BACK TO THE FUTURES

Discussion Questions by Chapter

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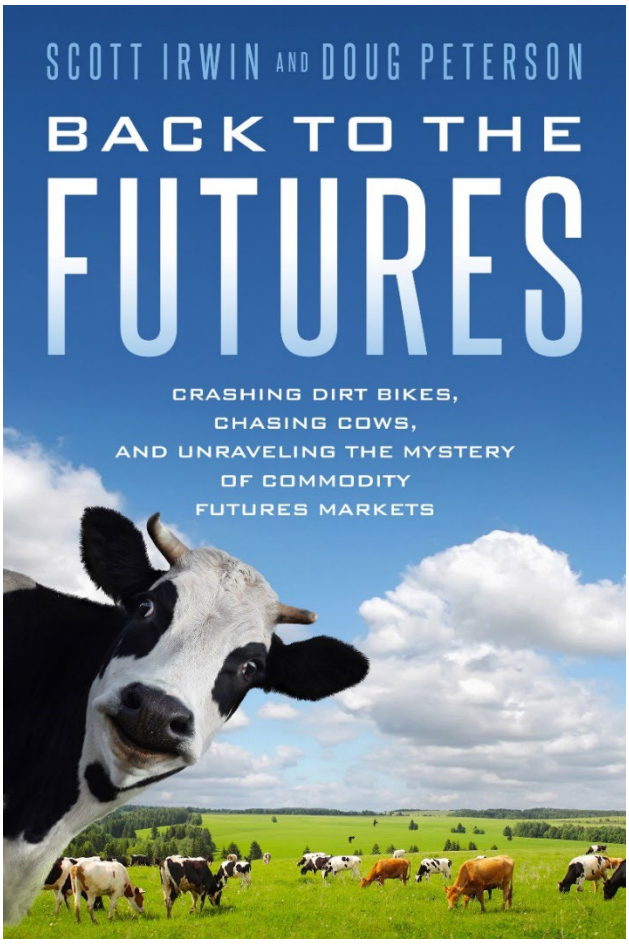
This document provides five discussion questions for each chapter of *Back to the Futures*. These questions are designed to promote critical thinking, encourage deeper analysis of commodity market concepts, and facilitate classroom discussion. Questions range from conceptual understanding to application, analysis, and synthesis of ideas across chapters.



Chapter 1: My Near-Death Experience

1. How does Irwin's personal near-death experience serve as an effective metaphor for understanding risk in commodity futures markets? What parallels can you draw between physical risk-taking and financial speculation?

2. Explain the concept of fungibility and why it is essential to commodity markets. Can you think of products that are on the borderline between commodities and non-commodities? How might this classification affect their marketability?

3. Irwin describes the 'Anti-Speculation Cycle' as a recurring pattern throughout history. Why do you think politicians and the media consistently return to blaming speculators during periods of price volatility? What does this suggest about public understanding of futures markets?

4. The chapter distinguishes between transforming commodities in space, time, and form. Of these three transformations, which do you think is most complex from an economic standpoint? Why is the transformation in time particularly important for futures markets?

5. Two of the chapter's most vivid scenes are the back room at the grain elevator in Irwin's hometown — with its ticker machine clacking out prices connected to Chicago— and his father refusing to help him up after he fell on his crutches: "You've got to get up by yourself." How do these two scenes together establish the emotional and intellectual foundations of the book? What do they reveal about the world the author grew up in?

Chapter 2: Daredevils

1. The chapter introduces the 'physical fallacy'—the belief that speculators are parasites because they don't produce anything tangible. How would you explain to someone skeptical of speculation why this belief is incorrect?

2. Compare and contrast forward contracts and futures contracts. Why was standardization of contracts necessary for the development of modern futures markets? What problems did standardization solve?

3. Irwin argues that speculators make markets less volatile, not more. How does this work? Use the concept of market liquidity in your explanation. Can you think of a situation where removing speculators might actually increase price volatility?

