2024

EFFECTS OF GROWTH INCENTIVES ON NON-INCENTIVIZED PROTOCOL IN STIP & BSTIP (STATISTICAL ANALYSIS)

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Correlational Coefficient Analysis Method

This analysis calculates the Pearson correlation coefficient to assess the relationship between Daily Active Users (DAU) and Total Value Locked (TVL) for each protocol, distinguishing between incentivized and non-incentivized protocols. The coefficient (r) ranges from -1 to 1, indicating:

T-test Analysis

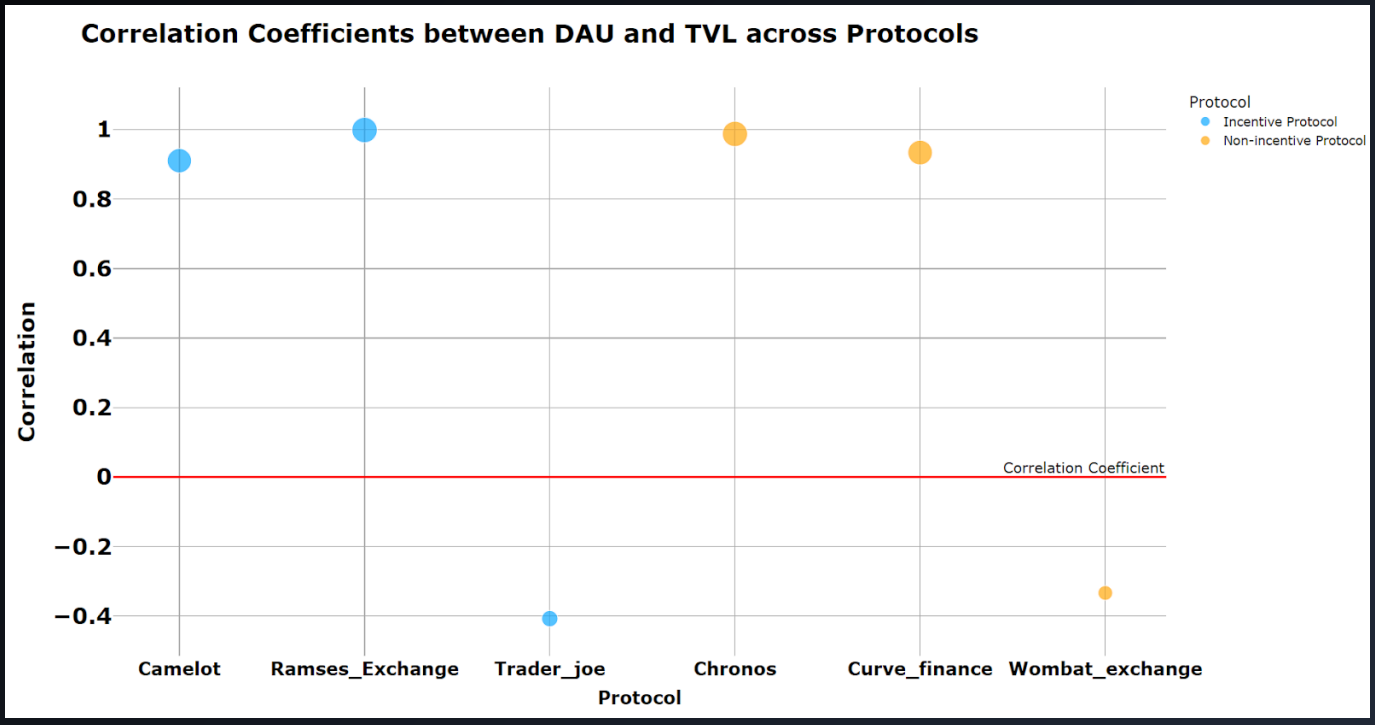
- r = 1: Perfect positive correlation
- r = -1: Perfect negative correlation
- r = 0: No correlation

Explanation of Terms

- **T-statistic:** This value indicates the magnitude and direction of the difference between the two periods (before and during incentives) for each metric. A positive t-statistic suggests that the values were generally higher during the incentives period, while a negative value indicates they were lower.

- **P-value:** This value indicates the statistical significance of the difference between the two periods. A p-value less than 0.05 (for a 5% significance level) typically suggests a statistically significant difference. Higher p-values indicate that the difference is not statistically significant.

Decentralized Exchange (DEX)

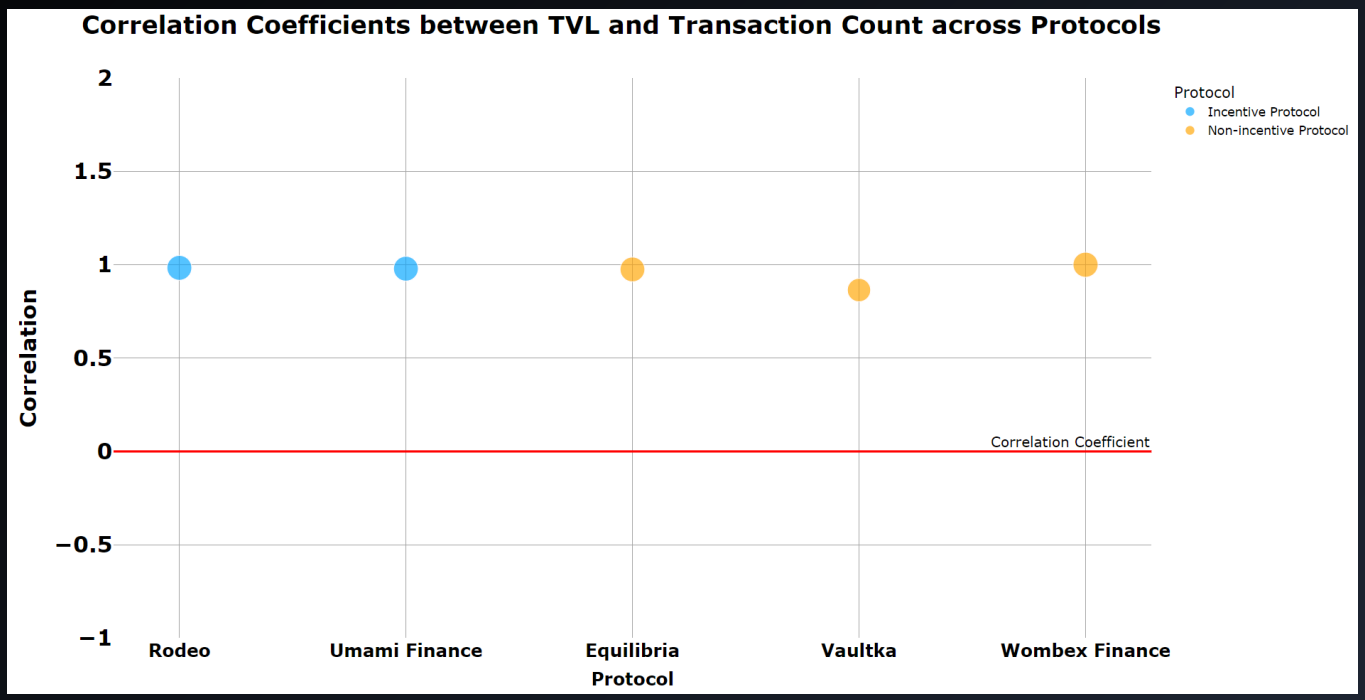


Visualization Link - [Correlation coefficients between DAU and TVL across protocols]

The Bubble chart examines the relationship between Daily Active Users (DAU) and Total Value Locked (TVL) across six decentralized exchange (DEX) platforms. Camelot and Ramses Exchange, which are incentivized protocols, show strong positive correlations, meaning that as more users engage with these platforms, the value of assets locked in them also increases. This suggests that the incentive programs effectively boost both user activity and liquidity growth, creating a positive feedback loop for these protocols.

In contrast, Trader Joe, also an incentivized protocol, shows a negative correlation. Despite increased user activity, the TVL decreases, possibly indicating that users are withdrawing assets or engaging in short-term trades rather than contributing to long-term liquidity. Similarly, non-incentivized platforms like Chronos, Curve Finance, and Wombat Exchange show mixed results. Chronos and Curve Finance have positive correlations, suggesting that user engagement still supports liquidity, while Wombat Exchange shows a negative correlation, similar to Trader Joe. These findings suggest that while incentives generally support liquidity growth, they may not guarantee success for all protocols.

