PolySci Capital: Decentralized Political Payment Rails

https://polysci.capital

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1. Introduction

PolySci Capital utilizes decentralized capital to develop new donation pathways that comply and operate within existing FEC and political donation laws. We leverage the inherent increase in liquidity and security that decentralized capital provides to develop new product offerings that allow for political actors to fundraise in a more capital efficient and transparent manner. PolySci Capital provides the same abstraction of risk that traditional tools (such as SuperPACs) offer, without the need to delegate control of said capital to a third-party institution, and instead route it through an immutable self-executing smart contract that operates on a decentralized network.

1.1 Background

Montesquieu argues that the key to a successful democracy, is the separation of powers, it prevents collusion and strategy; if all branches (judicial, liberal, and executive) are able to stay separate, and hold one another accountable at the highest level, you are able to operate at a true representative democratic framework. Only if you have the firewalls between these three separated powers for robust divisions; the president doesn't do any lawmaking or adjudication, then you have a rule of law, it may not be good, but it's a rule of law[1]. Montesquieu states that political parties are a layer that exists on-top of this framework. Some justices are nominated by a party or elected on a party basis, the president belongs to one party, and the congress members belong to a party. These parties enable cross-collaboration across the separated powers, and break down the firewall. Members of Congress on the same team as the President, want their team to be on the Supreme Court as this enables them to pass legislation that otherwise would be shot down.

The contemporary increase in political polarization, the greater proliferation of stances and sides, derives itself from the development of the SuperPAC; which itself is a financing vehicle, much like a venture fund. PolySci Capital builds decentralized political payment rails that enable the same benefits SuperPACs allow, without enabling the same consolidation of power and inherent lack of oversight, and lack of control over delegated capital.

1.2 Existing State

At the moment, political donation pathways are not only anarchic, they are also incredibly centralized. Prior to 2010, individuals could only donate $2,500 to political actors; corporations and unions were prohibited from any campaign financing activity. In 2010, a Supreme Court case, *Citizens United V FEC* concluded that corporations had the same first amendment protections as individuals. With the conclusion of the case, came new precedent; banning corporations and unions from independent political contributions was declared unconstitutional. Enter SuperPACs or Super Political Action Committees, that were a financial vehicle created to provide access to those same freedoms, without enabling corruption and bribery. SuperPACs are able to accept unlimited donations from individuals and corporations; they are then able to donate all that capital to any individual, without any regard for contribution limits that individuals face. Effectively, the government enabled a new financing vehicle, where the managers are able to

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[1] Levy, Jacob T. "The Separation of Powers and the Challenge to Constitutional Democracy." Review of Constitutional Studies, vol. 25, no. 1, 2020-2021, pp. 1-18. HeinOnline.

pool billions of dollars and unilaterally control that capital, since donors were required to delegate control in exchange for abstracting the risk of bribery and corruption.[2]

There is a prevailing thesis that politics has degraded in the past years. While it's not uncommon for people to look upon the past with rose-tinted glasses, and for a generally negative outlook towards politics to persist, there is clearly a larger divide between government officials and the people they represent (on both sides of the aisle) than ever before. Some attribute this to the increased instability in the macro environment, or the overton window opening up to enable a greater culture of polarization.

PolySci's thesis is that this increased dissatisfaction is primarily due to the development of the SuperPAC and the subsequent degradation of representative democracy. After conducting interviews with lobbyists for SuperPACs, the incentive alignment within branches of government are so clearly skewed. Around convention season and at the onset of fundraising, SuperPACs will invite their lobbyists to conferences, lobbyists of all ages (from college students to seasoned professionals), and educate them on the PACs current policy initiatives and goals. After this updated focus is disseminated to the agents, the PAC then books meetings with congressmembers, with those who are contesting elections, and has the Lobbyists share the "education" and "perspective" with the candidate, letting them know what the PAC stands for, in great detail, and then discuss how their PAC is able to support said candidate.