4. The chapter draws an explicit parallel between Jack Hunter's daredevil behavior and the spirit of a speculator — particularly the snowmobile jump where Jack retreated to maximum distance and hit the drift "wide-open." The author says speculators "must approach the commodity market with Jack's same audacity." What specific qualities of a successful speculator does this metaphor capture well? Are there any qualities it might miss or distort?

5. The chapter includes the story of a trader who nailed a soybean plant to the pit wall to reveal that the traders had never seen one — yet these same people were trading millions of dollars of soybean futures contracts. The author uses this anecdote to illustrate the physical fallacy and Craig Pirrong's defense of what speculators actually do. Do you find the explanation convincing? What does it say about the relationship between physical knowledge of a commodity and the ability to price it effectively?

Chapter 3: Pit Bulls

1. When Duffey blew up $130,000 in his third month of trading and nearly lost his family's house, Vince Schreiber refused to bail him out financially but offered something he called more valuable — his reputation as a guarantee. What does this episode reveal about the culture of honor that coexisted with the cutthroat competition of the pits? How does it complicate the image of pit trading as pure "kill or be killed"?

2. Describe the price discovery process in open outcry trading. How did the chaotic-seeming activity in the pits produce efficient price discovery? What role did competition among traders play in this process?

3. The chapter mentions FBI investigations (Operation Sourmash and Operation Hedgeclipper) that uncovered fraud in the pits. What types of fraudulent practices were possible in open outcry trading? How does electronic trading reduce or eliminate these opportunities for fraud?

4. The chapter opens with the author's first visit to the CBOT floor in spring 1978 — arriving by bus from Iowa State with a keg of beer, watching the opening bell explode into chaos from the visitors' gallery. He calls it the moment the pits "replaced the grain elevator as the place where the magic happened." How does his personal origin story parallel Terry Duffey's, and what do the two together suggest about what made the pits so uniquely magnetic to a certain kind of person?

5. Terry Duffy notes that electronic trading 'puts us all at the same height, the same weight.' What did he mean by this? How did physical attributes and intimidation affect outcomes in pit trading? What are the implications for market fairness and efficiency?

Chapter 4: Elvis and Evel in Iowa

1. The Frank and Estelle example uses two corn farmers — one who stays in the cash market and one who hedges — to show how hedging works. Walk through Estelle's hedge step by step. What does she gain in the futures market, and why does that offset her cash market loss? What is she actually "buying" with her lower expected return compared to an unhedged position in a rising market?

2. Hedging 'cuts both ways'—it protects against price declines but also eliminates gains when prices rise. If hedging prevents farmers from benefiting from price increases, why would any farmer ever choose to hedge? Under what conditions does the protection offered by hedging outweigh the opportunity cost of foregone gains?

3. Irwin introduces the concept of the 'hedgulator'—a farmer who thinks he is hedging but is actually speculating by selectively choosing to hedge only when he expects prices to fall. Why is selective hedging speculation rather than risk management? What psychological factors might cause farmers to fall into the hedgulator trap?

4. The chapter presents a Texas cattle producer who hedges 100% of his production. Analyze this strategy. What are the benefits and costs of full hedging compared to partial hedging or no hedging at all? Is there an optimal hedge ratio, or does it depend on the producer's financial situation and risk tolerance?

5. The author reveals that after his father's death, his mother turned out to be a natural crop marketer — calm, unsentimental about past trades, decisive when prices were right. He calls her the real "Estelle" and says she could have transformed the family's finances if she had done the marketing all along. What specific traits made her effective where his father failed? And what does this contrast reveal about the psychological demands of disciplined hedging that the textbook Frank/Estelle example alone doesn't capture?

Chapter 5: My Spectacular Speculation Crackup

1. Irwin failed at speculation despite having a strong agricultural background, graduate-level education, and access to market data. What does this personal failure teach us about the nature of superior information in markets? What kind of information edge is needed to consistently profit from speculation?

