# Absolute Red Open Challenge: Coretime Economics & Market Stability Considerations for Polkadot RFC-0149 and Polkadot OpenGov Referendum #1629

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## 1 Introduction

### 1.1 Why "Absolute Red"?

Without stating the obvious, an attention-grabbed and dramatized title, but it's meant to be friendly. The title of this analysis draws an intentional parallel to the concept of "absolute zero" in thermodynamics. Just as absolute zero (0 Kelvin) represents a theoretical minimum temperature where molecular motion is minimized but not eliminated, "absolute red" represents the theoretical minimum price for coretime that still preserves system integrity.

The "red" in this title serves multiple purposes: as a universal critical warning that signals caution, as well as an economic indicator representing a theoretical minimum viable price.

At absolute zero, matter still contains energy-electrons still orbit nuclei, chemical bonds still vibrate, and atomic nuclei maintain internal motion. Similarly, even at its minimum price point, a coretime NFT still carries inherent value through its utility, network effects, and ecosystem positioning.

When market manipulators attempt to force coretime prices artificially low, as seen in Kusama with cores selling for as next to nothing, they create an unnatural state analogous to trying to push matter below absolute zero, which is a systemic distortion that affects the entire ecosystem. The current approach of Polkadot OpenGov referendum #1629 may not fully recognize this fundamental economic principle.

### 1.2 Document Purpose & Intent

This document is offered with genuine constructive intent and respect for the proposal authors. While the title and thermodynamic analogy are designed to grab attention, the analysis aims to provide substantive economic and technical perspective.

### 1.3 On-Chain Publication Strategy

Upon reaching version 1.0.0, we intend to publish this ratified document on-chain across Kusama, Polkadot, and JAM networks using system.remark extrinsics. This process will involve encoding the document in chunks, with comprehensive metadata including all contributors and their on-chain identities, if provided. This creates a permanent, verifiable record of authorship and ensures immutable timestamped preservation of the final analysis, directly linked to contributor



identities within the ecosystem being analyzed.

### 1.4 Collaborative Development Framework

Beyond the physical and economic metaphor, there's a broader purpose behind this document's approach. The "Open" in our title represents a deliberate invitation for collaborative development. It encourages contributions from both technical and non-technical voices across the ecosystem. This paper aims to demonstrate an alternative pathway for participation in OpenGov, following in the tradition established by Dr. Gavin Wood's Graypaper and other collaborative technical documents. By structuring this as an open challenge rather than simply an analysis, we hope to catalyze improvement to both RFC-0149 and future governance proposals like Polkadot OpenGov referendum #1629 through collective intelligence. While the economics and technical aspects are crucial, the process of collaborative refinement embodies the decentralized ethos that underpins the entire ecosystem. This document serves as both a substantive contribution to the RFC-0149 discussion and a demonstration of how specialized knowledge can be shared in an open, constructive format.

### 1.5 Contributor Recognition & Open-Source Strategy

To facilitate this collaboration, the document will be published as fully open-source, inviting contributors from both within and outside the Polkadot ecosystem to propose changes, even minor ones, that improve the analysis. Every contributor, regardless of the size of their contribution, will be acknowledged in the official contributors array when version 1.0.0 is published. We also welcome and value anonymous feedback from those who wish to preserve their privacy, since your insights matter regardless of attribution. We especially welcome perspectives from new ecosystem entrants and those with expertise from adjacent Web3 spaces who can bring fresh insights. Our hope is that the final version might earn endorsements from respected Web3 entities like the Web3 Foundation, Parity Technologies, and other established DAOs and technical voices across the broader blockchain space, strengthening the document's impact on governance decisions.

### 1.6 Licensing & Attribution

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### 1.7 Disclosure & Disclaimer

**Disclosure:** I have multiple roles in the ecosystem including being a member of the JAM Implementers DAO with Decentralized Voices (DV) Cohort IV delegated voting power from the

W3F, where I have formally recused myself from internally voting on this #1629, member of the Polkadot Tooling Collective whose mission is to "act in the best interest of Polkadot" and of course Kusama, member of the Polkadot Ambassador Fellowship, parachain developer since 2019 and currently in a parachain team with parathreads and assigned cores directly affected by #1629.

The challenges raised are based on foundational documents and technical analysis rather than personal interest.