SuperPACs' ability to throw the weight of pooled capital doesn't just stop during fundraising. During their terms, congressmen are forced to deal with a great deal of bills, to compensate. It's the staff more often than not who write up bills and engage with the actual proposals; yet no senate clerk or house staff member is fully equipped to deal with policy of such wide variety that congressmen must deal with, and in certain circumstances they need specialists. Take Oil for example, or social-media technology, these are very complicated industries that even members of congress themselves don't fully understand. So SuperPACs with vested interests in these spaces will sometimes help by sending over their employees to sit with these staffers and help draft up legislative processes and bills.

The primary difference between lobbying and bribery is known as a "Quid Pro Quo" Relationship. If there is no quid pro quo relationship ("I'm supporting you because I happen to stand for the same values you do"), then this is lobbying. If there is a quid pro quo relationship ("I'm supporting you because I hope you will stand for the same values I do"), then this is bribery and is illegal.[3]

With PolySci capital, not only would the political capital used by these donors be more efficient for them, since they don't have to go thru a third-party that aggregates various interests and inherently dilutes the value of said interest; they fundamentally represent weaker modes of influence, that in most cases will be set against one another, creating a more equitable marketplace for lobbying and fundraising, where political actors will not be owned and coordinated by one large SuperPAC, but owned by multiple different actors, and pitted against one another, thereby resembling a greater representation of diverse policy discussion. While admittedly not ideal, considering the role of capital in the political process, if one admits that by living under market-based coordination, as Hayek would contend, be it Capitalism or Market Socialism, the political process is bound to said limits of capital; PolySci capital seeks to make this market more equitable.

With SuperPACs attracting more and more funding and becoming more powerful in the process, it essentially becomes influence peddling, and by the above definition "bribery". Courts are the ones that ruled in favor of this law and the congress is not inclined to change this law that helps them get elected and one that they are dependent on.

[2] HARSTAD, BÅRD, and JAKOB SVENSSON. "Bribes, Lobbying, and Development." The American Political Science Review, vol. 105, no. 1, 2011, pp. 46–63. JSTOR, http://www.jstor.org/stable/41480826.,

[3] HARSTAD, BÅRD, and JAKOB SVENSSON. "Bribes, Lobbying, and Development." The American Political Science Review, vol. 105, no. 1, 2011, pp. 46–63. JSTOR, http://www.jstor.org/stable/41480826.

Then, it entails us, the common people, to take on these SuperPACs at their own game and use the free market to beat them at their own game. This is what PolySci Capital is attempting to achieve and even the playing field a bit more for common citizens, who would want to donate to their preferred candidate without ceding control of their donations or further strengthening the SuperPACs.

2. Problem Statement

Return to a state of separated powers, and decentralized decision making in political processes. PolySci's various smart contract offerings enable donation, without explicit unilateral coordination that SuperPACs provide, while offering the same contribution benefits of said SuperPACs and virtues of decentralized capital. PolySci enables donation of decentralized capital, and transparent reporting mechanisms, that abide by existing Federal Election Contribution laws.

3. Protocol Mechanics

PolySci Capital's solution is to provide the same level of risk abstraction that SuperPACs provide, without requiring donors to delegate control of their capital, while increasing the level of accountability and transparency regarding movements of capital.

Smart Contracts are self-executing immutable encoded contracts that are hosted on a decentralized network of computer nodes that make up a unifying virtual environment, where rules and laws that said smart contracts outline are enforced. Philosophically, this creates a similar environment to that of a nation or organization, where there are principles and rules, with the difference being the impartial yet instant execution of said rules, unlike existing physical governance mechanisms that require agents to act and are prone to delays, laziness, and inconsistent application of rules.[4]

Smart Contracts can be written and issued, yet they are hosted and executed by these decentralized nodes, as such the law is unable to go after decentralized technology and actors who facilitate the technical execution; this is because these nodes are hosted globally and is effectively permissionless, thus it's impossible to shutdown and prosecute individual actors for the effects of the contracts. Lawyers have argued that it's like blaming Ford for those who would use their cars in a hit and run. The greater value of smart contracts is that they can create environments by which principles and philosophies are objectively outlined in code. Therefore, where code is law, you are able to develop trust-less processes such as capital creation, communication, coordination of groups & resources, etc. In simplest terms, you are able to create an environment where the rules you place are put upon those who operate in those contract environments, and where laws cannot be broken, because if they violate the code, the action reverts as if it never happened at all.

