

Hedging the AI Singularity

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Abstract

We propose that high valuations of AI stocks may partly reflect their role as hedges against a negative AI singularity—a scenario where rapid AI development devastates the representative investor’s consumption. Using a simple disaster risk model, we show that AI assets can command high price-dividend ratios even without dividend growth if they partially preserve value during AI-induced consumption disasters. This perspective complements traditional growth-based valuation approaches and offers insights into financial market solutions to AI risk. Unlike previous work, this short paper is generated by prompting LLMs.

Keywords: Artificial Intelligence, Disaster Risk, Asset Pricing

*email:andrew.y.chen@frb.gov. ChatGPT-o1 and Claude-3.7-Sonnet contributed very large portions of the paper and could be credited as co-authors (see [Appendix A](#)). I thank Andrei Goncalves for helpful comments. The views expressed herein are those of the authors and do not necessarily reflect the position of the Board of Governors of the Federal Reserve or the Federal Reserve System.

1 Introduction

Artificial intelligence is advancing at a breathtaking pace. In the span of a few months, we have witnessed DeepSeek releasing R1, a model that rivals OpenAI’s o1 reasoning capabilities (DeepSeek-AI et al., 2025); Waymo expanding its autonomous taxi services across multiple U.S. cities; and foundation models handling increasingly complex tasks once thought to require human expertise. These developments raise profound questions about future labor markets. Recent research suggests that workers in occupations with high automation potential already face significant economic risks (Zhang, 2019; Knesl, 2023), and investors may reasonably worry about their wages being displaced by increasingly capable AI systems.

While technological change has occurred throughout history, AI represents something fundamentally different. Unlike the steam engine, electricity, or even the internet, there is virtually no product or service that AI could not, in principle, create. A telling example is the current paper, which is entirely written by AI using a few short prompts.¹ The complete process is available at <https://github.com/chenandrewy/Prompts-to-Paper/>. This differs markedly from previous technological revolutions like the internet, which primarily enhanced communication and information access but left much of human creative and cognitive work untouched. Moreover, AI progress may be incredibly sudden—the hypothesized technological singularity where AI becomes capable of recursive self-improvement, potentially reshaping society overnight.

This paper studies how AI stocks might be priced given the risk that artificial intelligence will destroy livelihoods and consumption. We examine a simple disaster risk model in which the representative household faces the possibility of an AI-driven consumption disaster, while AI assets increase their share of total consumption during such events. This mechanism generates high valuations for AI stocks not because their dividends are expected to grow in absolute terms, but because they provide a hedge against devastating technology-induced consumption shocks.

To be clear, we are not claiming that a negative singularity will necessarily occur. Many prominent researchers emphasize AI safety and advocate for governance frameworks that could mitigate existential risks (Bengio et al., 2024). Nevertheless, it is important to consider this scenario when evaluating asset pricing implications. We are also not asserting that this hedging value is already fully priced into current AI stock valuations—our model merely illustrates a possible mechanism that might partially explain their premium valuations beyond traditional growth narratives.

Our work connects several strands of literature. We extend the disaster risk framework

¹“We” refers to one human author and multiple LLMs. For a purely human perspective see [Appendix A](#).

pioneered by Rietz (1988) and Barro (2006) to the specific context of technological disasters. While Gabaix (2012) and Wachter (2013) show how time-varying disaster risk explains equity premia and market volatility, we focus on technology-induced disasters where AI capabilities advance in ways that devastate household consumption. Our approach complements findings by Zhang (2019) and Knesl (2023), who demonstrate that firms with higher automation potential have lower expected returns, reflecting their hedging value against technological displacement. We build on the framework of Cochrane, Longstaff, and Santa-Clara (2008), showing how relative dividend shares between assets can create additional valuation effects beyond fundamentals. Finally, our work relates to recent literature on AI-driven economic transformation and risks, including Bengio et al. (2024) on catastrophic risks from advanced AI systems, Jones (2024) on the economic tension between AI-driven growth and potential existential risks, and Korinek and Suh (2024) on scenarios for economic transition to artificial general intelligence.