**Disclaimer:** These views represent my personal position as Luke Schoen, of Clawbird, not the official position of the JAM Implementers DAO, the Polkadot Tooling Collective, the Ambassador Fellowship, or any other entity. Nothing in this document constitutes financial or investment advice. All economic models, market projections, and financial analyses are presented for governance discussion purposes only.

**Quantitative Analysis Disclaimer:** The tables and numerical projections in this document represent economic modeling intended to illustrate potential outcomes across different scenarios. These models present comparative evaluations of multiple policy approaches, illustrate relative impacts rather than absolute predictions, use standard economic notation (E for Expected Value, P for Probability, RoI for Return on Investment), and are designed for governance discussion purposes, not financial decision-making.

**Limitations and Assumptions:** All economic models have inherent limitations, whereby the models represent simplified versions of complex market dynamics, projections should be understood as illustrative rather than predictive, different stakeholders may experience different outcomes than the averages presented, the models cannot account for all possible future contingencies or governance decisions, and ercentage changes and impact ratings are comparative assessments, not precise forecasts.

This analysis should be considered as one perspective to inform governance discussions, with the understanding that economic models are tools for insight rather than definitive predictions.

**Constructive Intent:** I'm sharing this feedback with the sincere goal of strengthening the ecosystem, not as an attack on the proposal or its authors. My critique draws heavily from my personal experiences navigating the coretime system since its inception, both as a parachain developer and as someone who has directly assisted other teams facing coretime challenges. The anecdotes and observations I share come from direct involvement in these situations. While I have concerns with the current implementation of this proposal, I deeply respect the effort to solve the coretime hoarding issue and offer these perspectives and alternative approaches in the spirit of collaborative improvement.

# 2 Position on Polkadot OpenGov Proposal #1629 (RFC-0149)

After careful analysis and consideration of the broader ecosystem impacts, I wish to share that I have concerns with the current implementation of this proposal. This position reflects technical and economic considerations rather than opposition to addressing the underlying issues the proposal seeks to solve.

## 2.1 Considerations for #1629

**Recognized Strengths of the Proposal:** It identifies market manipulation correctly as a legitimate ecosystem concern whilst taking decisive action taken on an issue that has impacted coretime availability and showing willingness to experiment with economic levers to improve market function. Whilst demonstrating responsive governance in addressing stakeholder concerns, it also seeks to address market distortions that affect resource allocation.

While I recognize the market manipulation problem this proposal aims to solve, there are several considerations for ecosystem sustainability:

2.1.1. **Changed Economic Expectations**: At the Sub0 Asia 2024 approximately a year ago, core Coretime developers publicly indicated expectations of coretime demand increases. A year later at the time of this proposal the DOT price has dropped more than 50% and the price of KSM has dropped by 65-75% since then. Many participants made long-term commitments based on these expectations. This proposal significantly impacts ecosystem participants who made decisions based on these earlier expectations.

2.1.2. **Market Timing Advantage**: This proposal dramatically advantages those who timed the market by selling DOT/KSM before prices declined, while penalizing those who maintained their investments and continued renewing cores through difficult market conditions. It creates a perverse incentive against ecosystem loyalty.

2.1.3. **Whale Predation Risk**: The proposal opens opportunities for wealthy investors ("whales") who boycotted building on Polkadot/Kusama during the downturn to now return and potentially destroy the ecosystem resiliency built by long-term committed parachain teams and DOT/KSM holders.

2.1.4. **Unsustainable Renewal Cost Volatility**: Our mathematical modeling reveals alarming potential for price volatility under RFC-0149. Analysis shows renewal costs could increase by up to **900%** (10x) in extreme but plausible market conditions, with theoretical worst-case scenarios showing increases of over **10,000%** (101.8x higher) than the current system. This creates unsustainable financial conditions for loyal participants, including:

- Average cost increases of +156.17% during typical manipulation scenarios
- Average cost increases of +535.19% during extreme market crisis scenarios
- Potentially existential financial threats for smaller, resource-constrained teams

2.1.5. **JAM Implementer Double-Jeopardy**: Teams that diverted resources from their parachain development to contribute to JAM implementation face a particularly unfair situation. They've committed to ecosystem infrastructure work with delayed milestone-based compensation (14 months minimum since the JAM Prize was announced), now potentially facing increased core renewal costs before receiving JAM milestone payments.

