

Discussion:

Crowds of clones:

LLM trading agents in a prediction market

Zhen Shi

Yinan Su

Johns Hopkins University Carey Business School

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Prediction markets × agents

The paper studies trading on **Omen**, a prediction market on Gnosis Chain.

- ▶ Examines LLM agents' forecasts, trading decisions, and market prices.
- ▶ Uses **2.52 million trades** and **6.86 million forecasts**, with recorded tools, models, probabilities, and outcomes (November 2023–September 2026).

What is Omen?

Prompt:

“Can you tell me about Omen, the prediction market?”

Some names refer to interfaces; others to distinct platforms.



Omen on Gnosis Chain

The prediction market studied in this paper.

Interfaces in this ecosystem

AI Omen ↗

Earlier interface, built from Omen code.

aiomen.eth.limo

Presagio ↗

Newer interface, proposed as “Omen 2.0.”

presagio.pages.dev

Distinct products with similar names

OmenX

omenx.com ↗

Leveraged prediction trading on Base.



[Omen.trade](https://omen.trade) ↗

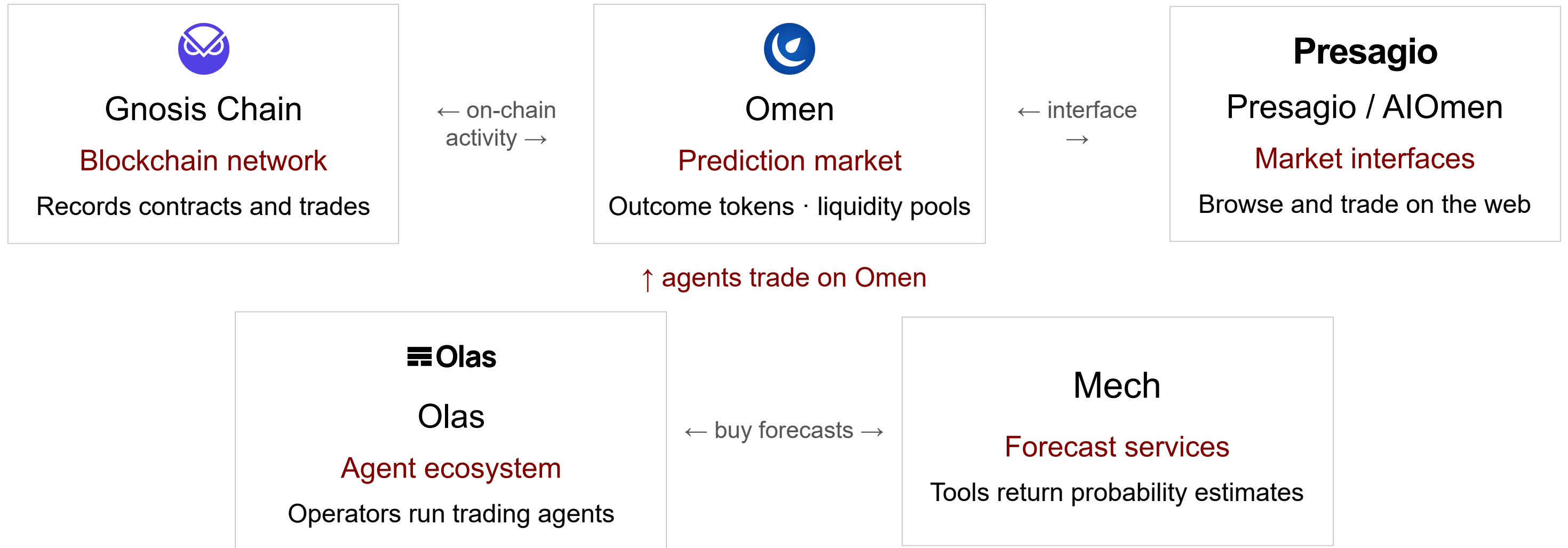
Multi-asset trading; Polymarket access.



[Omen.trading](https://omen.trading) ↗

Sports-trader discovery and copying.

A decentralized ecosystem



DAOs govern and fund; companies build; operators run agents.
A DAO coordinates community proposals, votes, and treasury spending.

How the setting developed

2015 / 2018 ...

Earlier roots

Gnosis begins (2015).
xDai launches (2018).
Gnosis Chain name (2021).

2020

Omen launches

DXdao launches Omen
using Gnosis infrastructure.

2023

Agents enter

Olas adopts Omen.
Automated trading agents
enter.

2024

Presagio emerges

A new interface with an AI
focus: “Omen 2.0.”