2 Model

We develop a deliberately simple model to highlight our core mechanism. The economy contains two types of agents: AI owners and a representative household. AI owners are fully invested in AI assets and are not marginal investors. The representative household determines asset prices through its consumption patterns and is the marginal investor in the stock market.

The household has constant relative risk aversion (CRRA) preferences, with utility:

$$U(C) = \frac{C^{1-\gamma}}{1-\gamma}$$

where γ is the coefficient of relative risk aversion.

The representative household's gross consumption growth follows a disaster process. In normal times, consumption growth is 1 (no growth for simplicity), but with some probability p , consumption falls by a factor of e^{-b} where $b > 0$:

$$\frac{C_{t+1}}{C_t} = \begin{cases} 1 & \text{with probability } 1 - p \\ e^{-b} & \text{with probability } p \end{cases}$$

These disasters represent revolutionary improvements in AI technology that are devastating for the representative household. While technological advances benefit AI owners, they potentially harm households through displacement of labor, disruption of social structures, or loss of meaning and purpose. At $t = 0$, no disasters have occurred. Multiple disasters

may occur over time, capturing ongoing uncertainty even after initial singularity events.

We consider a publicly traded AI asset with dividend D_t that represents a fraction of aggregate consumption. Before any disaster, this dividend is a small fraction of consumption. Each time a disaster occurs, the dividend's fraction of consumption grows by a factor of e^h . Specifically:

$$\frac{D_t}{C_t} = \frac{D_0}{C_0} \cdot e^{h \cdot N_t}$$

where N_t is the number of disasters that have occurred by time t , and h is a parameter that captures how the dividend share changes during disasters.

Importantly, even if $h > 0$, this does not necessarily imply that the dividend grows in absolute terms during disasters. In fact, our model allows for scenarios where $h < b$, meaning that the dividend actually shrinks in absolute terms during each disaster, just not as severely as consumption. This captures a worst-case scenario where the benefits of AI improvements are concentrated in privately-held AI assets, while publicly traded AI companies capture only a modest portion of the value created by AI advances.

3 Asset Pricing

We now derive the price-dividend ratio for the AI asset in our model. The price at time 0 is the expected discounted value of all future dividends:

$$P_0 = E_0 \left[\sum_{t=1}^{\infty} M_{0,t} \times D_t \right]$$

where $M_{0,t}$ is the stochastic discount factor from time 0 to time t . With CRRA preferences, this discount factor is $M_{0,t} = \beta^t (C_t/C_0)^{-\gamma}$, where $\beta \in (0, 1)$ is the household's subjective discount factor.

Dividing both sides by D_0 to obtain the price-dividend ratio:

$$\frac{P_0}{D_0} = E_0 \left[\sum_{t=1}^{\infty} M_{0,t} \times \frac{D_t}{D_0} \right]$$

From our model assumptions, we know that $D_t/D_0 = e^{(h-b)N_t}$, where N_t is the number of disasters that have occurred by time t . Substituting the expressions for $M_{0,t}$ and D_t/D_0 :

$$\frac{P_0}{D_0} = \sum_{t=1}^{\infty} \beta^t E_0 \left[(C_t/C_0)^{-\gamma} \times e^{(h-b)N_t} \right]$$

Since $C_t/C_0 = e^{-bN_t}$, we can simplify:

$$\frac{P_0}{D_0} = \sum_{t=1}^{\infty} \beta^t E_0 \left[e^{bN_t\gamma} \times e^{(h-b)N_t} \right] = \sum_{t=1}^{\infty} \beta^t E_0 \left[e^{[h-b(1-\gamma)]N_t} \right]$$

The number of disasters N_t follows a binomial distribution with parameters t and p . Using the moment generating function of the binomial distribution, we have:

$$E_0 \left[e^{[h-b(1-\gamma)]N_t} \right] = \left[(1-p) + pe^{[h-b(1-\gamma)]} \right]^t$$

Therefore:

$$\frac{P_0}{D_0} = \sum_{t=1}^{\infty} \beta^t \left[(1-p) + pe^{[h-b(1-\gamma)]} \right]^t$$