2. The chapter is bookended by two parallel crackups — the snowmobile slamming into the buried pickup truck in a blinding snowstorm, and the corn futures position getting crushed by the USDA crop report. The author draws this parallel explicitly. What specific elements do the two crashes share, and what does the parallel structure add to the chapter's argument about risk and the limits of information?

3. Grandmother Lurene is one of the book's most vivid characters — she subscribed the teenaged author to the *Atlantic* magazine, interrogated professors in their offices, and ultimately forced the Purdue visit by sending his mom with an airplane ticket and a note in perfect cursive. What does her role in this chapter reveal about the unexpected forces that shape an intellectual trajectory? What does the contrast between her vision for the author and his father's vision reveal?

4. Irwin was convinced he had valuable information about corn prices yet still lost money. What psychological factors might lead even knowledgeable people to overestimate the value of their information? How can traders guard against such overconfidence?

5. In the 30 seconds after the market opened on Friday morning, corn prices briefly ticked up — just long enough for the author's forgotten sell stop orders to fill. He calls it "providential intervention." What does this near-miraculous escape reveal about the role of luck versus skill in trading outcomes? How does it connect to the chapter's broader argument about what it actually takes to survive as a speculator?

Chapter 6: The Engine of Efficiency

1. The chapter opens with vivid memories of the author's father as a "gearhead" speed freak before drawing a parallel to the competitive "engine" of the futures market. How does this personal narrative frame the chapter's central argument about market efficiency? What does losing big in the futures market during graduate school have to do with the author's eventual conversion to the Efficient Market Hypothesis?

2. Holbrook Working's 1934 research found that commodity price changes appeared to follow a random walk. What does a random walk mean in the context of price movements? Why would random price changes be evidence that a market is working efficiently, rather than evidence that the market is broken?

3. Eugene Fama's Efficient Market Hypothesis earned him the 2013 Nobel Prize, yet the idea that markets are efficient seems counterintuitive to many people. Why do most investors believe they can beat the market? What cognitive biases lead to overconfidence in one's ability to predict prices?

4. The AgMAS Project tracked roughly 25 farm market advisory services for a decade and found that only one consistently beat the market benchmark. What does this finding imply for farmers who pay for advisory services? How should a farmer use this information when deciding whether to subscribe to a market advisory service?

5. By the end of the chapter, the author's view of the Efficient Market Hypothesis has evolved — he no longer believes that it is impossible to beat the market. What combination of personal experience, research, and emerging behavioral economics research drove this shift? Do you find his revised position more or less convincing than the strict EMH, and why?

Chapter 7: Towing Icebergs

1. The absurd iceberg-towing story illustrates the importance of information quality. Define what constitutes 'superior information' in commodity markets. How does this differ from simply being knowledgeable about the industry?

2. Dean Thompson's crop weather models represented genuinely superior information—they could detect yield signals before they appeared in USDA estimates or market prices. Explain why weather-based yield forecasting might provide a real edge in grain futures markets. What characteristics make this type of information valuable and difficult for other market participants to replicate?

3. The Yieldcast service achieved an outstanding corn yield forecasting record by integrating detailed weather data with crop yield models. If Yieldcast's methodology became widely known and adopted by many traders, would the informational edge disappear? What does this tell us about the 'arms race' nature of seeking superior market information?

4. Mike Tannura's thesis research found that the dramatic increase in corn yields was driven more by favorable weather conditions than by GMO technology — directly contradicting Monsanto's claims. What does this episode reveal about the role of rigorous, data-driven research in holding powerful corporate interests accountable? How does it connect to the chapter's broader theme of the value of superior information?

5. The chapter traces a remarkable chain of improbable events — a juvenile prank, an enraged dean, a chance meeting with a meteorologist, and decades-old agronomic research — that ultimately led to Yieldcast. What does this arc suggest about how breakthroughs in market research happen? How does the author's journey from the iceberg stunt to Yieldcast reinforce or complicate his modified view of the Efficient Market Hypothesis?