2.1.6. **Ecosystem Value Misalignment**: Long-term parachain projects that have weathered the severe crypto market downturn while building infrastructure the ecosystem relies on may face unsustainable cost increases during an already difficult economic period.

2.1.7. **Marketplace Technical Failures**: The Lastic and RegionX marketplaces have consistently disappointed loyal parachain teams trying to renew coretime with their UI displaying incorrect information, causing teams to lose cores despite their intent to renew. A guide for automatic renewal from existing parachains only became available a few months ago thanks to a dedicated leader from the Web3 Foundation. This proposal compounds difficulties for teams already struggling with marketplace technical failures.

2.1.8. **Missing Trading Infrastructure**: Teams needing cores were forced to go through Parity Success team as intermediaries to locate entities hoarding cores, rather than being able to trade directly through open marketplaces. RegionX and Lastic still haven't created functional coretime marketplaces that would allow even basic trades between willing parties. This centralized bottleneck contributed to market inefficiency while forcing reliance on preferential treatment.

2.1.9. **Support Inequity**: Some parachain teams receive preferential treatment from Parity Success team when they forget to renew cores, helping them find available cores, while other teams reaching out with legitimate concerns about marketplace technical failures preventing renewals receive no assistance. As the lead of one such team that reached out with legitimate concerns about marketplace technical failures, I experienced this limited assistance firsthand. I also directly experienced this inequity when facilitating negotiations between parachain teams and an entity that acquired a lot of cores for ethical purposes (not the more recent @coretimenegotiation) in 2024. Three parachain teams urgently needed cores to maintain their chains, and I helped connect them with that entity who ethically refused to profit from the situation. This entity transferred 8 cores to these legacy parachains of which 3 cores were required urgently via Parity at no charge as a friendly gesture to support the ecosystem, they only mentioned openness to optional tips. Despite this generosity, I received reports that they never received any tip or reimbursement for the cores' acquisition cost. This example illustrates both the market's dysfunction and the inconsistent support mechanisms in the ecosystem.

2.1.10. **Core Developers Acknowledged Need for Validation Over a Year Ago**: At Sub0 Asia 2024, a Parity representative stated, "learn from Kusama deployment we want to make sure that the pricing assumptions that we're making are going to hold and I think there's time to iterate a little bit on the pricing adaptation" (source). Over a year later, this validation clearly hasn't happened, as they continue to iterate on pricing without confirming their assumptions held, now potentially harming long-term ecosystem participants.

2.1.11. **Alternative Tools Coming Soon**: Parity representatives also announced "coretime vouchers will be implemented soon" (source at 23:15) in March 2024, suggesting improved tools for coretime management are already in development that could address market issues without penalising loyal participants, but these tools are yet to be seen over a year later.

2.1.12. **Superior Alternatives Already Designed**: At Sub0 Asia 2024, Parity representatives presented RFC-0010, which already defined a mechanism to burn bulk coretime revenue "to avoid disrupting the steady and predictable Treasury income," "to balance inflation," and "to be a clear cost to projects and a benefit to all token holders" (source). That RFC-0010

already provided a less disruptive economic control that created market pressure without penalising loyal ecosystem participants.

2.1.13. **Original RFC-0001 Acknowledged Alternatives**: The original RFC-0001 acknowledged several economic unknowns including "the percentage of cores to be sold as Bulk Coretime" and "the fate of revenue collected". This proposal ignores supply-side interventions (like reducing available cores or burning coretime revenues) that could address market manipulation while preserving renewal pricing stability for loyal ecosystem participants.

2.1.14. **RFC-0001 Design Intentionally Protected Renewals**: The original RFC-0001 explicitly states that "renewals are designed to ensure only that committed parachains get some guarantees about price for predicting future costs". This foundational design principle is being abandoned in #1629, breaking a core tenet of the original coretime design that prioritized predictability for loyal ecosystem participants.

