harold Rov Miller. et al.	17-Aug-21	29-Nov-21	104
In re Vaxart, Inc. Stockholder Litigation	24-Aug-21	30-Nov-21	98
III I C. YUMUL, IIIC, DIOCKHOIUCE LIIIUUIIOH	124-MUY-21	120-140A-51	ia <sub>C</sub>



Stream TV Networks, Inc. v. SeeCubic, Inc.	2-Dec-21	8-Dec-21	6
Hologram, Inc. v. Gregory Caplan	10-Dec-21	14-Dec-21	4
BAM International, LLC v. The MSBA Group Inc., et al.	15-Sep-21	14-Dec-21	90
SPav. Inc. v. Stack Media Inc. k/n/a JLC2011, Inc., et al.	28-Sep-21	21-Dec-21	84
The Williams Companies, Inc. v. Energy Transfer LP, et al.	23-Sep-21	29-Dec-21	97
Terrance L. Erisman and David Fouts v. Peter Zaitsev and Thomas Basil and	23-Sep-21	29-Dec-21	97
<u>Percona, LLC, Nominal Defendant</u>	-		
			AVERAGE:
			83.2083