Chapter 8: Steer Crazy

1. The chapter describes extensive cheating in 4-H steer competitions, including illegal practices like late castration and drug use. What parallels can you draw between incentives for cheating in steer shows and incentives for manipulation in commodity markets? How can rules and monitoring reduce but not eliminate cheating in competitive environments?

2. The Great Russian Grain Robbery of 1972 involved Soviet agents secretly purchasing roughly one-quarter of the entire U.S. wheat crop, sending prices soaring. How did government secrecy and the Soviet Union's ability to coordinate purchases across multiple grain companies enable this episode? What does this tell us about the role of information transparency in preventing market manipulation?

3. President Nixon imposed a soybean export embargo in 1973 in response to a price spike, and prices promptly crashed $4 per bushel. Japan subsequently redirected its soybean purchases to Brazil, helping build that country into the world's largest soybean exporter. What does this episode tell us about the long-term, unintended consequences of government intervention in commodity markets?

4. In 1977, the Hunt Brothers allegedly accumulated 23 million bushels of soybeans—seven times the legal position limit—before the CFTC forced liquidation of their position. What market signals might alert regulators to a potential corner developing? How do position limits serve as an early warning mechanism, and why is it difficult to set position limits at the 'right' level?

5. Irwin draws a careful distinction between genuine market manipulation—coordinated corners that require actual market power—and the 'imagined manipulation' that politicians invoke during every major price spike. What specific evidence would you look for to determine whether a price spike was caused by manipulation or by legitimate supply and demand factors? Why is this distinction critical for sound regulatory policy?

Chapter 9: All That Glitters is Goldman

1. The chapter opens by drawing a parallel between the brawling Woodard Brothers at a rural Iowa racetrack and the culture at Goldman Sachs. What is the author arguing with this comparison? Is the analogy fair, or does it obscure important differences between blue-collar aggression and high-finance competition?

2. The author argues that commodities make fundamentally poor long-term investments because real commodity prices have trended downward throughout history, unlike stocks. What drives this structural difference? Does his corn yield example effectively illustrate the point?

3. Keynes believed speculators earn a "risk premium" by absorbing price risk from producers — meaning they consistently buy below fair market value and profit. The author and his research partners conclude the risk premium is essentially zero. What is the core of their argument, and what does it imply for the viability of commodity index funds as long-term investments?

4. The chapter describes commodity "super-cycles" — dramatic price spikes roughly every 30 years. What combination of factors drove the 1970s super-cycle, and how does the 2000s super-cycle compare? Why does the author argue that even understanding super-cycles doesn't make commodities good investments for most people?

5. Goldman Sachs created the GSCI in the early 1990s when few were interested, profited enormously during the 2000s commodity boom, and then sold the index to Standard & Poor's just as prices peaked in 2007. What does this sequence reveal about Goldman Sachs's competitive edge? How does it connect to the chapter's broader theme about what it takes to consistently beat the market?

Chapter 10: The Onion Crying Game

1. Describe the alleged onion futures corner that led to the 1958 ban. What market conditions allowed two traders to move prices so dramatically? Could a similar problem occur in modern markets?

2. The Onion Futures Act of 1958 made onions the only active commodity futures market to ever be banned from trading in the U.S. Evaluate this policy decision with the benefit of hindsight. Did the ban solve the problem it was intended to address?

3. Compare price volatility in onion cash markets before and after the futures ban. What does this comparison tell us about the relationship between futures trading and price stability? Why might futures markets reduce rather than increase volatility?

4. The chapter profiles three academic heroes with distinct roles — Working the Theorist, Gray the Provocateur, and Hieronymus the Evangelist. What made each one's contribution distinctive? Why does the author suggest it took all three different styles and personalities to mount an effective defense of futures markets against political attack?

5. Working suspected the 1958 onion futures ban wasn't simply politicians buying a false narrative — he hinted that large onion dealers may have quietly pushed for the ban because eliminating open competitive bidding gave them greater pricing power over smaller, weaker growers. How does this theory deepen the chapter's argument about who really benefits when futures markets are eliminated? Does the movie futures case offer any parallel?