Yield



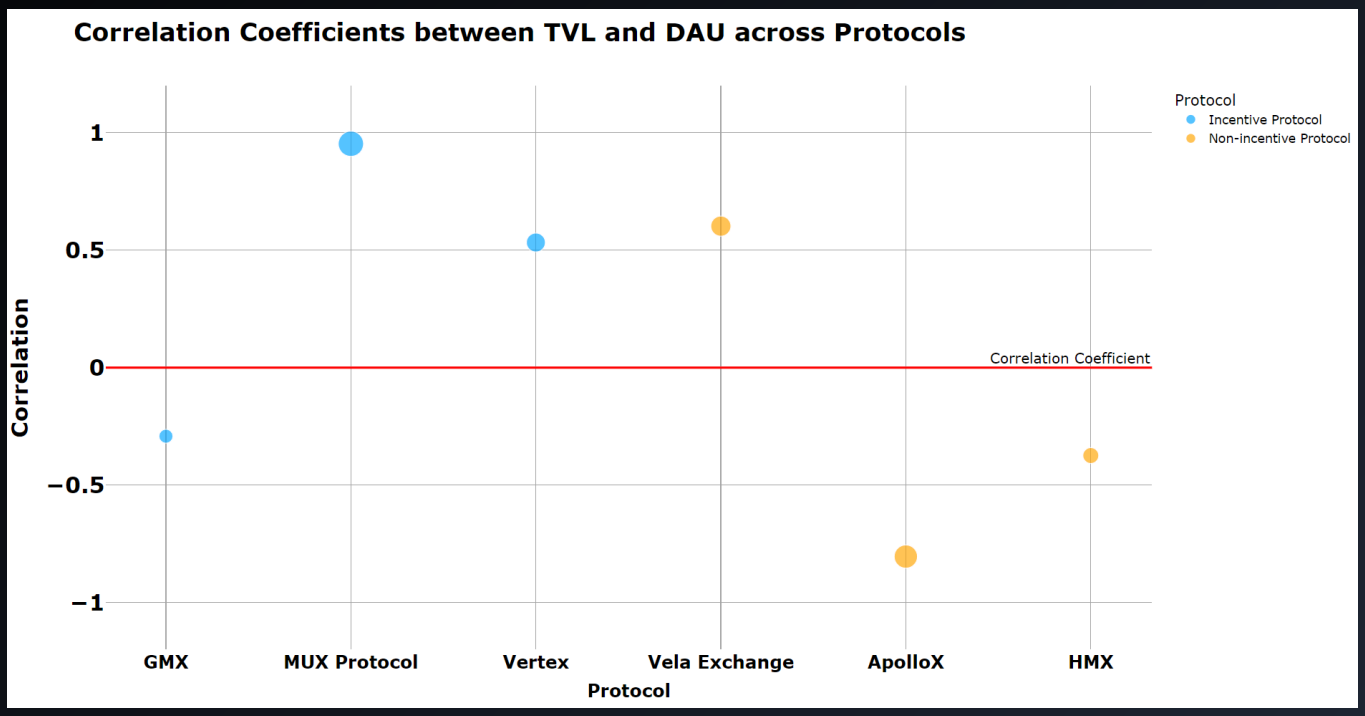
Visualization Link - [Correlation coefficient between TVL and Transaction count across protocols]

This analysis examines the relationship between Total Value Locked (TVL) and transaction count across five decentralized finance (DeFi) platforms: Equilibria, Rodeo, Umami Finance, Vaultka, and Wombex Finance. Rodeo and Umami Finance, both incentivized protocols, demonstrate strong positive correlations with their TVL values. This indicates that as the number of transactions increases on these platforms, the total value of assets locked in them also rises. Such a relationship suggests that the incentive programs effectively enhance both user engagement and liquidity growth, creating a positive feedback loop that benefits these protocols.

In contrast, the remaining platforms, Equilibria, Vaultka, and Wombex Finance, are classified as non-incentivized protocols and show varied results. Equilibria displays a notably high correlation, implying that increased transaction activity positively impacts its liquidity levels. Conversely, Vaultka and Wombex Finance exhibit lower correlation values, suggesting that despite transaction activity, the relationship between transaction count and TVL is less robust. This could indicate that these platforms may not effectively convert transaction engagement into increased liquidity, possibly due to factors such as user behavior or market conditions.

These findings highlight that while incentives generally support liquidity growth in protocols like Rodeo and Umami Finance, the success of transaction activity in enhancing liquidity is not uniform across all platforms. Understanding these dynamics can help refine incentive structures and improve overall performance in the DeFi space.

Perpetual



Visualization Link - [Correlation coefficient between TVL and DAU across protocols]

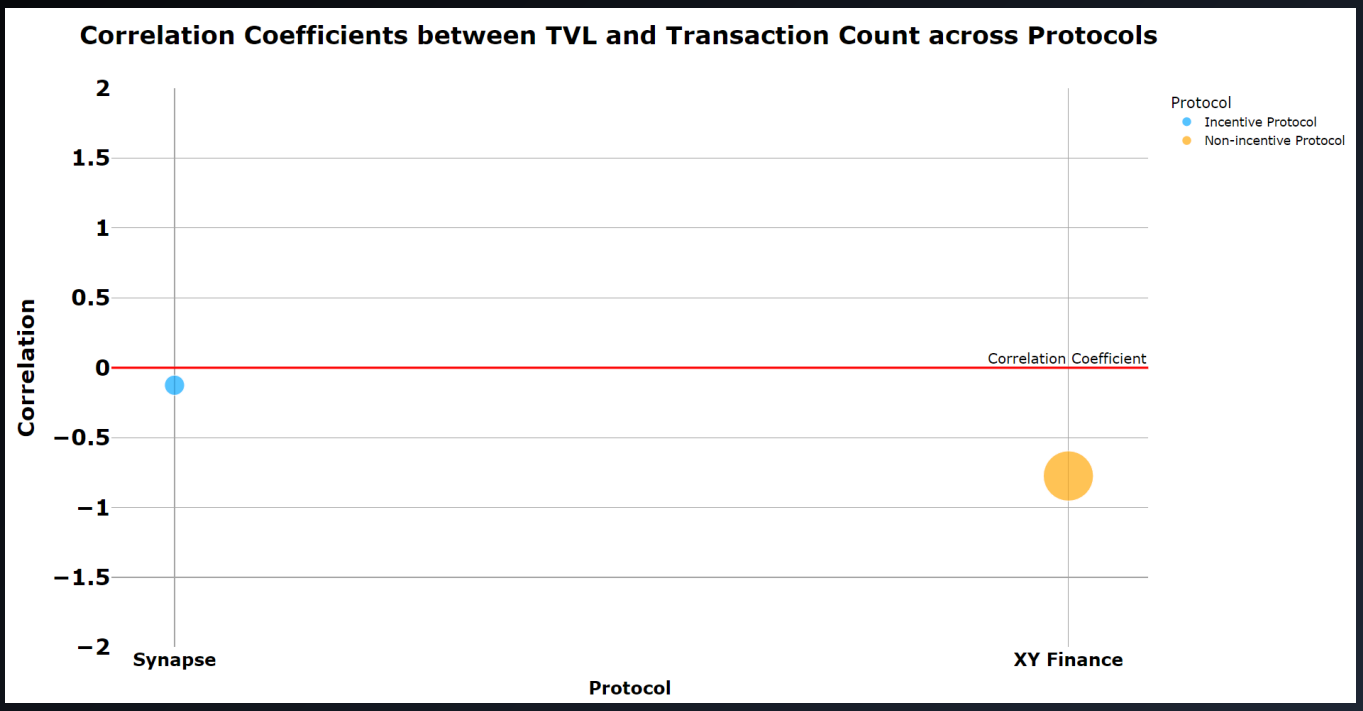
This analysis looks at how Total Value Locked (TVL) relates to Daily Active Users (DAU) across six decentralized finance (DeFi) platforms: ApolloX, GMX, HMX, MUX Protocol, Vela Exchange, and Vertex. Among these, MUX Protocol shows a strong positive correlation, meaning that as the number of daily active users increases, so does the TVL. This suggests that its incentive programs are successfully encouraging more user activity and boosting liquidity.

On the other hand, ApolloX, HMX, and GMX show negative correlations. This indicates that when the DAU rises, the TVL tends to drop. It could mean that users are withdrawing their assets or engaging in short-term activities instead of contributing to long-term liquidity.