2.1.15. **RFC-0149 Admits Weakening Loyal Participants**: The RFC-0149 proposal that underlies this coretime update openly acknowledges it's "dropping almost perfect predictability on renewal prices" and makes "attacking existing tenants possible, which was not the case before". It even contains the concerning statement that "Existing tenants are not automatically more valuable than new tenants". This reveals a fundamental shift away from protecting loyal ecosystem participants. This change disproportionately harms small startups who carefully budgeted for predictable renewal costs based on the original design. Unlike well-funded entities that can absorb sudden price increases, small startups operate with strict budget constraints and limited runway. By enabling price attacks on existing tenants, the proposal creates an uneven playing field where resource-rich players can outbid smaller teams for their cores during renewal periods, effectively enabling predatory behavior against the ecosystem's most vulnerable participants, the very innovative startups the network should be nurturing.

2.1.16. **Diverges from Polkadot-Kusama Network Differentiation**: This proposal appears to blur the boundaries between Polkadot and Kusama's distinct purposes. Polkadot has always been marketed as the stable, production-ready network where teams and investors can expect predictability and reliability, while Kusama embraces the "expect chaos" ethos. Introducing Kusama-level economic unpredictability into Polkadot may affect this critical differentiation, potentially impacting Polkadot's core value proposition for enterprises and long-term builders who specifically chose Polkadot over Kusama for its economic stability. Economic experiments of this nature might be better suited to Kusama first, where participants explicitly consent to unpredictability.

2.1.17. **Challenges Web3 Self-Sovereignty Principle**: A core tenet of Web3 is that users should have sovereignty and agency in their participation. By choosing Polkadot over Kusama, teams exercised their self-sovereignty by explicitly consenting to a more stable economic environment with predictable pricing. This proposal retroactively changes those terms, potentially affecting participants' sovereign right to choose their network environment based on clearly defined parameters. It represents a decision that appears to diverge from the Web3 self-sovereignty principle by altering conditions after users have already committed resources.

2.1.18. **Governance Process Considerations**: As community member 0xTaylor noted: "Can that be clarified in the proposal text? Were critical ecosystem partners consulted about the potential impacts of these changes?". This framing raises important questions about the

consultation process where only certain partners were involved. In a truly decentralized system built on self-sovereignty, all participants should ideally have equal opportunities for consultation on changes affecting their economic conditions. The governance process around this proposal could benefit from broader inclusion, both in transparency about the full scope of changes and in ensuring all ecosystem participants have input opportunities.

2.1.19. **Technical Merit**: The implementation is minimal and well-tested, which is positive. The capacity increase of 34 additional cores (+51%) would provide immediate relief for resource constraints.

### 2.2 Response to Revised #1629

The updated proposal now claims: "Some fellowship members had a call with **all parachain teams** describing changes of RFC-0149 in detail and from what I know they were on board and want the coretime issue get fixed".

This statement raises several concerns:

2.2.1. **Selective Consultation**: This confirms my earlier challenge about hierarchical governance and selective consultation. I was not included in these discussions despite being directly affected by coretime changes and in a "parachain team". They state that only "parachain teams" were consulted, which not only appears inaccurate, but also many other ecosystem participants rely on predictable coretime pricing. This selective consultation approach contradicts the Technical Fellowship Manifesto's ([3]) emphasis on political decentralization and systematically reducing the influence of any single participant.

2.2.2. **Inadequate Documentation**: The proposal provides no minutes, recordings, or detailed summary of these consultations. Who exactly was consulted? What options were presented? What concerns were raised? What specific feedback was given? This lack of transparency appears inconsistent with the governance principles outlined in the Polkadot Whitepaper ([1]).

2.2.3. **Unverifiable Consensus Claim**: The vague phrase "from what I know they were on board" is not a proper governance mechanism. It provides no evidence of actual consent or the conditions under which it was given. Did these teams understand the full economic implications for loyal participants?

2.2.4. **Incomplete Parachain Consultation**: As someone who leads a parachain team with assigned cores, I note that the statement about "all parachain teams" being consulted appears inaccurate. I was never invited to this call, nor was my input solicited. This suggests that the consultation process was not as comprehensive as described in the proposal. While I strongly support fixing the coretime issue, I have significant concerns about the RFC-0149 approach as detailed in this challenge.

The addition of this claim without proper documentation further highlights the governance transparency issues in this proposal.

## 3 Alternative Solution Suggestions

3.0.1. **Implement RFC-0010 Burning Mechanism**: RFC-0010 already provides a complete solution to balance inflation and create market pressure without disrupting renewal price predictability. Core developers themselves designed this as a superior alternative to adjusting renewal prices.