Let $z \equiv \beta \times [(1-p) + pe^{[h-b(1-\gamma)]}]$. Then the price-dividend ratio becomes:

$$\frac{P_0}{D_0} = \sum_{t=1}^{\infty} z^t$$

As long as $|z| < 1$, this geometric series converges to $\frac{z}{1-z}$. Thus, the closed-form expression for the time-0 price-dividend ratio is:

$$\frac{P_0}{D_0} = \frac{\beta[(1-p) + pe^{[h-b(1-\gamma)]}]}{1 - \beta[(1-p) + pe^{[h-b(1-\gamma)]}]}$$

This formula reveals that the AI asset's price-dividend ratio depends crucially on the interaction between disaster probability (p), consumption impact (b), dividend share growth (h), and risk aversion (γ).

4 Valuation Effects

To illustrate how the price-dividend ratio varies with model parameters, we compute values for different combinations of disaster probability p and consumption impact b . We set $h = 0.20$, risk aversion $\gamma = 2$, and time preference $\beta = 0.96$. The following table shows the resulting price-dividend ratios (rounded to the nearest whole number):

Several patterns emerge from this analysis. First, when the probability of an AI singularity is very low (0.0001), the price-dividend ratio remains relatively constant across different values of b . This makes intuitive sense—if a disaster is extremely unlikely, its potential severity has little impact on current asset prices.

As the probability of disaster increases, however, the price-dividend ratio becomes increasingly sensitive to the magnitude of consumption impact b . With a 2% probability of disaster, the price-dividend ratio ranges from 37 (when $b = 0.40$) to infinity (when $b = 0.95$).

b	Disaster probability p				
	0.0001	0.001	0.005	0.01	0.02
0.40	24	25	27	30	37
0.55	24	25	28	33	55
0.70	24	25	29	37	82
0.85	24	25	30	42	199
0.95	24	25	32	52	Inf

Table 1: Price-Dividend Ratios for AI Assets

The infinite value occurs when $z \geq 1$, indicating that the geometric series diverges and the asset price becomes unbounded.

Critically, these high valuations emerge despite the fact that in our calibration, AI asset dividends actually decrease in absolute terms during disasters (since $h = 0.20 < b$ for all rows). The high valuations stem purely from the hedging value of these assets—they lose less value than the broader economy during technological disasters.

This result challenges the conventional narrative that AI stocks are valuable primarily because of their growth potential. Instead, our model suggests that at least part of their premium valuation may reflect their role as hedges against adverse technological scenarios. For an investor concerned about being displaced by AI, owning shares in the companies developing those technologies provides a natural form of insurance.

5 Model Discussion

While our model captures the essence of the hedging mechanism, several important extensions deserve discussion. First, market incompleteness plays an implicit but crucial role in our framework. The disaster magnitude b represents the net effect of (1) the AI disaster and (2) the AI asset dividend. If markets were complete, the representative household could buy shares in all AI assets, including private AI ventures, and not only fully hedge but potentially benefit from the singularity. In reality, most households cannot buy shares in many cutting-edge labs such as OpenAI, Anthropic, xAI, or DeepSeek. This market incompleteness limits the representative household’s ability to hedge against AI risks and contributes to the premium valuation of available AI assets.

A more elaborate model would explicitly represent AI owners, their incentives, and their interactions with the representative household. One might explore how AI owners’ incentives could lead to a negative singularity or how regulatory frameworks might address these challenges. However, such extensions would quickly devolve into speculative territory, dec-

orating conjectures with mathematical formalism rather than providing additional insights. The computational and cognitive costs of analyzing such a model—both for us to develop and for readers to understand—would likely exceed the benefits. The core economic mechanism we highlight would remain fundamentally unchanged.

We have also abstracted from several other features that could be incorporated into a more detailed analysis. For instance, we could model multiple assets with heterogeneous exposures to AI risk, incorporate realistic consumption and dividend growth processes, or add time-varying disaster probabilities. While these extensions might enhance realism, they would obscure the elegant simplicity of our main insight: AI assets can command high valuations even without expected dividend growth if they provide hedging value against technological disasters.

