EQUIPPING INVESTORS, BOARDS, MANAGEMENT, AND POLICYMAKERS TO MAKE BETTER DECISIONS

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1. INTRODUCTION

Missing from debates about the need to reform capitalism and the never-resolved debates about shareholder capitalism versus stakeholder capitalism is a viable theory of the firm, Alvarez et al. (2020). This slide presentation focuses on an especially important use of a viable theory of the firm, which is to understand the past in a way that generates insights that better equip us for dealing with the future.

The text slides highlight why the Pragmatic Theory of the Firm (PTF) is substantially more useful than other theories of the firm. The slides that display life-cycle track records for firms, and related analysis, are not concerned with a comprehensive discussion of a firm's history. Rather, these slides illustrate how the PTF way of thinking facilitates an understanding of foundational causes for a firm's past performance, Madden (2020, 2025a).

The slides in Sections 2 through 8 are arranged to incrementally build up your knowledge of the PTF while experiencing practical use (note *pragmatic* theory of the firm) with the case studies. Section 9 provides key valuation principles—not understood by those who rely on EPS growth rates to value firms, Stern (1974)—that benefit both management and investors. Section 10 describes how the ideas in this slide presentation will be communicated to a wide audience.

INTRODUCTION

There are ten case studies that consist of a firm's life-cycle track record plus an accompanying brief analysis highlighting especially important managerial initiatives impacting long-term value creation. My objective is to focus on insights about specific firms that transcend the context of a single firm. Rather, these insights can contribute to a generalized understanding of value creation, i.e., the PTF.

On a personal note, I began the research that eventually evolved into the PTF in 1970 at Callard Madden & Associates—a research firm with large money management clients. The early work focused on connecting a firm's financial performance to stock market valuations. I later spent considerable time learning about systems thinking, cognitive science, culture, and knowledge building because this was needed to better understand what caused a firm's financial performance, Madden (2024).

In this manner, the PTF evolved via an inductive process by immersing myself in the concrete details of historical performance of firms and connecting insights that transcend the context of a single firm. This approach is diametrically opposite deductive theory development (e.g., neoclassical economics) that begins with (abstract) principles and then logically builds up a theory. Reviewing the case studies is an efficient means to gain some experience with the research process that yielded the PTF.

The Pragmatic Theory of the Firm benefits investors, boards of directors, management, policymakers, and anyone who is intellectually curious about the value creation process. The following two books are helpful as a companion for this slide presentation:

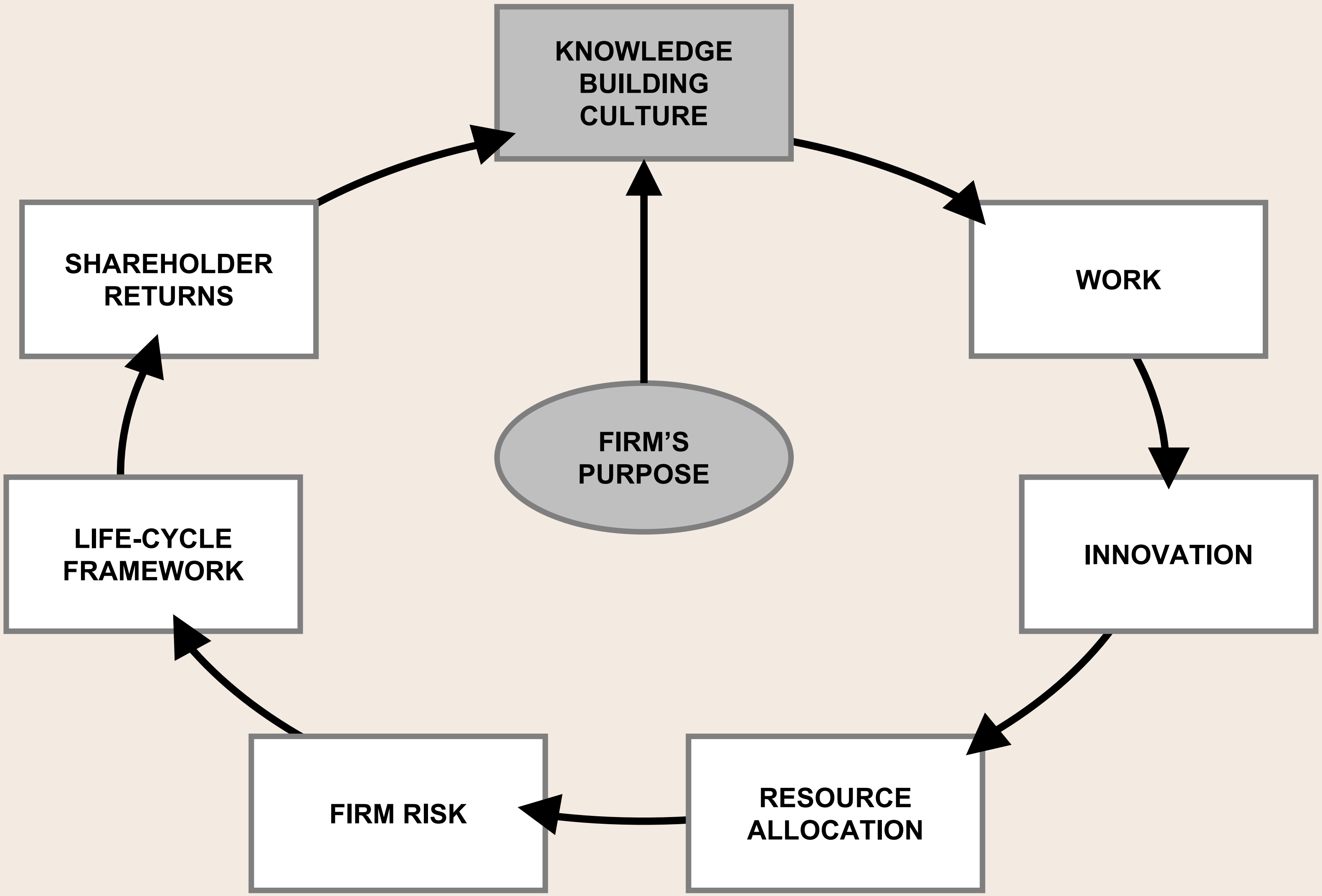
- Bartley J. Madden, 2025a, *Value Creation Insights: A Foundational Understanding of How Firms Build Knowledge and Create Value.*
- Bartley J. Madden, 2020, *Value Creation Principles: The Pragmatic Theory of the Firm Begins with Purpose and Ends with Sustainable Capitalism.*