Chapter 11: The Destroying Angel

1. Explain the concept of convergence between futures and cash prices. Why is convergence a fundamental principle of futures markets? What market mechanisms normally ensure that convergence occurs?

2. Describe the non-convergence problem that occurred in grain markets during 2007–2008. What complex factors—transportation, storage, and exchange delivery rules—contributed to this anomaly? Why is it important to understand these technical details rather than jumping to conspiracy theories?

3. The 'Destroying Angel' believed non-convergence proved market manipulation. How should researchers distinguish between market dysfunction caused by manipulation versus dysfunction caused by structural market problems? What types of evidence would support each explanation?

4. Discuss the concept of basis (the difference between cash and futures prices). Why does basis normally narrow as contracts approach delivery? What economic forces drive this convergence? Under what circumstances might basis fail to converge properly?

5. The non-convergence episode became ammunition for critics claiming that speculators had 'broken' the market. How did careful analysis of market mechanics help defend futures markets against these claims? What does this tell us about the importance of technical expertise in policy debates?

Chapter 12: Ferris Irwin's Week Off

1. The chapter's title and opening invoke Ferris Bueller, but the real heart of the story is the curmudgeonly tax accounting professor who gave the author an undeserved B rather than letting him fail. The author describes this as "grace." How does this personal experience connect to the chapter's broader themes about political battles and academic life? What does it reveal about the author's values as a teacher and researcher?

2. Congressional hearings on speculation created intense political pressure on researchers. How should academics maintain objectivity when their research has major political implications? What pressures might compromise research integrity in such situations?

3. Compare the supply and demand fundamentals for grain and energy in 2007–2008—droughts, growing demand, ethanol mandates—with the speculation hypothesis. Which explanation do you find more compelling for the price spikes? Can both factors contribute simultaneously?

4. The chapter describes Irwin and Sanders obtaining crucial CFTC data from the Senate Permanent Subcommittee, which showed that index fund positions had grown substantially in 2004–2005 but were flat during the 2007–2008 price spike. What does this timeline reveal about the causal relationship between index fund positions and prices? Why is data about position levels before a price event so important in evaluating causation?

5. Irwin and Sanders delivered a 131-page empirical report to the OECD — five times what was expected — only to face immediate pushbacks from European officials and eventually a public rebuttal co-signed by Sir Richard Branson. One observer captured their core finding with the line about not seeing elephant footprints in the backyard. What does this metaphor mean in the context of the index fund debate, and why did such a clear empirical finding generate so much political resistance?

Chapter 13: Bubble Boy

1. Michael Masters argued that crude oil should be $60–70 per barrel instead of $140+, a difference of 50–100%. Evaluate this claim. How would you test whether such a large price discrepancy could be caused solely by speculation rather than fundamentals? What evidence would prove or disprove Masters' claim?

2. Masters effectively communicated his ideas to Congress using simple charts and colorful language, while academic economists used complex statistical analysis. Why might policymakers find Masters more persuasive than academic research? How can economists better communicate complex ideas to non-technical audiences?

3. Explain the 'two-sided nature' of futures contracts that Irwin emphasizes in his counterargument. If every buyer has a seller, why should large buying by index funds move prices? Under what theoretical conditions could one-sided demand pressure affect equilibrium prices?

4. Dubbing Masters' theory "the Masters Hypothesis" was a deliberate provocation — the author compares it to hurling a chair through a bar mirror, and Dwight Sanders nearly talked him out of it as too aggressive. Why was naming the hypothesis such a consequential academic move? What did it accomplish strategically, and what risks did it carry?

5. The chapter's climax comes when CFTC chief economist produces Mike Masters unannounced to comment on the Irwin's research immediately after his presentation — a setup the author never saw coming. How does this ambush illustrate the way political forces can infiltrate what should be a purely empirical debate? What does it reveal about the environment the author was navigating as he defended his research?

Chapter 14: The Hatfields and the McCoys

1. Explain what position limits are and what problems they are intended to solve. Make the best case you can for strict position limits in commodity markets. Then make the best case against them. Which argument do you find more compelling?