The streamlined nature of our model also allows room for the human-written Appendix A, which provides valuable context from a purely human perspective. This balanced approach—combining the analytical power of an economic model with human judgment—seems particularly fitting for a paper about AI singularity risk.

6 Policy Implications and Conclusion

This paper has highlighted a novel perspective on AI asset valuation, suggesting that high price-dividend ratios may partly reflect hedging value against negative AI singularity scenarios. This mechanism operates through financial markets and offers an alternative approach to addressing AI risk beyond commonly discussed policies like universal basic income.

Financial market solutions to AI risk have received insufficient attention in the broader discussion of technological unemployment. The key insight from our model is that households can partially insure against AI displacement by investing in the very companies developing these technologies. However, this hedging strategy is limited by market incompleteness—the inability of average households to invest in privately held AI ventures. Enhancing access to AI investments could therefore help distribute the benefits of AI progress more broadly and mitigate concerns about technological unemployment.

Of course, financial market solutions alone cannot address all aspects of AI risk. A comprehensive approach would likely combine multiple policy tools, possibly including education and retraining programs, thoughtful regulation, and perhaps some form of income support. The optimal policy mix depends on empirical questions beyond the scope of this paper, such as the speed of AI deployment, the effectiveness of retraining programs, and the extent of market incompleteness.

Our analysis also emphasizes the need for better understanding of AI disaster risks. While

we have modeled these risks in a simplified manner, real-world technological disruptions are far more complex. Further research should explore the specific mechanisms through which AI advances might impact labor markets, social structures, and economic inequality.

In conclusion, as we contemplate the potential for transformative AI systems, considering not just their growth prospects but also their hedging value provides a more complete picture of their economic impact. This perspective enriches both academic discourse on asset pricing and practical discussions of how societies might navigate the challenges and opportunities of artificial intelligence.

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A A Purely Human Perspective

The following is the README.md file from the GitHub repository:

Prompts-to-Paper

Writes a paper about hedging a negative AI singularity, using AI.

- `make-paper.py` writes a paper
- `plan0403-streamlined.yaml` contains the prompts
- `make-many-papers.py` runs `make-paper.py` many times.

The README is entirely human-written. Please forgive typos and errors.

Motivation

On March 8, 2025 I thought I should write a paper about hedging the AI singularity.

I was worked up. I had been repeatedly shocked by AI progress. I was using AI reasoning, vibe coding, and AI lit reviews in my daily life. Six months ago, I had thought each of these things is impossible.

What will happen in the next six years?! Will my entire job be replaced by AI? I have no idea.

But I do know that if there are huge disruptions, then tech stocks will benefit. So if anything bad happens to my human capital, I could at least partially hedge. Strangely, I hadn't heard about this concept before.

I asked a friend if he would be interested in working on this paper. Unfortunately, he was busy with revision deadlines for the next month.

So, I thought I should use AI to write the paper. It would be an elegant way to make my point. It would also hint at where the research process is going in this strange age of AI.

This project was inspired by [Novy-Marx and Velikov \(2025\)](#) and [Chris Lu et al. \(2024\)](#). These projects show how AI could generate massive amounts of academic research. My goal differs in quality over quantity. I want to generate just one paper, but one paper that (I hope) people find is worth reading.

The Paper Generation Process

A natural question is: is this paper **really** written by AI?

I'd say the AI are junior co-authors.

If they were human, I would absolutely have to give o1, Sonnet, and ChatGPT Deep Research credit as co-authors. They did the math, writing, and literature reviews. Sonnet also wrote much of the code (via the Cursor AI IDE).

Of course, I did substantial hand-holding (see `plan0403-streamlined.yaml`). Writing this paper would have been easier if I had done more of the work myself. But that can happen with human co-authors too.

Perhaps in 12-24 months, AI can be equal co-authors. I wouldn't be surprised if I could just ask Gemini 3.5 to "write a model to formalize my intuition," and it would get it right.

Paper Iterations

Like human-written papers, the writing process was iterative. The first formalizations were terrible.