Vela Exchange and Vertex have moderate positive correlations, showing some link between DAU and TVL, but it's not as strong as with MUX Protocol. This suggests that while these platforms see more daily active users, it doesn't lead to a significant increase in liquidity.

Overall, the results highlight that different DeFi platforms respond differently to user activity. Strong incentives can effectively drive liquidity in platforms like MUX Protocol, but for others like ApolloX, HMX, and GMX, the connection isn't as favorable. Understanding these relationships can help improve strategies for increasing liquidity in the DeFi space.

Bridge



Visualization Link - [Correlation coefficient between TVL and Transaction count across protocols]

The bubble chart examines the relationship between Total Value Locked (TVL) and transaction counts for two decentralized finance (DeFi) platforms: Synapse and XY Finance. Synapse, which offers an incentive program to encourage user engagement, shows a weak negative correlation of -0.1250. This means that as the number of transactions increases, the TVL does not rise significantly. The results suggest that the incentive program may not be effectively motivating users to hold their assets long-term.

In contrast, XY Finance, which does not have an incentive program, exhibits a stronger negative correlation of -0.7744. This indicates that when transaction counts go up, the TVL tends to drop significantly. It could imply that users are pulling out their assets or making quick trades instead of contributing to the platform's liquidity.

Overall, these findings highlight how incentive programs can influence user behavior in DeFi platforms. While Synapse's incentive program has a minimal positive impact on liquidity, XY Finance's lack of incentives leads to a more significant decline in TVL as transaction activity increases. Understanding these patterns can help refine strategies to enhance liquidity in the DeFi space.

Correlation Analysis Insights Across DeFi Sectors

The correlational analysis across various decentralized finance (DeFi) sectors reveals that incentivized protocols like Camelot and Ramses Exchange benefit from strong positive correlations between Daily Active Users (DAU) and Total Value Locked (TVL), indicating successful user engagement and liquidity growth. Conversely, Trader Joe shows a negative correlation, suggesting that increased user activity may lead to asset withdrawals rather than long-term liquidity.

In yield protocols, Rodeo and Umami Finance exhibit strong positive correlations with transaction counts boosting their TVL, while Equilibria shows a notable correlation, unlike the weaker relationships seen in Vaultka and Wombex Finance. In perpetual protocols, MUX Protocol benefits from a strong positive correlation, whereas ApolloX, HMX, and GMX display negative correlations, indicating user withdrawals.

Finally, Synapse's weak negative correlation suggests limited effectiveness of its incentive program, while XY Finance's strong negative correlation highlights the risks associated with a lack of incentives. Overall, these findings emphasize the varying impacts of incentive programs across different DeFi sectors, with the need for tailored strategies to enhance liquidity and user retention.

Synthetic Control Analysis(Daily TVL)

In this analysis, synthetic control methods will be employed to evaluate the impact of incentive programs on Total Value Locked (TVL) across different protocols. The treated unit will be the incentivized protocol, while the control group will consist of similar non-incentivized protocols.

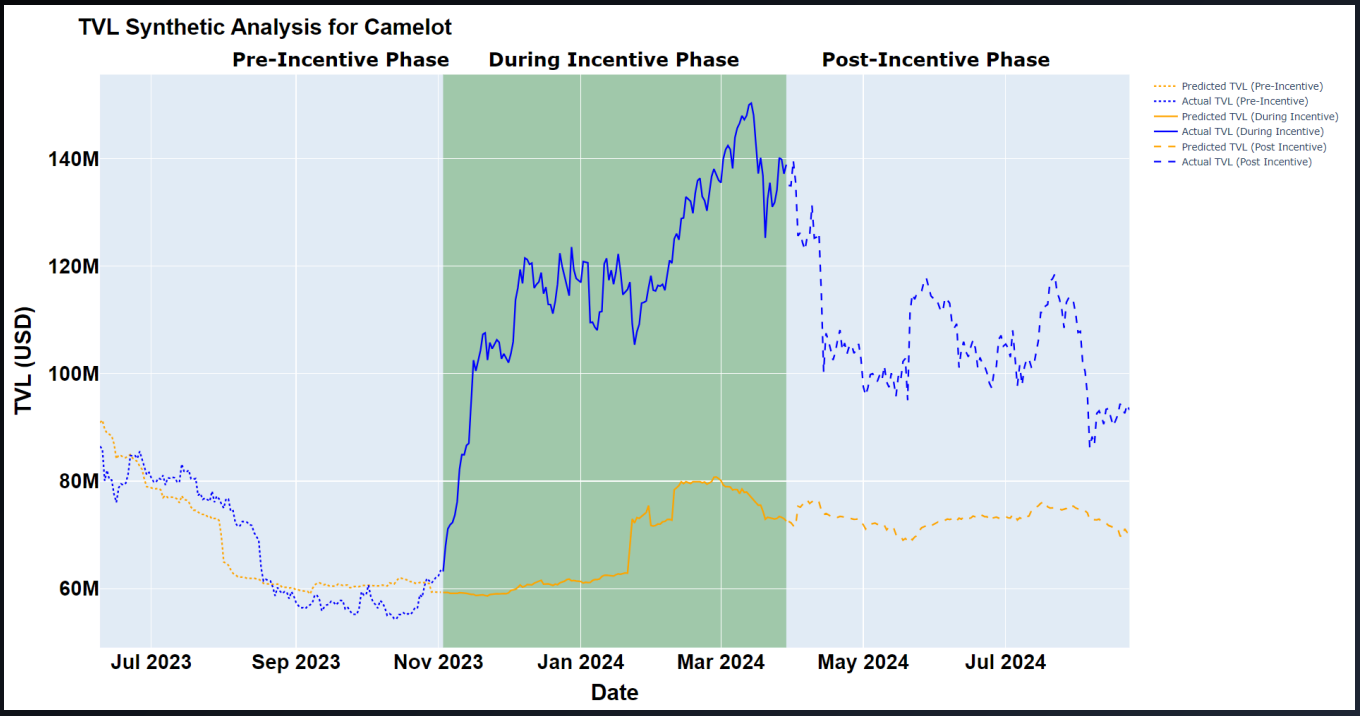
To begin, we will collect TVL data across three distinct phases: Pre-Incentive, Active Incentive, and Post-Incentive. This data should be granular, ideally at a daily TVL to accurately capture trends. Using the TVL data from the control group, we will construct a synthetic version of the treated unit that closely resembles its characteristics during the pre-incentive phase. This involves optimizing weights assigned to each control unit to minimize the difference in TVL between the incentivized protocol and the synthetic control.

Once the synthetic control is established, we will estimate treatment effects by comparing the post-incentive TVL outcomes of the incentivized protocol with those of the synthetic control. The difference in TVL will help quantify the impact of the incentive program. A positive treatment effect indicates that the incentive program successfully boosted liquidity, while a negative or negligible effect suggests it may not have achieved its intended goals.

Expected Outcomes

The results of this analysis will provide valuable insights into the effectiveness of the incentive programs on TVL. A significant increase in TVL for the incentivized protocol compared to the synthetic control will suggest that the program was effective. Conversely, a lack of difference may indicate that other factors influenced liquidity. Overall, this approach will help inform future strategies for enhancing liquidity in decentralized finance (DeFi) platforms

Decentralized Exchange(DEX)