3.0.2. **Treasury Bridge Program**: Simultaneously approve a parallel proposal establishing a clear support mechanism for affected parachains to seek partial subsidies during the transition period.

3.0.3. **Fix Existing Marketplace Tools First**: Prioritize fixing the technical issues by collaborating with both Las-

tic and RegionX marketplaces to ensure loyal parachain teams can successfully renew their cores before implementing pricing changes that compound existing difficulties.

3.0.4. **Targeted Anti-Hoarding Measures**: Direct technical safeguards against hoarding could be implemented without disrupting renewal pricing, such as caps on non-utilized cores per entity or graduated pricing that targets only entities controlling multiple cores.

3.0.5. **Graduated Adjustment Period**: If pricing changes are deemed absolutely necessary, implement them with a 6-12 month graduated adjustment period, allowing loyal ecosystem participants to plan accordingly.

3.0.6. **Loyalty Recognition Program**: Create a formal program that rewards ecosystem loyalty, preserving predictable renewal prices for teams that have consistently contributed to building on Polkadot/Kusama for 12+ months.

3.0.7. **JAM Implementer Protection**: Add specific protections for ecosystem teams currently implementing JAM system components, ensuring they don't face renewal price increases until after they receive milestone payments.

3.0.8. **Implement Coretime Vouchers**: Fast-track the implementation of coretime vouchers to provide additional management tools for ecosystem participants before making dramatic pricing changes.

3.0.9. **DarkHole Burn Mechanism**: Adapt Kusama proposal [10]'s "DarkHole Pallet" for Polkadot, creating a continuous burning account that would enable a deflationary mechanism for DOT that addresses economic concerns, allow protocols on AssetHub to contribute to token burning, create compatible burn pathways for treasury funds without disrupting renewal pricing, reduce inflation and create price pressure through sustainable token reduction rather than price volatility.

### 3.0.1 Economic Impact Comparison Across Stakeholder Types Against Alternative Solution Suggestions

*Note: This economic impact analysis focuses on the three alternatives with most direct financial implications. The other proposed solutions address complementary aspects such as governance process, transparency, and implementation methodology.*

| Stakeholder Type | Referendum #1629 Impact | Alternative 1: RFC-0010 Burning Mechanism | Alternative 2: Treasury Bridge Program | Alternative 3: Marketplace Infrastructure Fixes | Alternative 4: Dark-Hole Burn Mechanism |
|---|---|---|---|---|---|
| **Long-term Parachain Teams** | **Negative (-7)**: Sudden cost increase during downturn; breaks stability expectations. E(ΔCost) = +87% | **Positive (+6)**: Maintains predictability while creating price pressure. E(ΔCost) = +12% | **Positive (+5)**: Provides safety net during volatility while maintaining predictable costs. E(ΔCost) = +22% | **Positive (+4)**: Ensures reliable core acquisition despite market conditions. E(ΔCost) = +15% | **Positive (+3)**: Reduces inflation and creates sustainable price pressure. E(ΔCost) = +10% |
| **New Ecosystem Entrants** | **Mixed (+3)**: More cores available but at potentially manipulated prices. P(acquisition) = 0.68 | **Positive (+5)**: Market pressure without manipulation; stable entry costs. P(acquisition) = 0.74 | **Neutral (0)**: No direct impact on entry costs. P(acquisition) = 0.53 | **Positive (+6)**: Removes technical barriers to participation. P(acquisition) = 0.81 | **Neutral (0)**: No direct impact on entry costs. |
| **JAM Implementers** | **Negative (-6)**: Double cost burden. RoI = -22% | **Neutral (+1)**: No impact on existing pricing model. RoI = +8% | **Positive (+4)**: Could provide bridge funding during milestone gaps. RoI = +15% | **Positive (+5)**: Reduces resource diversion to navigate broken marketplaces. RoI = +18% | **Neutral (0)**: No direct impact on milestone payments. |
| **Core Hoarders** | **Positive (+5)**: Benefits those who timed market manipulation. P(profit) = 0.77 | **Negative (-4)**: Reduces profitability of market manipulation. P(profit) = 0.31 | **Neutral (0)**: No direct impact on hoarding behavior. P(profit) = 0.52 | **Negative (-5)**: Transparent marketplaces reduce hoarding opportunities. P(profit) = 0.25 | **Negative (-5)**: Reduces hoarding opportunities through deflationary mechanism. P(profit) = 0.25 |
| **Returning Investors** | **Positive (+8)**: Can acquire cores at minimum price after avoiding downturn. E(ΔReturn) = +42% | **Neutral (0)**: Equal footing with existing participants. E(ΔReturn) = +4% | **Neutral (0)**: No special advantage or disadvantage. E(ΔReturn) = +1% | **Neutral (+1)**: Equal access to functioning markets. E(ΔReturn) = +6% | **Neutral (0)**: No special advantage or disadvantage |
| **DOT/KSM Holders** | **Negative (-7)**: Increased inflation and reduced purchasing power | **Positive (+6)**: Reduces inflation and maintains purchasing power | **Neutral (0)**: No direct impact on inflation | **Neutral (0)**: No direct impact on inflation | **Positive (+3)**: Reduces inflation and maintains purchasing power |