AI Agents are another technology PolySci uses for risk abstraction.[5] The law, as it currently stands, is nascent when looking at legal responsibility of AI Agents that operate completely autonomously. By leveraging the blockchain, you are able to host an Agent on a decentralized cloud, thereby having an AI agent that runs and acts without any connection to the creator. Is a creator responsible for their creations actions? What if the creation has a level of competency and objective agency? What if the training these models go under are sealed under a black box, with weights being unknown even to the deployer?[6] These are very important questions that the law is only just beginning to unravel, and if history is any indicator, will be unbelievably unprepared to answer.

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[4] Buterin, Vitalik. Plurality Philosophy in an Incredibly Oversized Nutshell. 21 Aug. 2024, https://vitalik.eth.limo/general/2024/08/21/plurality.html.

[5] Pondering Durian, Delphi Digital. *DeAI IV: The Agentic Economy*. Delphi Digital, 2024, https://members.delphidigital.io/reports/deai-iv-the-agentic-economy#prediction-markets--revolt-of-the-public-c202.

[6] Crapis, Davide. *The Internet of Agents*. Notion, Mar. 2024, https://davidecrapis.notion.site/The-Internet-of-Agents-23aa09799b9c4620a1a287926bcfd6af.

PolySci leverages cryptocurrencies and AI Agents to enable the creation of a new line of financial products that are focused on improving efficiency of political capital without the need of delegating control of said capital to a third-party one must implicitly trust that has little to no-oversight due to bureaucratic processes, while improving the level of transparency and reporting standards that current methods have failed to pursue. PolySci Capital is working to push the discussion of political financing further, while retaining grassroots for-the-people, by-the-people ethos central to American politics.

3.1 Direct Donation Rails

Currently, when on-chain assets are donated, they are classified as in-kind contributions. In-Kind contributions are donations of property (land, property, stocks, etc). For traditional donation purposes, there is extensive reporting done to ensure adherence to FEC regulations regarding donations of fiat capital or in-kind contributions.[7] The issue present in existing donation pathways is how anarchic the reporting and accountability processes are. They are purposefully anarchic to make traceability of payments much more obscure. Specifically with donation of cryptocurrencies, a fast rising tool of capital movement, there is no institutional insight on reporting standards. Cryptocurrencies operate on a public and decentralized blockchain, all transactions are considered pseudonymous; this is because while all transactions are public with histories completely transparent, they are associated with wallet addresses that are hashed and cryptographically protected, thus there is no clear identity tied to the wallet, but if there is a link between the actor and their wallet address, you could reasonably connect all previous transaction histories and tie them to the actor. In this sense, there is a great opportunity to set standards by which crypto donations cannot only be moved, but also increase the level of transparency and accountability.

PolySci's Direct Donation Smart Contract enables simple 1-1 transfer of on-chain assets to political actors. Through onboarding, and adherence to KYC (Know-Your-Customer), KYB (Know-Your-Business), and AML (Anti-Money Laundering) principles, PolySci is able to create a registry of all registered users with all their associated wallets; this enables people to trace the capital moved from their wallets to various political actors in a much more transparent manner, when compared to existing political financing pathways; specifically by leveraging a more user friendly user-interface, but also because the history of each and every asset transaction on-chain is clearly accounted for. This also automates reporting for political actors and donors when the FEC's semi-annual reports are due, in a way that is much more standardized than it has been in the past.