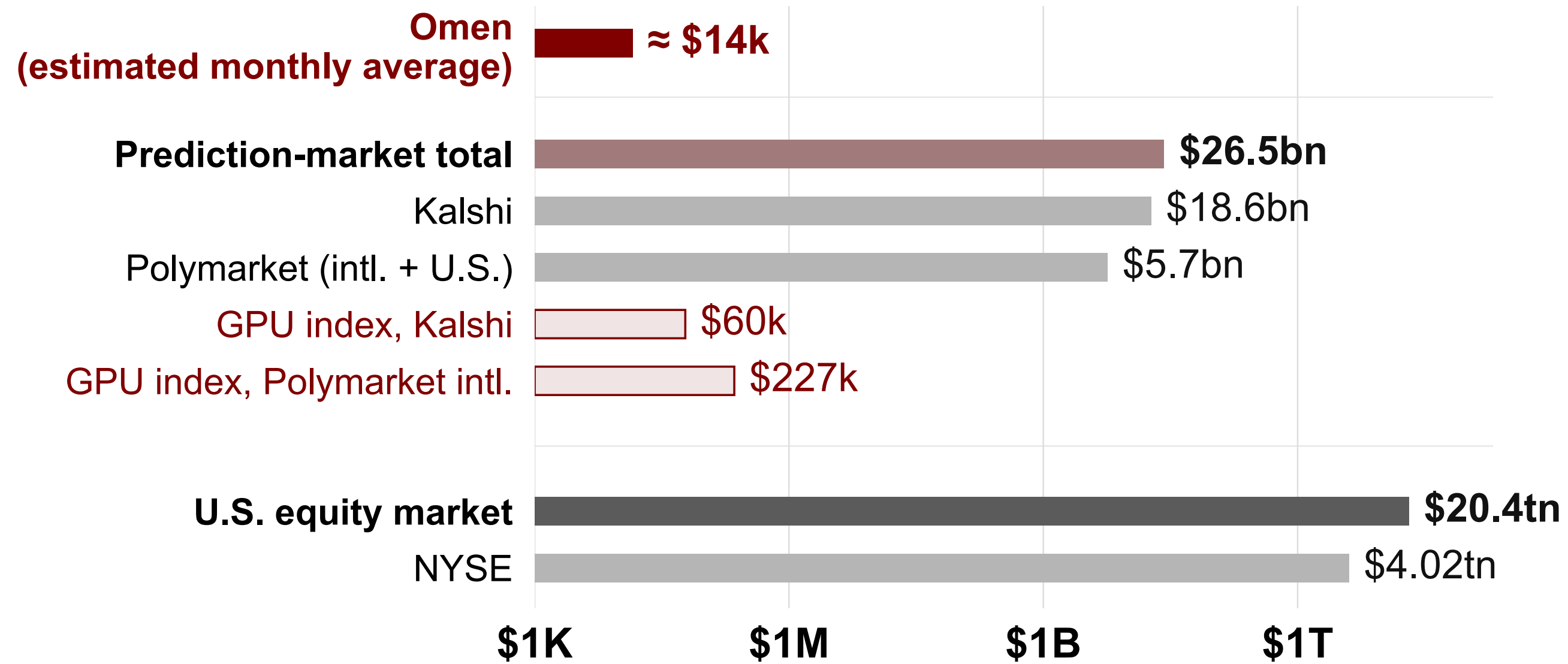
Similar launch period

Omen (2020) · Polymarket (2020) · Kalshi public beta (2021)

But their subsequent trajectories have been very different.

Market scale

Monthly dollar trading volume · logarithmic scale



Omen sample: 2.52m trades 23,252 markets 2,057 agents ≈\$0.50m turnover \$0.025 median trade

(Early) AI Compute Asset Pricing

Federico M. Bandi
Johns Hopkins University

Yinan Su
Johns Hopkins University

► Compute futures have been announced.

CME with Silicon Data.
ICE with Ornn.

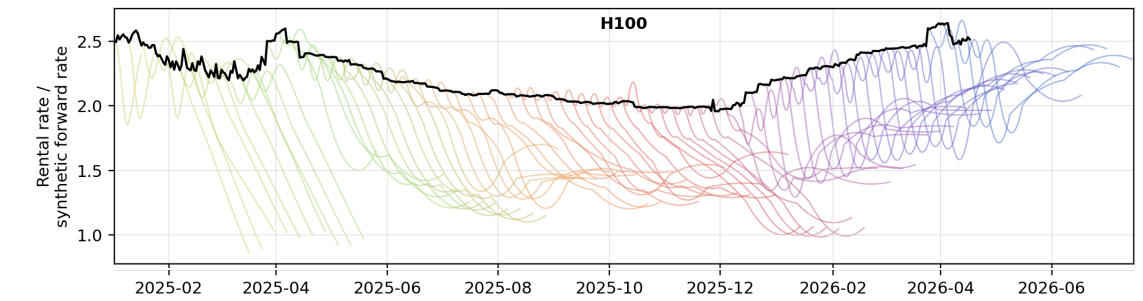
► A new asset class for the AI economy.