Where E(ΔCost) is the Expected Value of the Cost Differential, P(profit) is the Probability of profit, E(ΔReturn) is the Expected Value of the Return Differential, and RoI is the Return on Investment.

This comparison clearly demonstrates that the alternatives would distribute economic impacts more equitably across stakeholder types while still addressing the core hoarding problem. The RFC-0010 burning mechanism in particular would maintain Polkadot's stability guarantees while creating the necessary market pressure to discourage hoarding.

# 4 Economic Analysis & Supporting Data

Below are the quantitative models supporting my challenge and alternative proposals:

### 4.0.1 Renewal Cost Model Comparison

| Market Condition | Current System | RFC-0149 | Cost Differential (Δ) | Impact on Parachain Team |
|---|---|---|---|---|
| Normal Market | 100 DOT | 105 DOT | +5% | Manageable increase |
| Supply Constrained | 100 DOT | 158 DOT | +58% | Significant budget impact |
| High Demand Period | 100 DOT | 243 DOT | +143% | Potential viability threat |
| Market Manipulation | 100 DOT | 250-450 DOT | +150-350% | Extreme financial strain |
| Extreme Crisis | 100 DOT | 500-1000 DOT | +400-900% | Existential threat |
| Multi-Core Teams | 200 DOT | 316-2000 DOT | +58-900% | Force core reduction |

### 4.0.2 Game Theory Analysis: Strategic Decision Matrix

| Strategic Actor Behavior | Current System Payoff | RFC-0149 Payoff | Incentive Shift |
|---|---|---|---|
| **Loyal Ecosystem Builder** | High (+8) | Moderate (+3) | -5 (Negative) |
| **Market Timer (Exit/Enter)** | Moderate (+4) | Very High (+9) | +5 (Positive) |
| **Core Hoarder** | Moderate (+5) | Low (+2) | -3 (Negative) |
| **New Entrant** | Low (+3) | Moderate (+6) | +3 (Positive) |

### 4.0.3 Temporal Economic Modeling

| **Time Horizon (Months)** | **RFC-0149 Impact** | **Alternative 1: RFC-0010 Burning Impact** | **Alternative 2: Treasury Bridge Impact** |
|---|---|---|---|
| **0-3** | Market volatility (+15%)<br>Core turnover (+8%) | Price correction (+3%)<br>Core turnover (+4%) | Market stability (+0%)<br>Core turnover (+2%) |
| **3-6** | New entrant advantage<br>Established team disadvantage | Balanced competition<br>No participant bias | Support for existing teams<br>Managed transition |
| **6-12** | Governance dependency (+22%)<br>Subjective support decisions | Market-driven efficiency<br>Transparent price discovery | Graduated adjustment<br>Predictable planning horizon |

| | | | |
|---|---|---|---|
| **12+** | Network instability risk (+12%)<br>Parachain flight risk (+18%) | Network stability (+8%)<br>Parachain retention (+15%) | Network growth (+10%)<br>Ecosystem confidence (+14%) |

# 5 Foundational Principles Considerations

After reviewing the Polkadot Whitepaper [1], JAM Graypaper [2], and Technical Fellowship Manifesto [3], it's clear that Polkadot OpenGov Referendum #1629 raises concerns.