3.2 Debt Donation Pipeline

The first payment innovation that PolySci created is the Debt Donation Pipeline. This protocol enables the creation of debt capital that donors can issue to provide funding to political actors, without affecting contribution limits, by implementing in-kind repayments.

Debt Capital is a term that banking institutions use. When a loan is issued, the bank does not actually pull a dollar from its reserves and loan it to you. Instead, they create a credit and add that to your account. The difference, while seemingly small, has huge implications when you realize that banks can leverage one dollar over five times, because by using credit, or debt capital, you create the perception of an IOU that must be paid back, instead of giving a dollar and waiting for the borrower to repay that with interest. Ultimately, it's a way of leveraging more capital than you have without directly risking said capital.
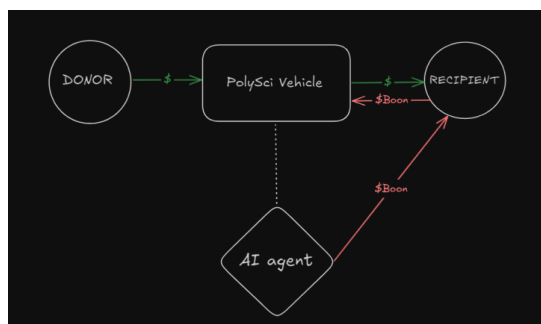
[7] HARSTAD, BÅRD, and JAKOB SVENSSON. "Bribes, Lobbying, and Development." The American Political Science Review, vol. 105, no. 1, 2011, pp. 46–63. JSTOR, http://www.jstor.org/stable/41480826.

PolySci essentially does the same thing; by "lending" say $3000 in USDC, you are transferring that payment to the contract, which is being monitored by an AI Agent, completely independently. The agent sees the address of the political actor on the contract, and privately mints a PolySci token to donate to the political actor as an in-kind contribution (donation of property, such as a car, land, or in this case a newly minted cryptocurrency). This is a privately minted token (therefore no market value or objective intrinsic value tied to a real-world asset), that enables an implicit one-to-one OTC (over the counter) lending market between the political actor and the recipient.

The donor is able to finance a loan to the recipient, parallel to this, the original $3000, and the donor accepts the PolySci tokens (the AI Agent minted and donated) back as an in-kind repayment (the mental framework the donor, theoretically follows, is that if this token goes public there is a chance it increases in value), with randomized interest rates and repayment terms encoded into the deployment. Therefore, you have a Debt Donation, this is a financial product that leverages the merits of a traditional payment and a loan to navigate existing donation laws that enable SuperPACs' regulatory moat.

4. Economic and Governance Design

PolySci Capital LLC, as a company, builds a wallet for political agents and donors to manage their on-chain political donations, and collate the wallet addresses and associated transactions with the KYC/AML information on each donor (be it institution or individual), for FEC compliance.

If a contribution is given to a candidate via an on-chain transaction, that is not backed by any fiat currency, then it cannot be subject to current political donation laws that govern US-tenure payments. This is backed by three corollaries; 1. Decentralized capital is not backed by fiat currency, 2. Decentralized Capital, in certain forms, is not backed by objective traceable value, 3. Decentralized Capital can be programmable and self-executing.[8] Under these three tenets, PolySci capital builds smart contracts that enable the decentralized movement of capital, without violating existing FEC regulations, and not being hindered by them as well.

One may find a comparable design to Kickstarter; when designed, there was no legislation regarding online crowdfunding, this led to congress bringing in the founders to hold a hearing. Legislators decided that the technology was undeniable, and with that being the case, in the JOBS Act, introduced a "new "crowdfunding exemption" to the registration requirements of the Securities Act of 1933", which enables individuals to raise money from unaccredited investors and financiers via online financial rails, up to $1M. [9]