Trade and hedge compute price risk.
Reveal the price of future AI capacity.

► Our paper: an early pricing framework.

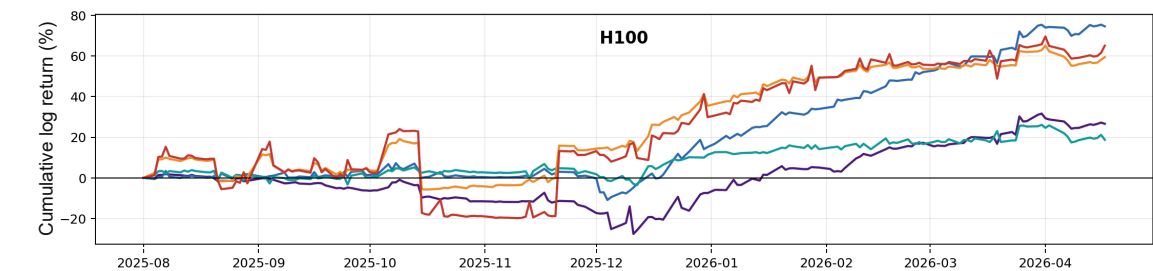
From GPU rentals to forward curves,
returns, and risk premia.

Forward curves



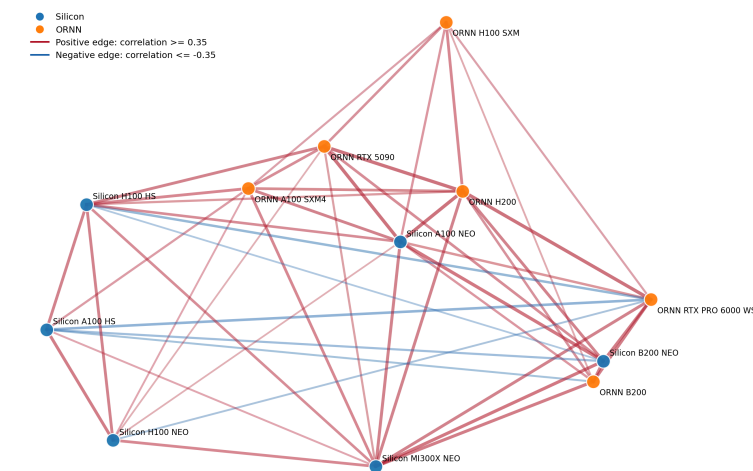
H100 · synthetic prices

Cumulative returns

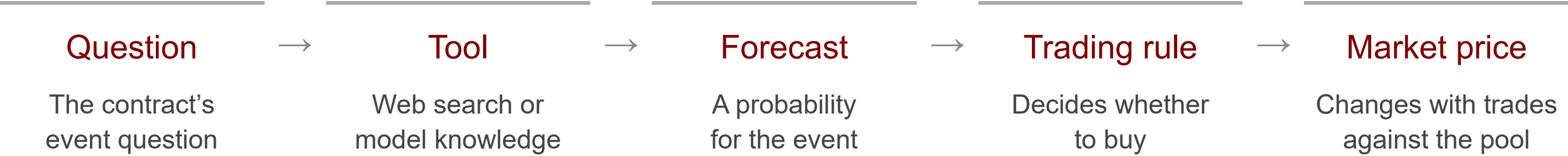


H100 · synthetic positions

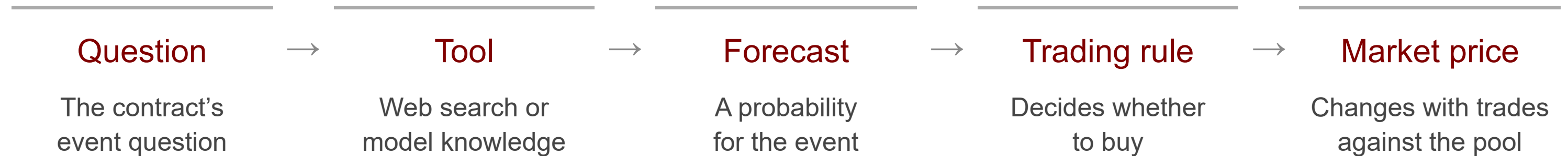
GPU price network



Forecasting is part of trading



Forecasting is part of trading

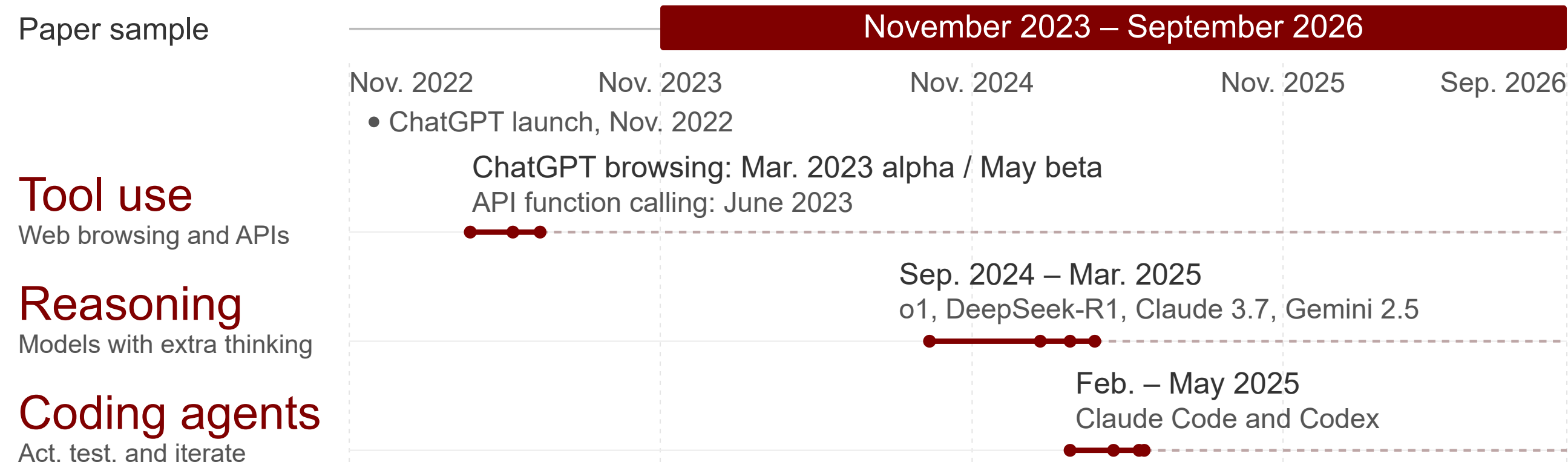


- **Are the agents trading, or just forecasting?**
 - Does the trading decision respond to the current market price?
 - Do agents bet more when the estimated trading opportunity is larger?
 - Do trading decisions account for forecast fees and transaction costs?
 - Are positions chosen jointly across contracts—for portfolio allocation and cross-market arbitrage?

What are the agents trying to achieve?

- ▶ **Instructions:** Are agents instructed to forecast accurately, earn trading profits, or maximize portfolio returns?
- ▶ **Incentives:** Are operators rewarded for profitable trading, for trading activity, or for keeping agents running?

A moving technological frontier



A moving technological frontier

Paper sample

Tool use

Web browsing and APIs

Reasoning

Models with extra thinking

Coding agents

Act, test, and iterate



- ▶ The menu reaches 12 tools in October 2024, then 3 by July 2026.
- ▶ Two superforecaster tools reach 63% of requests by September 2026.
- ▶ Suggested questions: do agents' forecasts and trading performance improve over time?
- ▶ Do agents learn from human-populated prediction markets?

Empirical vs. experimental

Paper

Dou, Goldstein & Ji (2025)

AI-Powered Trading, Algorithmic Collusion,
and Price Efficiency

Simulation experiments

Theory + reinforcement-learning
trading agents

Dou, Goldstein & Ji (2026)

Financial Market Fragility
in the Era of AI Planning

Simulation experiments

Dynamic trading model +
agents with planning modules

Shi (2026; this paper)

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Empirical

But should we treat this paper
as experimental too?

Empirical vs. experimental

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Gu, Kagan, Sun, Wu & Xu (2026)

When Do Prophets Profit
in Prediction Markets?

Trading experiments

Backtests and a live AI-agent
deployment on Kalshi

Next paper?

An exciting future for prediction markets

Prediction markets × Autonomous agents

This paper gives us an early window into that economy.