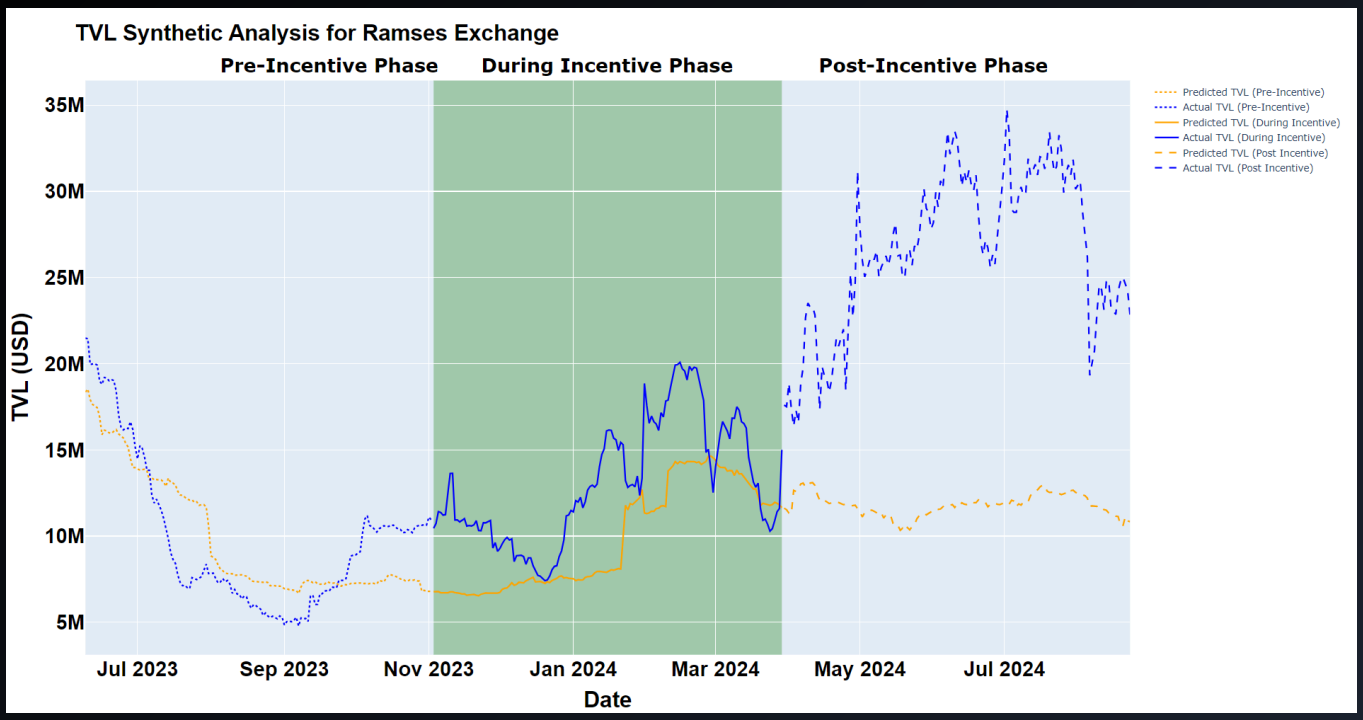


Visualization Link - [TVL synthetic analysis for Camelot]

This graph provides a comprehensive analysis of the Total Value Locked (TVL) for Camelot across three distinct phases: Pre-Incentive, During Incentive, and Post-Incentive. In the Pre-Incentive Phase, which spans up to November 2023, Camelot's TVL showed a gradual decline from approximately 80-90 million USD to around 60 million USD by October. This period reflects the protocol's baseline performance in the absence of external incentives.

The subsequent During Incentive Phase (November 2023 - March 2024) marked a significant turning point, with actual TVL surging rapidly to nearly 140 million USD. This increase is particularly noteworthy as it far exceeds the predicted TVL range of 60-80 million USD, demonstrating the powerful impact that incentive programs can have on attracting user capital and engagement.

Finally, in the Post-Incentive Phase (after March 2024), Camelot's TVL declined from its peak, fluctuating between 90-120 million USD, while the predicted values remained relatively stable. This contrast between the predicted and actual TVL throughout these phases illustrates the effectiveness of targeted incentives in driving substantial growth, highlighting how such strategies can lead to outcomes significantly beyond initial expectations. Overall, the analysis underscores the importance of incentive programs in shaping TVL dynamics within DeFi protocols.

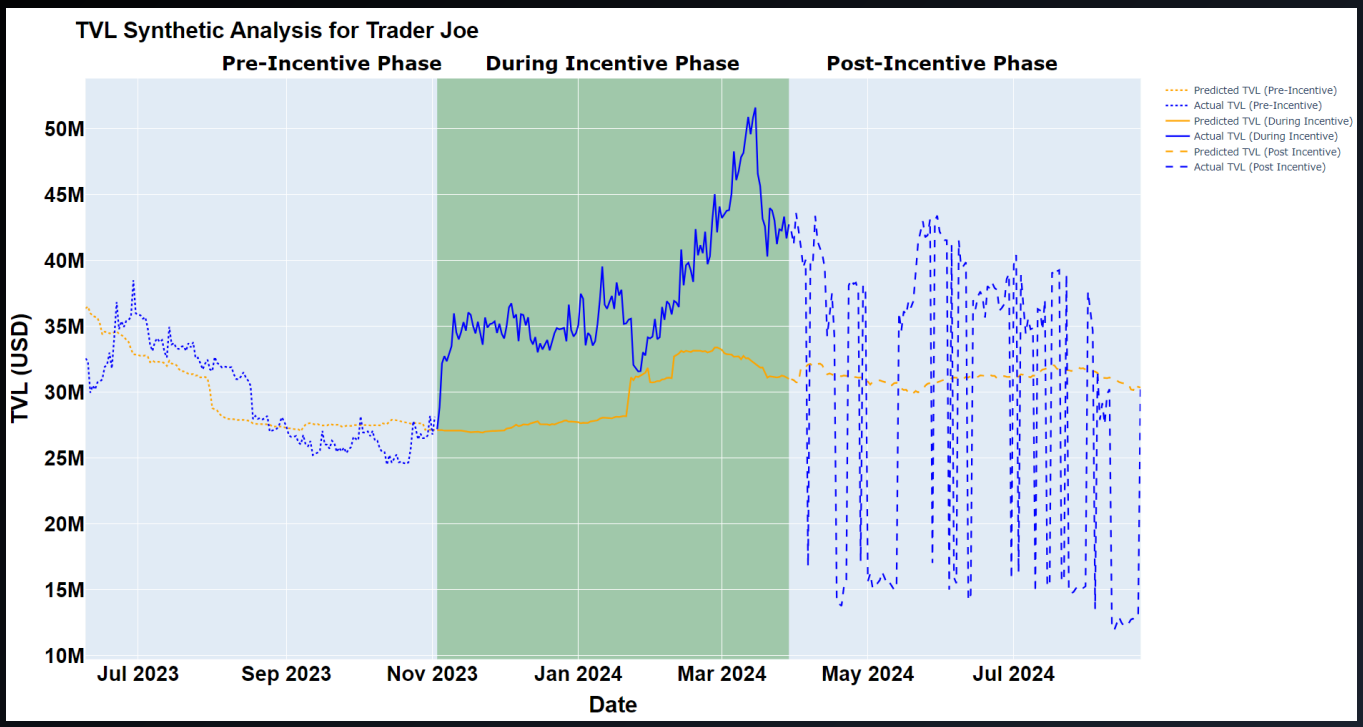


Visualization Link - [TVL synthetic analysis for Ramses Exchange]

This graph shows the Total Value Locked (TVL) Synthetic Analysis for Ramses Exchange across three phases: Pre-Incentive, During Incentive, and Post-Incentive. In the Pre-Incentive Phase (up to November 2023), TVL started at around 20 million USD in July but dropped significantly to about 5-7 million USD by September. There was a small recovery to around 10 million USD just before the incentives began, indicating challenges in attracting capital without incentives.

During the During Incentive Phase (November 2023 - March 2024), TVL fluctuated between 8-13 million USD, with notable spikes up to 20 million USD, particularly in February 2024. This increase shows that the incentives successfully drew in users and capital.

In the Post-Incentive Phase (after March 2024), there was an unexpected rise in TVL, reaching between 30-35 million USD, although it slightly declined to around 25 million USD by July 2024.
The graph compares Predicted TVL (orange dotted line), which stayed stable at 10-15 million USD, with Actual TVL (solid/dashed blue line), which exceeded predictions, especially after the incentive period. Unlike many projects, Ramses Exchange showed growth even after the incentives ended, suggesting that the program helped create lasting user interest and capital. This analysis highlights the effectiveness of incentive programs in boosting TVL and shows Ramses Exchange's potential for continued success in the DeFi market.