Tornado Cash is another notable example regarding undeniable technical development. Tornado Cash is a decentralized protocol that more or less enables money laundering, by having executors add funds to the contract, the contracts "shard" or send them to thousands of wallet addresses before reaching the final address, thereby making traceability, not impossible, but extremely difficult. The US government sanctioned Tornado Cash and its founders, who subsequently countersued. The lawsuit discussed developer liability, definition of money transmitting, and first amendment rights of free speech.[10] The courts who sanctioned Tornado Cash were counter-sued because Tornado Cash co-founders argued that since the business was entirely decentralized, with node operators around the world, they were not only unstoppable (since you cannot shutdown decentralized systems, there is no centralized entity/authority/site to pursue), the founders themselves could not be held accountable since they developed a protocol and released it, not co-signing or actively enabling the technology in specific processes, since the contracts

[8] Saxton, Jim. Joint Economic Committee. *U.S. Dollar Policy: A Need for Clarification*. 2022, https://www.jec.senate.gov/public/_cache/files/1b24dbe0-1523-427a-9176-70a1af53f978/u.s.-dollar-policy---a-need-for-clarification.pdf.
[9] Miller, George C. "Crowdfunding Under the JOBS Act: What Investors Need to Know." *Shufirm*, Nov. 2013, https://shufirm.com/crowdfunding-under-the-jobs-act-what-investors-need-to-know.
[10] Mehta, Hiral D., et al. "The Tornado Cash Trial's Mixed Verdict: Implications for Developer Liability." Insights – Mayer Brown, 15 Aug. 2025, https://www.mayerbrown.com/en/insights/publications/2025/08/the-tornado-cash-trials-mixed-verdict-implications-for-developer-liability

are self-executing and permissionless.[11] The courts agreed, and agreed that TornadoCash could not be pursued as an illegal money transmitter, because funds sat in those smart contracts, not in anybody's wallet or accounts.[12] Finally, the courts agreed that this could be seen as an infringement of first amendment rights, with the smart contracts that were issued being "open-source" code as free expression and subsequent sanctions to be infringing on said liberty.

The legal community is at a flashpoint where technology for capital movement has increased at such a rate, that they are unable to keep up. Between tornado cash and Zero-Knowledge Proofs, the need for clarity and standardization regarding decentralized capital financing, specifically for something as important as Federal Elections is needed, but it seems at the moment, the government is not capable to provide these protections, purely because of the rate at which said technologies are growing.[13]

At the moment, PolySci Capital LLC issues and develops PolySci Smart Contracts on Ethereum, via Base and Aptos. There is no native token, and each private "PolySci" token the AI Agent issues during the Debt Donation process is randomized in terms of count, repayment amt, interest rate, and name for greater abstraction of value during initial donation process.

PolySci Capital generates revenue by charging a 3% fee on each transaction.

5. Conclusion

After speaking with different legal scholars, the advice to build multiple contract solutions that thread the needle legally was commonplace. PolySci's product line currently includes a simple 1-to-1 crypto donation pipeline and a novel Debt Donation Pipeline. The latter is done by leveraging memetic value and blockchain technology, it's effectively creating a payment vehicle, that is for all intents and purposes, a one-way payment, defined as a loan under existing law; subsequently receiving the benefit of both..

PolySci Capital LLC is continuing to push the bounds of political payment rails by continuing to research existing financial products and their inefficiencies regarding intent, custody, trust, transparency, and speed. PolySci will change the way traditional political capital is moved, by removing the need for third party SuperPACs and providing financial payment rails that enables individuals to effectively (and legally) donate as much capital as they want, without having to delegate control of that capital to a third party institution, such as a SuperPAC.

Appendix

[11]Wright, Aaron, and Miles Jennings. *The Legal Framework for Decentralized Autonomous Organizations: Part I*. a16z Crypto, June 2022, https://api.a16zcrypto.com/wp-content/uploads/2022/06/dao-legal-framework-part-1.pdf.

[12] Ciani, Gourvitz, Chandler, Ropes, Gray, Teperdijian. Commercial Professional Perspective: Legal Implications of Decentralized Autonomous Organizations (DAOs). Bloomberg Law, https://www.bloomberglaw.com/external/document/X7236IS4000000/commercial-professional-perspective-legal-implications-of-decent.