2. The chapter describes the conflict between CFTC Chairman Gary Gensler (favoring strict limits) and economists like Irwin and Pirrong (opposing them). What explains these different perspectives? Is this a genuine disagreement about evidence, or do different values and priorities drive the positions?

3. The 2022 nickel market crisis illustrated how a single trader's massive short position—and the resulting margin calls reaching into the billions—can create systemic risk that threatens broader financial stability. How does this episode change your view of the position limits debate? Does it strengthen the case for limits, or does it illustrate the difficulty of setting them at the right level?

4. Craig Pirrong's combative blog — with posts titled "Gary Gensler, Naked and Exposed" and nicknames like "GiGi" and "Igor of Frankendodd" — eventually got him literally banned from the CFTC building. Meanwhile the author took a more measured but still publicly oppositional stance. What does the contrast between their styles reveal about different strategies for fighting policy battles? Are there costs to Pirrong's scorched-earth approach that the author's approach avoids?

5. The CFTC's position limit regulations ultimately failed the "necessity condition" test — a legal standard dating to 1936 requiring regulators to demonstrate that speculators are causing artificial price movements before imposing limits. Judge Wilkins didn't just modify the rules; he vacated them entirely. Why was this legal standard so central to the outcome, and what does it say about the relationship between empirical evidence and regulatory authority?

Chapter 15: All the Smears That Are Fit to Print

1. The chapter opens with the rotary hoe Parade of Shame — driven through Bagley with a bent toolbar blocking both lanes — as a deliberate parallel to the NYT hit piece. What does this structural choice reveal about how the author processes public humiliation? How does the comparison between the two parades illuminate the difference between deserved and undeserved consequences?

2. The author's handling of the NYT reporter was, by his own admission, hopelessly naïve — he complied with a sweeping FOIA request and even posed for a photo in the business college building that he rarely even visited. What specific details in the article exploited that naïvety, and what lessons does his experience offer to researchers who find themselves in the crosshairs of investigative journalism?

3. Compare the scrutiny applied to Irwin and Pirrong (defending markets) versus economists arguing for bubbles and manipulation. Why might researchers reaching different conclusions face different levels of scrutiny regarding their funding? Is this asymmetry justified?

4. The article appeared to be a 'hit piece' rather than balanced journalism. What responsibilities do journalists have when covering academic disputes with major policy implications? How can readers distinguish between legitimate reporting on conflicts of interest and advocacy disguised as journalism?

5. One of the chapter's most telling details is Craig Pirrong's research for a banking trade group that came back with the "wrong answer" — concluding commodity traders posed no systemic risk, the opposite of what the funder wanted. The NYT ignored this entirely. What does this episode reveal about the article's actual method and intent? And what does Craig's parting observation — "if you don't matter, they don't come after you" — suggest about how researchers should think about reputational attacks?

Chapter 16: The Market Finds a Way

1. The chapter uses two parallel stories — the Weld brothers selling their championship sprint car for $1 to circumvent a racing ban, and the futures market adjusting around a storage rate cap — to illustrate the same principle. What is the common logic linking these two stories?

2. The author uses a simplified "Newman" example to show how a storage rate cap below the market carry creates non-convergence. Walk through the logic: why does a cap of 5 cents per bushel per month, when the market needs 10 cents, cause futures prices to rise above cash prices at delivery? What does this reveal about the relationship between contract rules and market behavior?

3. One of the chapter's most surprising discoveries is that the CBOT inadvertently prevented non-convergence in the 1970s — by raising storage rates to match USDA rates without realizing they were solving the problem. What does this accidental success, followed by a quarter-century of institutional forgetting, reveal about how market governance can fail even in the absence of bad intentions?

4. The 1991 Cargill episode — in which Cargill broke a gentleman's agreement on storage rates, prompting the CBOT to hard-code rates into the rulebook — turned out to be a critical cause of the non-convergence crisis fifteen years later. How does this episode illustrate the Law of Unintended Consequences in market regulation? Who, if anyone, bears responsibility for the eventual crisis?