Visualization Link - [TVL synthetic analysis for Trader Joe]

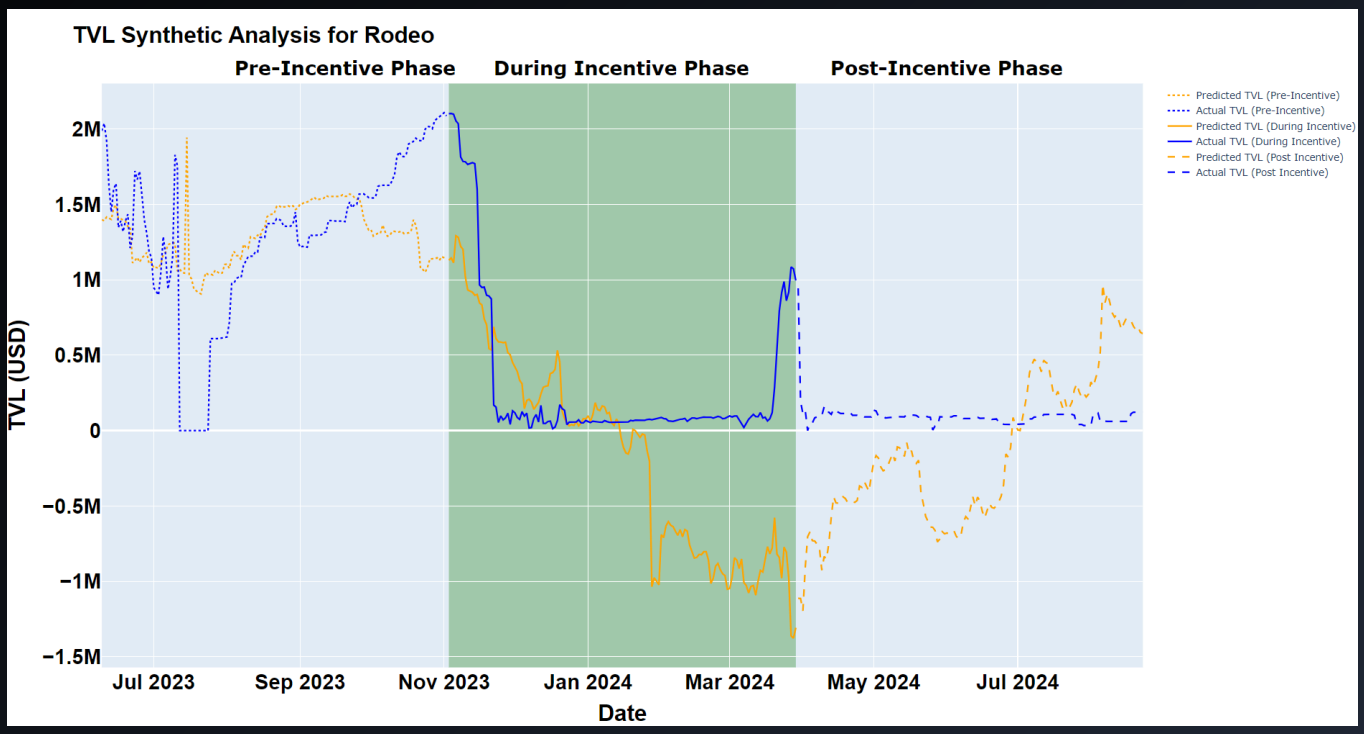
This graph presents the Total Value Locked (TVL) Synthetic Analysis for Trader Joe, highlighting its performance across three key phases: Pre-Incentive, During Incentive, and Post-Incentive. In the Pre-Inc11111entive Phase (up to November 2023), TVL began at approximately 35-38 million USD in July 2023 but gradually declined to around 25-27 million USD by September and October, showing a generally downward trend with minor fluctuations.

During the During Incentive Phase (November 2023 - March 2024), Trader Joe experienced a sharp increase in TVL, reaching about 35 million USD at the start of the incentives. The TVL remained relatively stable around 35-37 million USD through January 2024, with significant growth in February and March, peaking at approximately 50 million USD near the end of the incentive period.

In the Post-Incentive Phase (after March 2024), the TVL displayed high volatility, fluctuating between roughly 15-40 million USD, characterized by sharp drops and recoveries. Overall, the values trended lower than the peaks seen during the incentive phase.

The graph contrasts Predicted TVL (represented by the orange dotted line), which remained conservative at around 30-33 million USD, with Actual TVL (shown in solid/dashed blue lines), which significantly exceeded predictions during the incentive phase. The post-incentive phase is marked by increased volatility, indicating less stability after the program ended; however, values generally remained above pre-incentive levels despite the fluctuations. This analysis underscores the impact of incentive programs on Trader Joe's TVL, revealing both opportunities and challenges in maintaining user engagement following such initiatives.

Yield



Visualization Link - [TVL synthetic analysis for Rodeo]

The graph illustrates Rodeo's Total Value Locked (TVL) performance across three distinct phases: Pre-Incentive, During Incentive, and Post-Incentive periods. During the Pre-Incentive phase leading up to November 2023, Rodeo demonstrated significant volatility with TVL fluctuating between 1M and 2M USD. The protocol showed resilience despite these fluctuations, maintaining a generally upward trend that peaked at approximately 2M USD by November 2023.

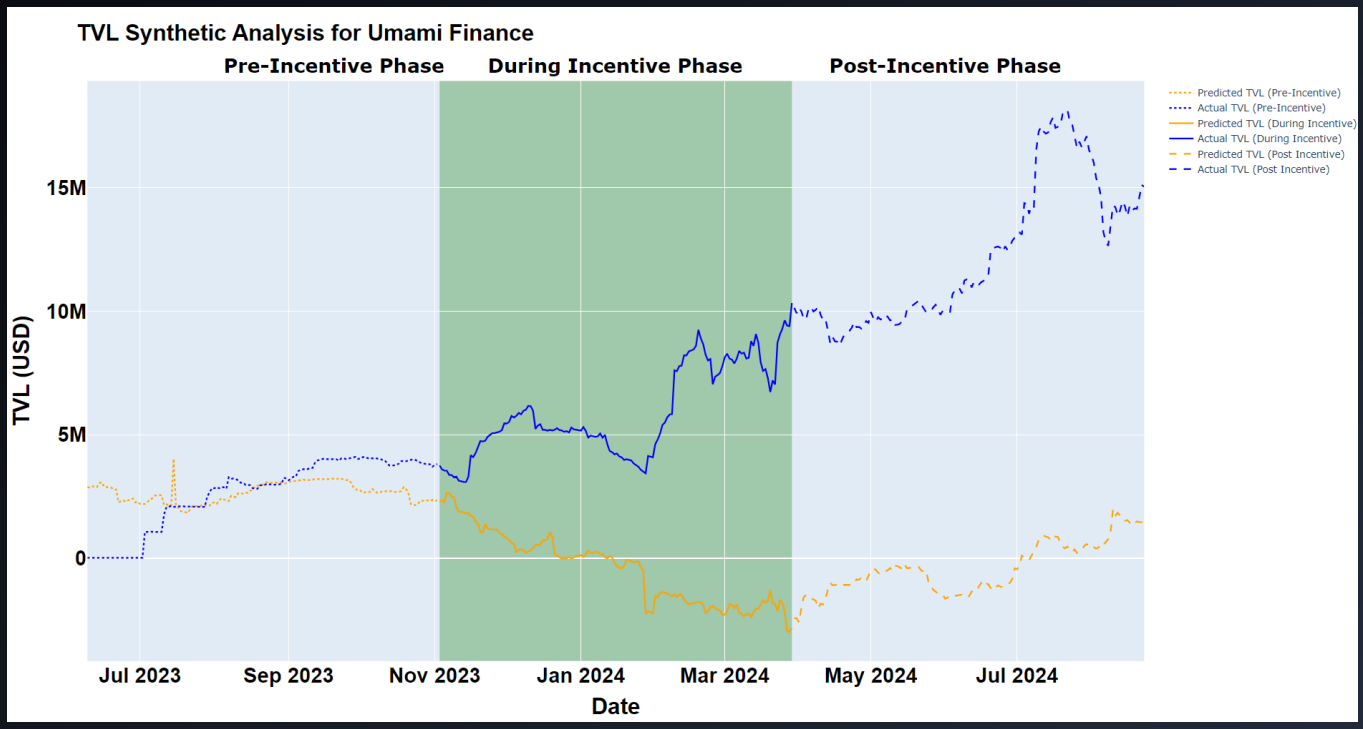
A dramatic shift occurred at the onset of the Incentive Phase (November 2023 - March 2024), marked by a sharp decline from the 2M USD peak. The TVL dropped substantially to around 100-200K USD and maintained relatively low levels throughout this period. Notably, there's a significant divergence between the Predicted TVL (shown in orange) and Actual TVL (in blue), with predictions becoming increasingly negative while actual values remained low but stable.