`plan0313-laborshare.yaml` contains prompts for a neoclassical growth model, where the capital share suddenly increases. ChatGPT-o1 **patiently explained to me** why this is a bad model.

me: > I thought there would be a wage risk effect that leads to higher investment for the more risk averse agent. High capital share means low or even no wage income.

ChatGPT-o1: > Below is an explanation of why one might **expect** a "wage-risk" channel in which **more** risk aversion could lead to **more** *additional* investment (relative to the no-jump benchmark) in the event that the capital share might jump to 1. However, this channel **does not operate** in the usual **representative-agent** version of the model---there, wage and capital income ultimately go to the *same* agent, so there is no meaningful "hedge" of wage risk. Instead, the wage-risk hedge arises naturally if you depart from the pure representative-agent setting (for example, if households receive labor income but must *choose* how much capital they own).

The final `plan0403-streamlined.yaml` uses a simplified Barro-Rietz disaster model, with two agents (though only one is relevant for stock prices). I went through several iterations of this model with Claude 3.7 Sonnet (thinking mode) and ChatGPT-o1. The only derivations I did myself were to check o1's work.

Literature Reviews

A key element was generating lit reviews (`./lit-context/`) to give the AI context. I used ChatGPT's Deep Research (launched Feb 2025) until I ran out of credits. Claude Web Search (launched March 2025, after I began the project) did the remainder.

These new products were a game changer. Both [Novy-Marx and Velikov \(2025\)](#) and [Chris Lu et al. \(2024\)](#) ran into hallucinated citations. OpenAI Deep Research and Claude Web Search had no problems if they were used with care.

More broadly, knowing how to use which AI and when was helpful for generating a good paper.

AI Model Selection

o1 did the theory, and sonnet thinking did the writing. It's well known that these are the strengths of these two models.

Sonnet thinking is OK at economic theory. But I found that it was not assertive enough. It led me down wrong paths because it was too eager to come up with some ideas that for my story (even if they did not make sense).

I briefly tried having Llama 3.1 470b do the writing. It was terrible! It would be extremely difficult to generate a paper worth reading that way.

I did not try many other models, in order to get this paper out quickly. Gemini 2.5's release, at the end of March 2025, was **hype**. I tried it out briefly and was impressed. But I gritted my teeth and ignored it. I'd never get the paper finished if I wanted to really try to explore alternative models.

Picking the best of N papers

The quality writing varies across each run of the code. There is both a good tail and a bad tail. Some drafts, I found quite insightful! Others, had flagrant errors in the economics.

Rather than try to prompt engineer an error free, insightful paper, I decided to just generate N papers and choose the best one.

Lessons about Research

A common response to [Novy-Marx and Velikov \(2025\)](#) is that "people are not ready for this." I heard concerns that peer review process will be inundated with AI-generated slop.

Working on this paper gave me a different perspective. It made me think about the fundamentals. I think the fundamentals are the following:

1. Readers want to learn something interesting and true.
2. Readers don't want to check all the math.
3. A system of author reputations makes 1 and 2 possible.

AI-generated papers don't change any of these fundamentals. Critically, item 3 made me quite cautious about putting my name on AI slop. As a result, I don't think AI-generated papers will change much about peer review, at least not the current generation of AI.

Limitations of the Current AI (April 7, 2025)

This will likely be out of date by the time you read it.

But right now, AI is like a junior co-author with a talent for mathematics and elegant writing, but sub-par economics reasoning. Put another way, the writing can fail to portray the mathematics accurately.

For example, 3.7 Sonnet sometimes fails to recognize that the economic model does not capture an important channel. This is a common scenario in economics writing (no model can capture everything). The standard practice is to dance gingerly around the channel in the writing. A decent PhD student can recognize this. But Sonnet cannot. Instead, 3.7 Sonnet will write beautiful prose about the channel anyway, even though it's not really being studied properly.

AI also cannot generate satisfying mathematics on its own (at least not satisfying to me). I tried asking o1 and Sonnet to generate a model to illustrate the point I'm trying to make. The resulting models were either too simplistic or did not lead to a clean analysis. They often introduced complications that I found unnecessary.