[13] Peirce, Hester M. "The Journey Begins: Remarks at Digital Assets and Decentralized Finance Conference." U.S. Securities and Exchange Commission, 4 Feb. 2025, https://www.sec.gov/newsroom/speeches-statements/peirce-journey-begins-020425.

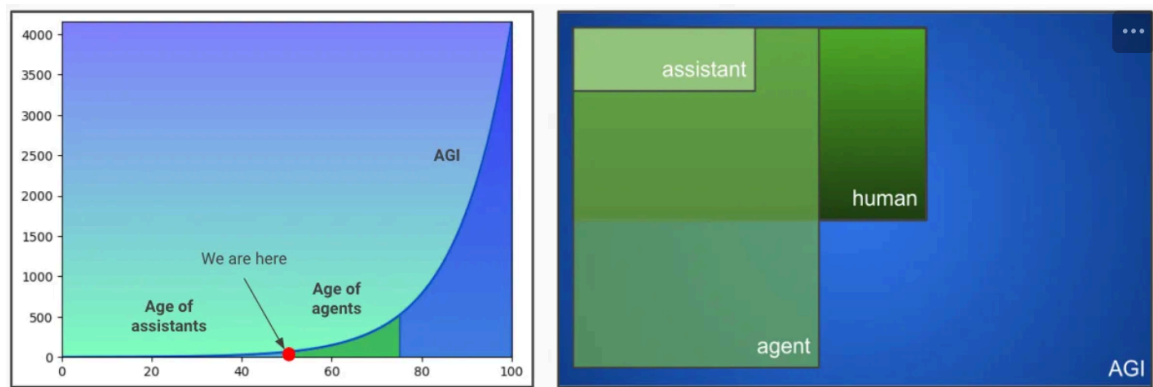Fig. 1 Existing AI Agent State (Crapis)

Fig. 2 Future's "Optimal" Philosophical Framework (Buterin)
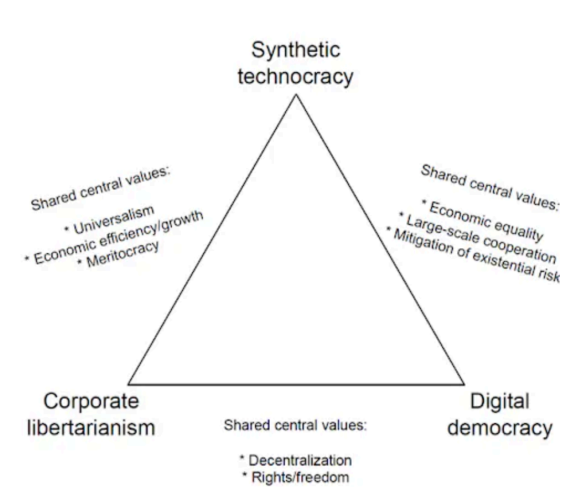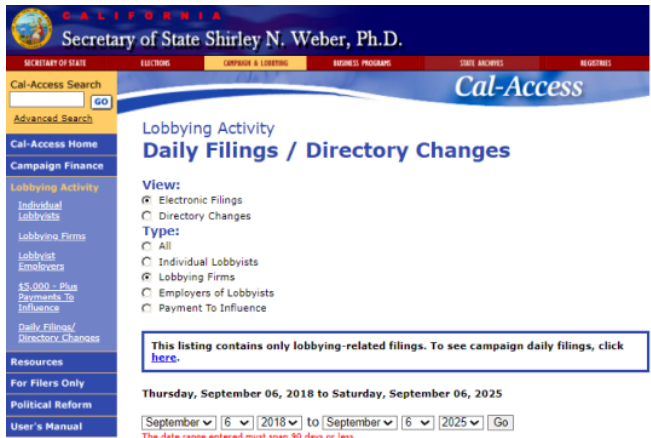

Fig. 3 Existing FEC Donation Reporting Service

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