5. The CME's Variable Storage Rate system ultimately solved the non-convergence problem — but only after years of political pressure to blame index funds and speculators. Fred Seamon credits Illinois research as saving the wheat contract by steering the exchange away from "forced load-out." What does the near-adoption of forced load-out, and the likely consequences of its passage, reveal about the dangers of applying political pressure to technical market problems?

Chapter 17: Trading Spaces

1. Describe Leo Melamed's role in championing electronic trading through Globex despite fierce resistance from pit traders. What does his success tell us about innovation and institutional change? Why do insiders often resist innovations that ultimately benefit the industry?

2. The chapter opens with research showing that noise levels in the CBOT Treasury bond pit reliably predicted price volatility — the "hive" sent signals that traders could read minutes ahead of price swings. But this raised an uncomfortable point: was this informational edge helping customers, or was it primarily helping floor traders front-run them? How does this tension reframe the question of what was actually lost when pit trading disappeared?

3. The chapter details how pit trading enabled floor traders to front-run customer orders—trading for their own account ahead of incoming customer orders they saw first. Explain exactly how this front-running worked mechanically in the open outcry setting. Why was it so difficult to detect and prosecute? How did electronic trading structurally eliminate this conflict of interest?

4. Leo Melamed's childhood — fleeing Nazis and Soviets, riding the Trans-Siberian Railway, arriving in Seattle weeks before Pearl Harbor — takes up a substantial portion of the chapter. The author frames it as foundational to Leo's relationship with risk. How does Melamed's biography serve the chapter's broader argument about what it takes to drive fundamental change in entrenched institutions?

5. The CME–CBOT merger in July 2007 created CME Group, the world's largest derivatives exchange, at the very moment CBOT had just completed an ill-timed 60,000 square-foot trading floor expansion. What does this juxtaposition reveal about institutional resistance to change? What incentives cause organizations to double down on legacy infrastructure even when technological change has made it obsolete?

Chapter 18: Outrunning Your Angels

1. The chapter opens with Irwin's cousin Eric Hanson going airborne over the "barn roof" bridge and closes with the author's mom coining the phrase "outrunning your angels." How does the chapter use this metaphor to frame the risks of electronic trading speed?

2. The 1905 USDA cotton report breach — where a statistician signaled results via window shade positions — established a security culture that persists to this day. The author witnessed the USDA crop report lockdown firsthand in 1999, before real-time release existed. Why were these precautions sufficient in the era of after-hours release, and what fundamentally changed when the USDA moved reports into live trading in 2013?

3. The shift to real-time crop report release was driven not by policy deliberation but by competitive pressure — first Japanese exchanges, then ICE's move to stay open during report hours. What does this sequence reveal about how market structure decisions get made? Who, if anyone, was actually in charge of this consequential change?

4. The author proposes two solutions to the speed advantage problem: tweeting USDA headline numbers simultaneously to everyone or a batch auction system that pauses trade matching around report releases. What are the strengths and limitations of each approach? Why did the USDA push back on the Twitter proposal?

5. The author found that grain futures markets became significantly more volatile in the minutes immediately following real-time crop report release. What does this spike in volatility reveal about how the market processes new information under speed pressure? Does it suggest the real-time release was a mistake, or is short-lived volatility an acceptable cost of a more level playing field?

Chapter 19: Twister!

1. On April 20, 2020, WTI crude oil futures traded at negative $37 per barrel for the first time in history. Explain the specific combination of factors—COVID-19 demand collapse, Cushing storage completely full, and the mechanics of physical delivery at contract expiration—that made this unprecedented event possible. Could negative oil prices occur again, or were these conditions unique?

2. NYMEX was near bankruptcy after Maine potato futures failed but survived by launching WTI crude oil futures in 1983. What does this episode teach us about the importance of innovation for organizational survival? Should failing institutions be saved through bailouts, or should they be forced to innovate or perish?