The most striking feature appears in the During Incentive Phase, where the Predicted TVL shows a concerning downward trajectory, reaching negative values of up to -1.5M USD. This unusual pattern suggests potential challenges or structural changes within the protocol during this period. Meanwhile, the Actual TVL maintained a relatively stable, though much lower, position compared to the pre-incentive phase.

Entering the Post-Incentive Phase (after March 2024), the protocol experienced a brief but significant spike in TVL, reaching around 1M USD, before settling into a more stable pattern. This post-incentive period shows less volatility compared to previous phases, though at significantly lower levels than the pre-incentive highs.The substantial contrast between predicted and actual TVL values, particularly during the incentive phase, highlights the complexity of forecasting DeFi protocol performance during incentive programs.

The negative predicted values during the incentive phase, coupled with the relatively stable actual performance, suggests that traditional prediction models may struggle to accurately capture the impact of incentive programs on protocol TVL.

This analysis provides valuable insights into the challenges of maintaining TVL stability during and after incentive programs, and the potential limitations of TVL prediction models in the context of DeFi protocols undergoing significant structural changes or incentive implementations.



Visualization Link - [TVL synthetic analysis for Umami Finance]

The graph demonstrates Umami Finance's Total Value Locked (TVL) performance across three distinct phases: Pre-Incentive, During Incentive, and Post-Incentive periods. During the Pre-Incentive phase (July 2023 to November 2023), the protocol showed steady growth with TVL gradually increasing from around 2M to 4M USD, displaying relatively stable performance with minimal volatility.

A significant transformation occurred at the beginning of the Incentive Phase (November 2023 - March 2024), marked by a substantial increase in Actual TVL (shown in solid blue line) from around 4M to peaks of nearly 10M USD. However, there's a notable divergence between the Predicted TVL (shown in orange) and Actual TVL, with predictions showing a declining trend while actual values demonstrated strong growth.

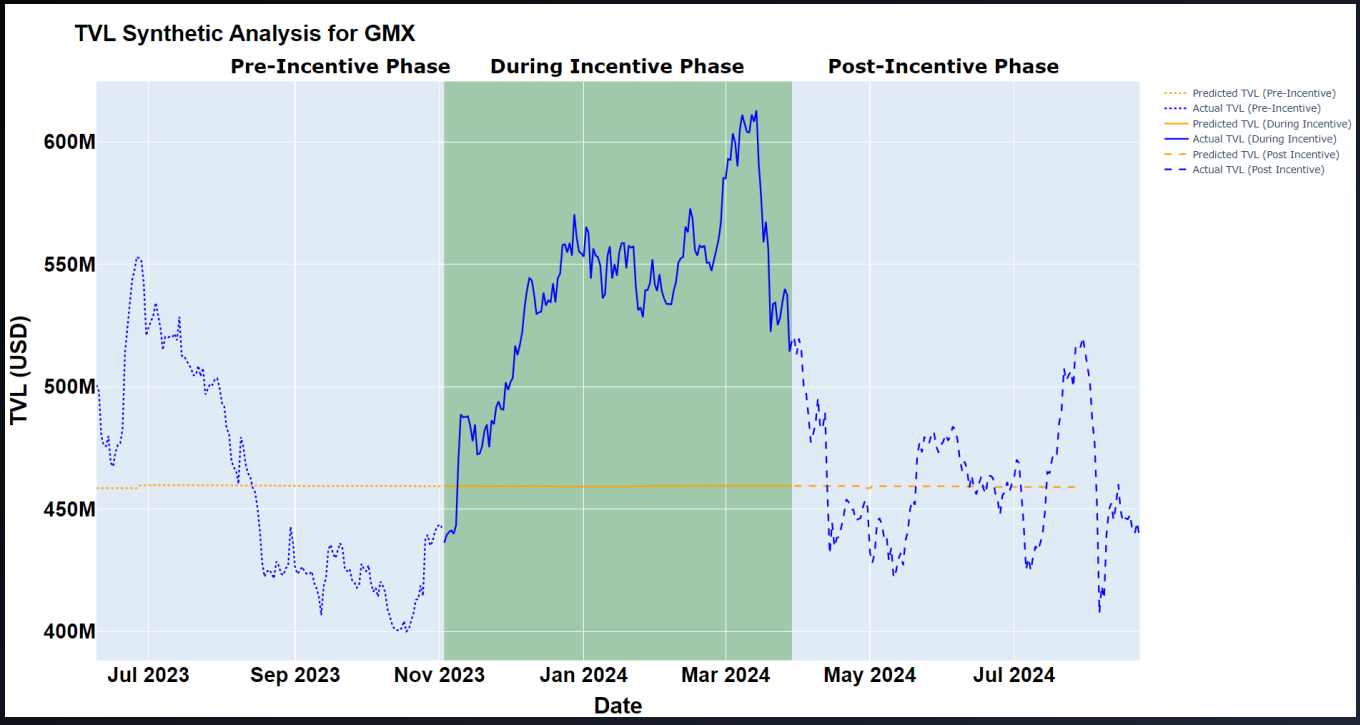
The most remarkable feature appears in the During Incentive Phase, where the Actual TVL shows multiple growth cycles, reaching several peaks between 5M and 10M USD, indicating strong user adoption and engagement. Meanwhile, the Predicted TVL shows a consistent downward trajectory, reaching near-zero values by the end of the incentive period, suggesting the models may have underestimated the effectiveness of the incentive program.

In the Post-Incentive Phase (after March 2024), the protocol demonstrates exceptional growth, with TVL surging to unprecedented levels of around 15M USD. This period shows increased volatility but maintains a generally upward trend, significantly outperforming both previous phases and predictions.

The substantial disparity between predicted and actual TVL values, particularly during and after the incentive phase, highlights the effectiveness of Umami Finance's incentive program in attracting and retaining liquidity. The negative correlation between predictions and actual performance suggests that traditional forecasting models may have underestimated the protocol's potential for growth and user adoption during incentivized periods.

This analysis reveals the significant success of Umami Finance's incentive program in boosting TVL, with actual performance substantially exceeding predictions across all phases, particularly in the post-incentive period where the protocol achieved its highest TVL levels.

Perpetual



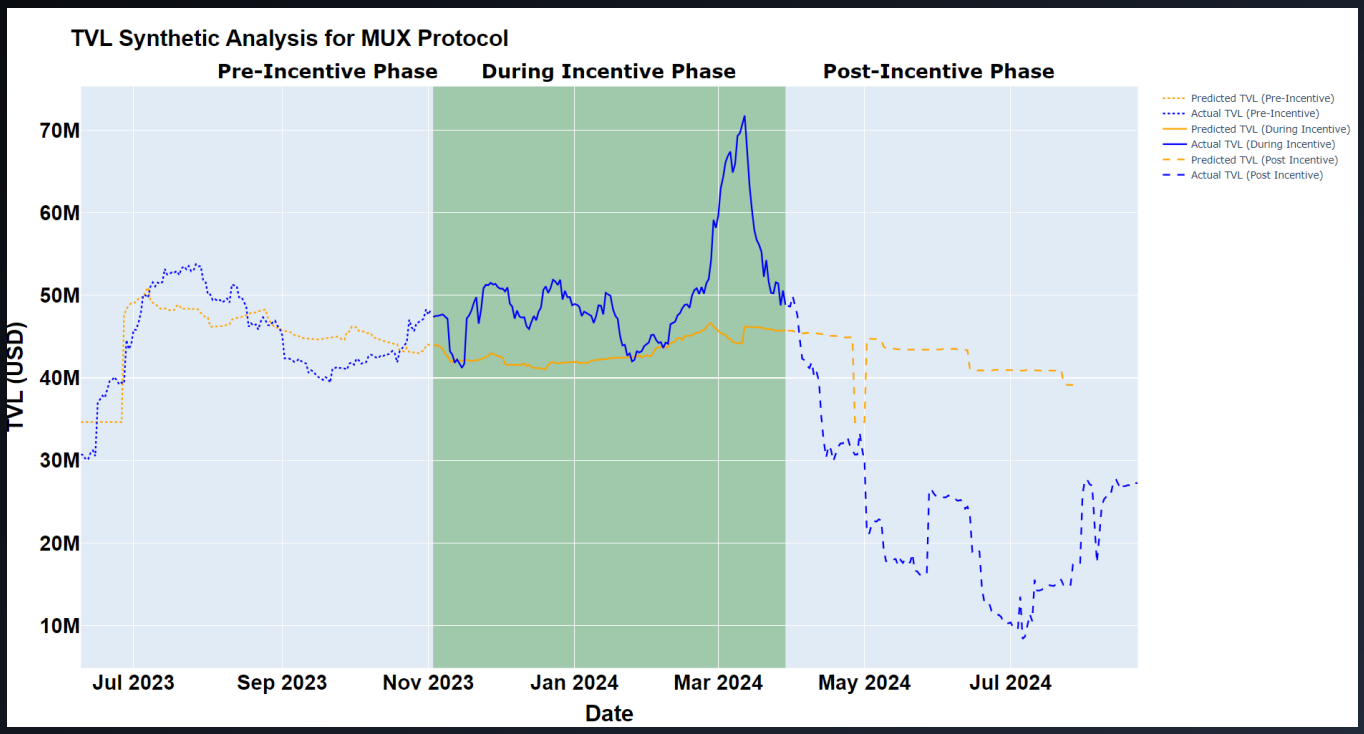
Visualization Link - [TVL synthetic analysis for GMX]