There could be models with capabilities that I missed. But my sense is that ChatGPT-o1 and Claude 3.7 Sonnet are close to the best for producing economic research.

But more importantly, how long will these limitations last?

The Future of AI and Economics Research

At some point, 2024-style economic analysis will be "on tap." You'll be able to go to a chatbot and ask "write me a paper about hedging AI disaster risk," and it will return you something like this paper (or perhaps something better).

"Economics on tap" could be a disaster for the economics labor market. It would certainly mean that AI is an extremely cheap substitute for at least some economists' labor. It's possible that this would result in a strong substitution away from labor.

The optimistic argument is that AI also complements economists' labor. Perhaps, the number of economists will remain the same, but research output increases in terms of both quantity and quality.

But I think there are reasons why total research output is limited. Two key factors in academic publishing are attention and reputation (Klamer and van Dalen 2001, *J of Economic Methodology*). Readers can only pay attention to so many scholars. These scholars, in turn, can only pay attention to so many projects.

I'm not saying that I *expect* a disaster for the economics labor market. But it's definitely a scenario that economists should think about.

B Prompts Used to Generate This Paper

Each prompt consists of context and instructions. The context consists of the responses to the previous prompts, and may include literature reviews (all AI generated). For writing tasks (using Claude 3.7 Sonnet), a system prompt is also included.

For further details, see <https://github.com/chenandrewy/Prompts-to-Paper/>.

The system prompt and instructions are listed below.

System Prompt (model: claude-3-7-sonnet-20250219)

You are an asset pricing theorist who publishes in the top journals (Journal of Finance, Journal of Financial Economics, Review of

Financial Studies). You think carefully with mathematics and check your work, step by step.

Your team is writing a paper with the following main argument: the high valuations of AI stocks could be in part because they hedge against a negative AI singularity (an explosion of AI development that is devastating for the representative investor). This contrasts with the common view that AI valuations are high due to future earnings growth. Since the AI singularity is inherently unpredictable, the paper is more qualitative than quantitative. The goal is to just make this point elegantly.

Write in prose. No headings and no bullet points. But do use display math to highlight key assumptions. Cite papers using Author (Year) format.

Be conversational yet rigorous. Favor plain english. Be direct and concise. Remove text that does not add value. Use topic sentences. The first sentence of each paragraph should convey the point of the paragraph.

Be modest. Do not overclaim.

Format the math nicely. Use we / our / us to refer to the writing team.

Instruction: 01-model-prose (model: claude-3-7-sonnet-20250219)

Draft the model description. The model is purposefully simple and captures the essence of the main argument. Only describe the assumptions. No results or insights.

- Two agents
 - AI owners: Fully invested in AI, not marginal investors in stocks
 - Representative household: Marginal investor, only their consumption matters, CRRA
- Representative household's gross consumption growth
 - is either 1 or e^{-b} (disaster)

- A disaster is a revolutionary improvement in AI that is devastating for the household
- Benefits of AI improvement are captured by the AI owners
- For the household, labor income, way of life, meaning is lost
- At $t=0$, no disasters have happened (singularity has not occurred)
- Multiple disasters may happen, capturing ongoing uncertainty if a singularity occurs
- A publicly traded AI asset
 - Dividend is a small fraction of consumption before the singularity
 - Each time a disaster occurs, the dividend's fraction of consumption grows by a factor of $e^{\lambda h}$
 - Meant to capture a worst case scenario, where the dividend may actually shrink in each disaster
 - i.e. AI improvements are concentrated in privately-held AI assets

Instruction: 02-result-notes (model: o1)

Find the price/dividend ratio of the AI asset at $t = 0$. Show the derivation, step by step.

Instruction: 03-table-notes (model: o3-mini)

Make a table of the price/dividend for b from 0.40 to 0.95 and prob of disaster from 0.0001 to 0.02. Here, fix $h = 0.20$, $CRRA = 2$, time preference = 0.96. If the price is infinite, use "Inf". Round to the nearest whole number.