3. The chapter argues that serendipity and desperation drove the creation of crude oil futures — heating oil contracts accidentally became a lifeline when the Iranian revolution caused prices to explode, clearing the way for WTI crude in 1983. What does the NYMEX story reveal about how institutional crisis can force innovation that prosperity never would?

4. The chapter examines the controversy surrounding the 'Essex Boys'—Vega Capital London traders who allegedly used TAS (Trade at Settlement) contracts to profit approximately $660 million by 'banging the close' during the negative oil price event. Explain how TAS contracts work and how aggressively trading near settlement can constitute potential manipulation. Does trading legally but aggressively near a settlement price undermine the integrity of price discovery?

5. The chapter opens with the 1965 F4 tornado near Medford, Oklahoma — narrowly missing seven towns including the author's — and closes by linking it to the "economic perfect storm" of April 20, 2020. How does the tornado metaphor work structurally in this chapter?

Chapter 20: Out of the Box

1. The chapter opens with Rinny the Gopher — an anonymous energy trader who invented an elaborate drunk-gopher persona on Twitter — physically arriving at the author's office as a puppet in a box filled with empty liquor bottles. What does Rinny's character reveal about the culture of energy trading? What's the irony in the fact that one of the earliest validators of the author and Darrel Good's RIN pricing theory turned out to be this pseudonymous gopher?

2. Explain how currency futures emerged after the collapse of the Bretton Woods system. What problem did currency futures solve? How did floating exchange rates create a need for new hedging tools?

3. Leo Melamed describes himself as a "small government" free-market advocate, yet he surprised people by actively lobbying President Ford to create the CFTC — a new federal regulatory agency. What was his reasoning? What does his willingness to invite federal oversight reveal about what financial innovation requires to thrive?

4. The chapter ends with the FTX collapse — Terry Duffy called Sam Bankman-Fried "an absolute fraud" to his face in March 2022, months before the exchange imploded. The author notes it "is not easy to pull the wool over the eyes of an old futures trader." What does the FTX meltdown reveal about the specific risks of new markets in politically charged or poorly regulated spaces? How does it connect to the chapter's broader cautionary note about environmental credit markets?

5. The 2013 RIN price spike was blamed on Wall Street speculators hoarding credits, triggering congressional investigations. But Irwin and Good discovered it was caused by a structural conflict between the E10 blend wall and the RFS ethanol mandate. Why was this price signal so easily misinterpreted? And what does the resulting political "trench warfare" between Iowa ag interests and Texas oil refiners reveal about the unique challenges of commodities that exist only because of government mandates?

Chapter 21: The Running of the Cows

1. The book's conclusion returns to farm stories, using 'the running of the cows' as a final metaphor for chaotic but functional markets. Evaluate the effectiveness of this framing device throughout the book. Did the personal stories enhance or detract from the economic arguments?

2. Synthesize the book's main themes: speculation serves essential economic functions, markets are resilient, the EMH has merit but isn't absolute, and political scapegoating recurs. Which of these themes do you find most convincing? Which are you most skeptical about?

3. The chapter presents the author as an "optimistic skeptic" — drawing on Tetlock's Superforecasting framework — who believes an elite subset of traders can beat the market, but only with genuine skill and superior information. How does his own forecasting record throughout the book — the 1981 crackup, the Yieldcast success, the 2019 Prevented Plant loss, the $6 corn sale — illustrate this framework? Does his experience validate or complicate the "optimistic skeptic" position?

4. The Anti-Speculation Cycle recurs throughout history despite evidence of speculators' benefits. Why do these patterns persist? Is there something about human psychology or political economy that makes scapegoating speculators irresistible? How can this cycle be broken?

5. The chapter closes with his father's one-lap sprint car ride at age 70, Jack Hunter's surprise appearance in line beside him, and Cale Yarborough's line that "driving a race car is like dancing with a chainsaw." How does the author use his father's story — and his father's death from Alzheimer's at 75 — to bring the book's themes of risk, speed, and grace to a close? Is it an effective ending?