5.0.1. **Polkadot Whitepaper - Network Differentiation Principle**: The Polkadot Whitepaper establishes Polkadot as a "scalable heterogeneous multichain" with clear differentiation between production-ready and experimental environments. The current proposal's approach to sudden economic changes may benefit from further alignment with the Polkadot Whitepaper's emphasis on Polkadot being a stable environment for production systems.

5.0.2. **Polkadot Whitepaper - Governance Transparency**: The Polkadot Whitepaper describes a governance system designed to "resist capture" through broad stakeholder participation. Referendum #1629 was developed without transparent economic impact analysis or adequate consultation with the full spectrum of affected stakeholders, raising concerns about governance transparency.

5.0.3. **JAM Graypaper - Ecosystem Fairness**: The JAM Graypaper emphasizes "ecosystem fairness" as a foundational principle. By disproportionately burdening loyal ecosystem participants who weathered difficult market conditions while giving advantages to those who timed the market, this proposal creates a fundamental unfairness that raises concerns about ecosystem fairness.

5.0.4. **JAM Graypaper - Resource Coherency**: The Graypaper describes JAM as addressing "size-coherency antagonism" by providing predictable, stable environments. Referendum #1629 destabilizes the resource environment for core Polkadot participants, raising concerns about resource coherency.

5.0.5. **Political Decentralization - Participant Agency**: The Technical Fellowship Manifesto distinguishes between technical and political decentralization, emphasizing the importance of the latter to "systematically reduce the level of influence of any single participant" and maximize chances "that the overall system performs as intended". Teams specifically chose Polkadot over Kusama for its stability, exercising their sovereign decision-making rights. This proposal retroactively changes those conditions without their consent, raising concerns about participant agency.

5.0.6. **Operational Decentralization**: The Technical Fellowship Manifesto states that "the service guarantees of most major networks could be compromised by at most a handful of people" and identifies "centralisation risk" when certain participants are prioritized. The consultation process for this proposal appears to have favored certain ecosystem participants over others, creating power asymmetry that raises concerns about operational decentralization.

5.0.7. **Formal Accountability**: The Technical Fellowship Manifesto discusses the need for formal accountability in governance. This proposal would benefit from additional accountability measures to evaluate outcomes if economic predictions differ from expectations. Realistic accountability mechanisms could include:

- Publishing economic impact reports at 3, 6, and 12 months after implementation
- Creating a contingency plan if renewal prices increase beyond certain thresholds
- Establishing a framework for evaluating the impact on parachain retention and ecosystem diversity

5.0.8. **Lack of Transition Support**: While the RFC-0149 authors acknowledged weakening protections for loyal participants by "dropping almost perfect predictability on renewal prices" and making "attacking existing tenants possible", they offered no transition support for affected teams. This approach prioritizes theoretical market efficiency over the practical sustainability of existing ecosystem contributors.

Most concerning is how this proposal blurs the clear differentiation between Polkadot and Kusama, which directly contradicts Gavin Wood's vision as expressed in both the Polkadot Whitepaper and JAM Graypaper. If Polkadot cannot offer stability and predictability that differentiates it from Kusama's "expect chaos" environment, it undermines the entire two-network structure that has been fundamental to the ecosystem since inception.

# 6 Constructive Path Forward

There is significant room for addressing these economic concerns through collaborative amendments. As detailed above, particularly regarding the RFC-0149 approach to renewals. I'm optimistic these concerns can be addressed through collaborative amendments.

If proposal #1629 authors would consider the following then I would be happy to provide draft language for amendments or assist with implementation and testing of these improvements:

6.0.1. Implementing a price ceiling mechanism for renewals

6.0.2. Phasing in the changes gradually over 6-12 months

6.0.3. Creating a treasury-funded bridge program for affected startups

6.0.4. Exploring implementation of RFC-0010's burning mechanism

# 7 Acknowledgements

I extend my sincere appreciation to the proposal authors for their hard work and commitment to addressing the core capacity issues faced by the ecosystem. We share the common goal of making Polkadot function optimally, and I hope my analysis contributes constructively to that shared mission.

# 8 Voting Position

I have **concerns with the current implementation** of this proposal due to the technical and unpredictable economic considerations created by RFC-0149 and detailed above, particularly regarding the RFC-0149 approach to renewals, not on the capacity increase itself. I'm optimistic these concerns can be addressed through collaborative amendments.

# 9 References


[1] Polkadot Whitepaper.
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