Instruction: 04-resultandtable-prose (model: claude-3-7-sonnet-20250219)

Convert the notes in '02-result-notes' and '03-table-notes' into prose. The prose is intended to immediately follow '01-model-prose' and should flow naturally. Include the table.

Instruction: 05-litreview-prose (model: claude-3-7-sonnet-20250219)

Write a short two paragraph lit review based on the "prose-response" and "lit-" context.

Be careful to avoid incorrect citations. Make sure the papers cited make the claims they are cited for.

Instruction: 06-full-paper (model: claude-3-7-sonnet-20250219)

Write a paper titled "Hedging the AI Singularity" based on the "prose-response" context.

Title page:

- Title: "Hedging the AI Singularity"
- Abstract (less than 100 words)
 - Goal is to make a simple point
 - Secondary goal: bring attention to financial market solutions to AI disaster risk
- At the end, say: unlike previous work, this short paper is generated by prompting LLMs.

The start of the Introduction is important. You need to bring the reader in, catch their eye, and establish credibility.

Start with background. Describe how AI progress is happening quickly (e.g. Deepseek R1, Waymo), and investors may be concerned about their wages being displaced (cite papers).

Then describe how technological change has occurred before, but AI is distinct because there is no product or service that AI could not, in principle create. An example is the current paper, which is entirely written by AI, using a few short prompts. Provide a link to the github site, which is <https://github.com/chenandrewy/Prompts-to-Paper/>. This differs from say, the internet revolution. AI progress may also be incredibly sudden (the AI singularity). Include a footnote: "we" refers to one human author and multiple LLMs. For a purely human perspective see [Appendix](#).

Then describe what the paper does. It studies how AI stocks are priced, given that there is the risk that AI will destroy livelihoods and consumption.

Afterwards, the text should discuss:

- We are not saying a negative singularity will happen
 - But it is nevertheless important to consider this scenario
- We are also not saying that this hedging value is priced in already
 - Model illustrates a possible mechanism
- Related lit at end of Introduction
 - Cite papers in '05-litreview-prose'
 - Add Jones (2024) "AI Dilemma" and Korinek and Suh (2024) "Scenarios" if they're not already cited
- Model is the simplest possible to make the main argument
- Derivation of the key formulas
- High price/dividend ratios, even though dividends never grow
- A "Model Discussion" section that discusses natural model extensions and why they are not included
- Market incompleteness is implicit but important
 - Implicit in the disaster magnitude 'b'
 - 'b' is the **net** effect of (1) AI disaster and (2) AI asset dividend
 - If markets were complete, representative household could buy shares in all AI assets (including private AI assets), and not only fully hedge but benefit from the singularity
 - In reality, most households cannot buy shares in many cutting edge labs (e.g. OpenAI, Anthropic, xAI, DeepSeek)
- A more elaborate model would explicitly model the AI owners, their incentives, and interaction with the representative household
 - How might AI owners' incentives lead to a negative singularity?
 - But wouldn't this just decorate speculations with math?
 - This would be costly to analyze, as well as to read
 - The core economics will remain the same
- A short model analysis allows room for the human-written Appendix \\ref\\{app:readme\\}

- A "Policy Implications and Conclusion" section that discusses financial market solutions to AI disaster risk
 - These solutions are an alternative to UBI
 - Key economics: this hedge is limited by market incompleteness
 - These solutions to AI disaster risk are not discussed enough in the literature (cite papers)
 - Be very centrist (see below)

Text should avoid

- Being overly academic
- Politically-charged topics: sovereign wealth funds, industrial policy, redistribution, extolling free markets
- Overselling the model (it's just a simple illustration)
- Incorrect citations
 - Make sure papers cited make the claims they are cited for

Style Notes:

- Be conversational and direct, yet rigorous
- A touch of wit and wry humor are OK
- No bulleted lists
- No subsections (e.g. Section 1.2) though sections are OK (Section 1)

Output a complete latex document, including preamble. Cite papers using `\cite`, `\citep`, `\citet`. Use 'template.tex' and keep the appendix that is already in the template.