The TVL Synthetic Analysis for GMX reveals a fascinating evolution of liquidity dynamics across three pivotal timeframes. In the Pre-Incentive period from July to November 2023, GMX experienced considerable volatility, with TVL initially reaching peaks around 550M USD before entering a gradual decline phase, eventually settling near 400M USD. This pattern suggests significant market sensitivity and changing user sentiment during this initial observation period.

The launch of the Incentive Phase in November 2023 catalyzed a remarkable transformation in the protocol's performance. The Actual TVL (represented by the solid blue line) demonstrated explosive growth, surging from approximately 440M USD to establish new highs, ultimately reaching an impressive peak of over 600M USD by March 2024. This period was characterized by robust upward momentum, though interspersed with periodic fluctuations, indicating active market participation and strong response to the incentive mechanisms.

Perhaps the most intriguing aspect of the analysis lies in the stark contrast between predicted and actual performance during the incentive period. While the Predicted TVL (orange line) maintained a conservative, almost flat trajectory around the 460M USD mark, the actual performance significantly outpaced these projections, highlighting the underestimation of the incentive program's impact on user engagement and liquidity provision.

The transition to the Post-Incentive Phase (post-March 2024) brought about a notable shift in TVL behavior. The protocol experienced increased volatility with TVL oscillating between 420M and 520M USD, displaying a series of pronounced peaks and troughs. Despite the end of direct incentives, the protocol maintained TVL levels substantially above the pre-incentive period's lows, suggesting some degree of sustained user engagement and market presence.This comprehensive view of GMX's TVL evolution demonstrates the profound impact of strategic incentive implementation on protocol liquidity. The data particularly emphasizes how well-designed incentive programs can not only attract immediate liquidity but also potentially establish new baseline TVL levels even after the program's conclusion. The oscillating pattern in the post-incentive phase further illustrates the dynamic nature of DeFi liquidity and the ongoing interplay between user behavior and market conditions.



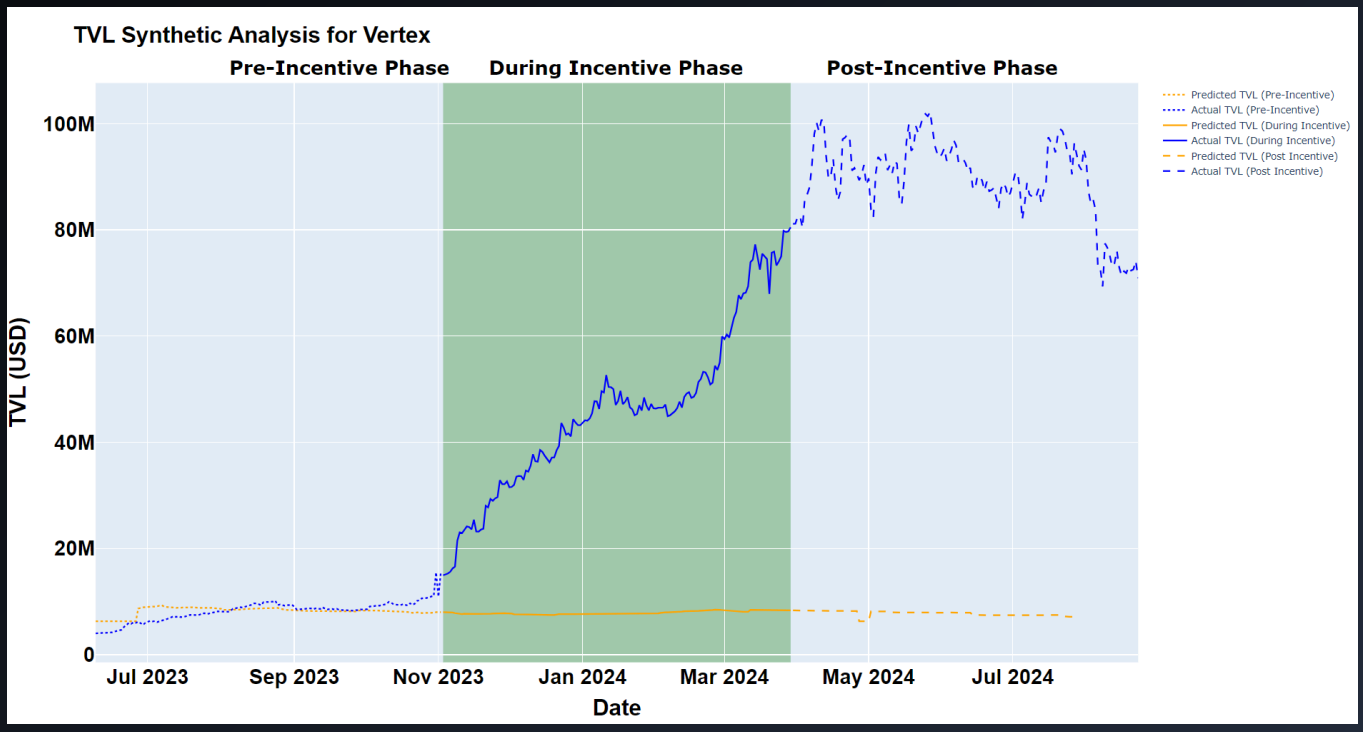
Visualization Link - [TVL synthetic analysis for MUX Protocol]

The TVL Synthetic Analysis for MUX Protocol presents a compelling narrative of liquidity evolution across three distinct phases. During the Pre-Incentive Phase from July to November 2023, the protocol demonstrated relatively stable performance with TVL fluctuating between 40-55M USD, characterized by moderate volatility and a general convergence between predicted and actual values toward the end of this period.

The implementation of the Incentive Phase from November 2023 to March 2024 marked a transformative period for MUX, triggering unprecedented growth in liquidity. Most notably, the actual TVL significantly outperformed predictions, culminating in a remarkable peak of approximately 72M USD in early 2024, while the predicted TVL maintained a more conservative trajectory around 42-45M USD. This substantial divergence between predicted and actual values underscores the powerful impact of the incentive program in attracting liquidity.

However, the transition to the Post-Incentive Phase revealed the challenges of maintaining such elevated liquidity levels without active incentives. The protocol experienced a dramatic decline in TVL, dropping to around 20-30M USD, with significant volatility marked by multiple sharp drops and partial recoveries. This period starkly contrasted with the predicted TVL, which anticipated a more gradual decline while maintaining levels around 40M USD.

The substantial gap between predicted and actual performance in this phase suggests that the protocol's liquidity was heavily dependent on incentive mechanisms. Perhaps most notably, the current TVL levels have fallen below the pre-incentive baseline, indicating potential challenges in sustaining long-term liquidity without active incentive programs. This comprehensive analysis highlights both the immediate effectiveness of incentive programs in boosting liquidity and the complexities involved in maintaining these gains over the longer term.



Visualization Link - [TVL synthetic analysis for Vertex]

The TVL Synthetic Analysis for Vertex Protocol reveals a remarkable transformation across its three distinct phases, showcasing one of the most successful implementations of an incentive program in the DeFi space. During the Pre-Incentive Phase from July to November 2023, the protocol maintained a relatively modest TVL ranging between 5-10M USD, with both predicted and actual values showing minimal volatility and tracking closely together, indicating stable but limited market participation.