2. PRAGMATIC THEORY OF THE FIRM

FOUR ESSENTIAL CRITERIA FOR EVALUATING A THEORY OF THE FIRM

- **Facilitates systems thinking**
- **Clarifies the purpose of the firm**
- **Identifies the critical determinant of the firm's long-term performance**
- **Connects the firm's long-term performance to market valuations and shareholder returns**

PRAGMATIC THEORY OF THE FIRM TREATS THE FIRM AS A HOLISTIC SYSTEM



Madden (2020)

PRAGMATIC THEORY OF THE FIRM (PTF)
FIRM'S FOUR-PART PURPOSE

#1 Communicate a **vision** which inspires and motivates employees to work for a firm committed to behaving ethically and making the world a better place.

#2 **Survive and prosper** through continual gains in efficiency and sustained innovation, which critically depend upon a firm's knowledge-building proficiency. Nothing works long term if a firm consistently fails to earn the cost of capital.

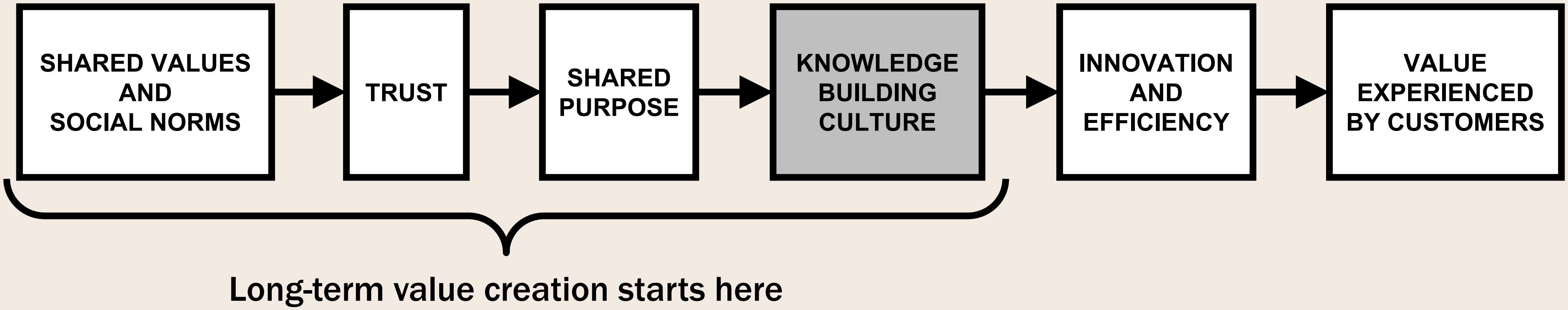
#3 Work continuously to **sustain win-win relationships** with all of the firm's stakeholders.

#4 Take care of **future generations**. Importantly, the early stage of the design of products and manufacturing processes should be focused on minimizing waste and pollution.

Maximizing shareholder value is best positioned not as the purpose of the firm, but as the result of a firm successfully achieving its four-part purpose

Madden (2020)

THE CRITICAL DETERMINANT OF LONG-TERM PERFORMANCE
A FIRM'S KNOWLEDGE-BUILDING CULTURE



Madden and Reardon (2026)
Madden and Stevens (2025)

WHY WAS BB&T THE BEST PERFORMING LARGE BANK DURING 2008 FINANCIAL CRISIS?