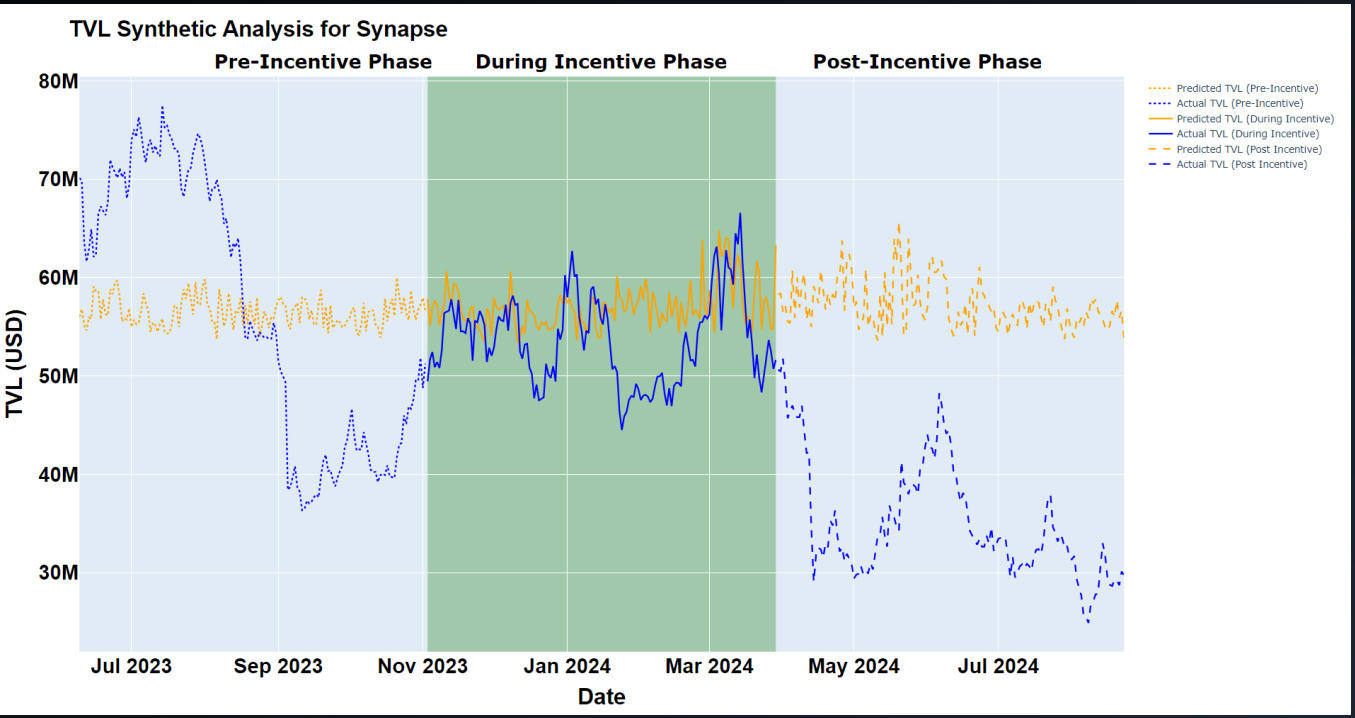
The introduction of the Incentive Phase in November 2023 marked a dramatic turning point, triggering an exceptional growth trajectory that far exceeded expectations. The actual TVL demonstrated consistent and robust growth, climbing steadily from around 15M USD to an impressive 80M USD by March 2024, significantly outperforming the conservative predicted TVL which remained relatively flat around 10M USD throughout this period.

Most notably, the Post-Incentive Phase beginning March 2024 showcased Vertex's remarkable ability to not only maintain but build upon its gains, distinguishing it from many other protocols that typically experience sharp declines after incentive programs end. During this phase, the TVL continued to demonstrate strong performance, fluctuating between 80-100M USD, with several peaks reaching the 100M USD mark.

While showing some increased volatility, the protocol maintained significantly higher TVL levels compared to both its pre-incentive baseline and predicted values, even experiencing periods of continued growth. This sustained performance in the post-incentive period suggests that Vertex successfully transformed temporary incentive-driven liquidity into lasting protocol value, potentially through strong product-market fit and effective community building.

The recent slight decline to around 70-75M USD still represents a remarkable ~7x increase from pre-incentive levels, underscoring the protocol's successful transition to sustainable liquidity levels and suggesting effective long-term value creation beyond mere incentive optimization.

Bridge



Visualization Link - TVL synthetic analysis for Synapse

The TVL Synthetic Analysis for Synapse Protocol presents an intriguing narrative of liquidity dynamics across three distinct phases, characterized by significant volatility and changing market dynamics. During the Pre-Incentive Phase from July to September 2023, the protocol exhibited considerable strength with actual TVL reaching peaks of around 75M USD, notably outperforming predicted values that hovered consistently around 55-60M USD. However, this period also witnessed a sharp decline in actual TVL to approximately 40M USD by late September, while predicted values maintained their stable trajectory, suggesting underlying market challenges or changing user sentiment.

The Incentive Phase, beginning in November 2023, brought a period of heightened volatility rather than sustained growth, with actual TVL fluctuating between 45M and 65M USD, and experiencing several sharp peaks and troughs. Notably, during this phase, the actual and predicted TVL values showed closer alignment, both oscillating around the 55-60M USD range, indicating that the incentive program had a moderating rather than amplifying effect on liquidity.

The transition to the Post-Incentive Phase after March 2024 revealed significant challenges in maintaining liquidity levels, with actual TVL experiencing a dramatic decline to around 30-40M USD, substantially below both the predicted values and pre-incentive levels. This phase has been marked by continued volatility and a general downward trend, with TVL struggling to maintain stability and showing periodic attempts at recovery that ultimately proved unsustainable.

The stark contrast between predicted TVL, which remained relatively stable around 55M USD, and the actual performance suggests that the protocol faced fundamental challenges in retaining liquidity beyond the incentive period. This pattern indicates that while the incentive program may have temporarily stabilized liquidity levels, it did not successfully create lasting engagement or establish a new, higher baseline for protocol liquidity, highlighting the complexities of building sustainable DeFi protocols beyond initial incentive mechanisms.

Outcomes from Synthetic Analysis

This synthetic control analysis provides a sector-wide view of Total Value Locked (TVL) dynamics across multiple DeFi sectors—DEXs, Yield Protocols, and Perpetuals—within the phases of incentive programs. The analysis reveals clear patterns, showing that incentive programs can create substantial and immediate increases in TVL for DEXs such as Camelot and Ramses, with each protocol witnessing higher-than-expected TVL growth during the active incentive phase. In the Yield sector, protocols like Rodeo and Umami Finance demonstrated unique responses, with Rodeo experiencing a sharper decline despite predictions, while Umami achieved sustained growth that outpaced predictions even after the incentive phase concluded. Perpetuals, represented by protocols like GMX and MUX, showed how incentives could not only attract liquidity but in some cases redefine post-incentive TVL baselines, despite challenges in maintaining peak levels after incentives ended. Overall, these findings underline the strong influence of incentive programs on liquidity dynamics, albeit with variations across sectors and individual protocols.

In conclusion, the analysis underscores the nuanced impact of incentive programs on DeFi protocols across different sectors. The DEX sector shows that incentives can create significant short-term increases in TVL, while Yield and Perpetual protocols illustrate both the potential for sustained growth beyond incentives and the challenges of retaining high TVL without active rewards. The observed divergence between predicted and actual TVL values highlights that traditional forecasting models may underestimate the effect of incentives, suggesting a need for sector-specific approaches to better capture these dynamics. This analysis affirms the effectiveness of incentive programs as a strategic tool for liquidity growth, while also emphasizing the importance of adapting models and strategies to account for sectoral variations and protocol-specific responses.

Resources

1. Dune Dashboard

Description: Utilized to query on-chain data such as Daily Active Users (DAU), Monthly Active Users (MAU), transaction counts, and user retention rates across various protocols.

Access Link: Dune Analytics Tool

2. DefiLlama

Description: Used to gather data on Total Value Locked (TVL) and protocol fees. DefiLlama provided real-time financial insights into the liquidity and fee structures of the analyzed decentralized protocols, offering key metrics for comparative analysis between incentivized and non-incentivized protocols.

Access Link: DefiLlama

3. Dashboards

Description: Dashboards have been created to help us by providing an organized, interactive, and visual representation of data. They allow for quick insights and decision-making by summarizing key metrics, trends, and patterns from the analysis. The dashboards include all the visualizations from the analysis, along with brief descriptions.

Access Link: Python Dashboard