When management and the board of directors embrace the PTF's four-part purpose as the foundation for how the firm operates, then employees, customers, and suppliers will trust the firm to do what is right. Recall the 2008 financial crisis when many banks recorded boosts in quarterly earnings helped by the sale of "innovative" products, such as negative amortization loans. With these loans, in the early years customers made very low payments (less than the interest expense) but the principal owed kept increasing. Many customers eventually suffered severe financial losses.

BB&T was the best performing large bank during the financial crisis. Then CEO John Allison (2013, p. 241) explained that negative amortization loans were not sold by his bank because they violated the firm's commitment to ethical dealings with customers. Reminiscent of the firm's four-part purpose and the importance of culture, Allison noted:

> If you want to have passion and energy in your life, you must have a sense of purpose in your work … I ask the employees of BB&T: **Are you truly making the world a better place to live through your work?** Are you really helping your clients achieve economic success and financial security? Are you providing the quality of advice that ensures that they make better decisions?
>
> You should never do anything that you believe will not be in your client's best interests, even if you can make a profit in the short term … **Life is about creating win-win relationships.**

"CULTURE EATS STRATEGY FOR BREAKFAST"
NOT REALLY

PTF positions a firm's Knowledge Building Culture as "feeding" the firm's activities. Fast and effective knowledge building is key to problem solving in general, and in particular, adapting to change. This improves the firm's primary activities – **work**, **innovation**, and **resource allocation**.

Above quote originated from Mark Fields, former president at Ford America.

PTF VIEWS THE FIRM AS HOLISTIC SYSTEM

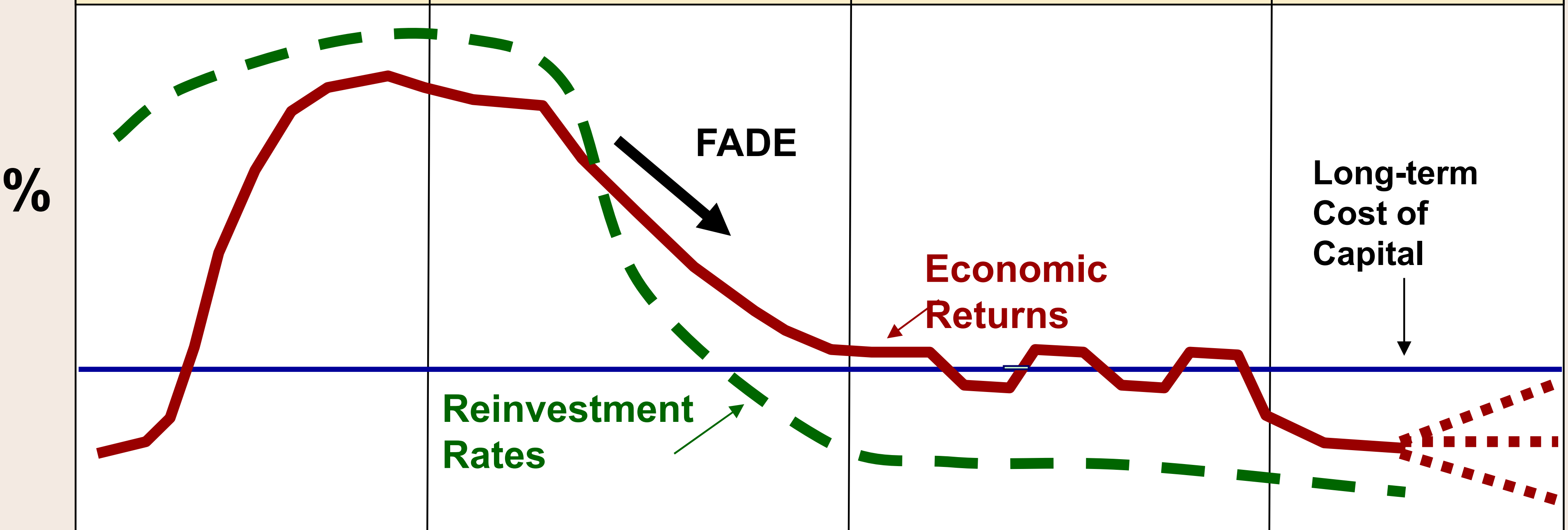
Firm Risk increases (decreases) in lockstep with changes that degrade/improve the likelihood of achieving the firm's purpose. An *increase* in firm risk, all else equal, means a greater likelihood for a firm to generate *lower* future financial performance.

Life-Cycle Framework provides a visual language that connects long-term financial performance to market valuations.

Excess (positive/negative) **Shareholder Returns** are explained using the life-cycle framework (see Section 9).

LIFE-CYCLE STAGES AND MANAGEMENT PRIORITES

High Innovation	*Competitive Fade*	*Mature*	*Failing Business Model*



Do We Deliver a High-Value Experience to Customers?	**Build or Acquire New Capabilities to Accelerate Innovation**	**Improve Efficiency While Developing New Businesses**	**Purge Business-as-Usual Culture and Restructure the Firm**

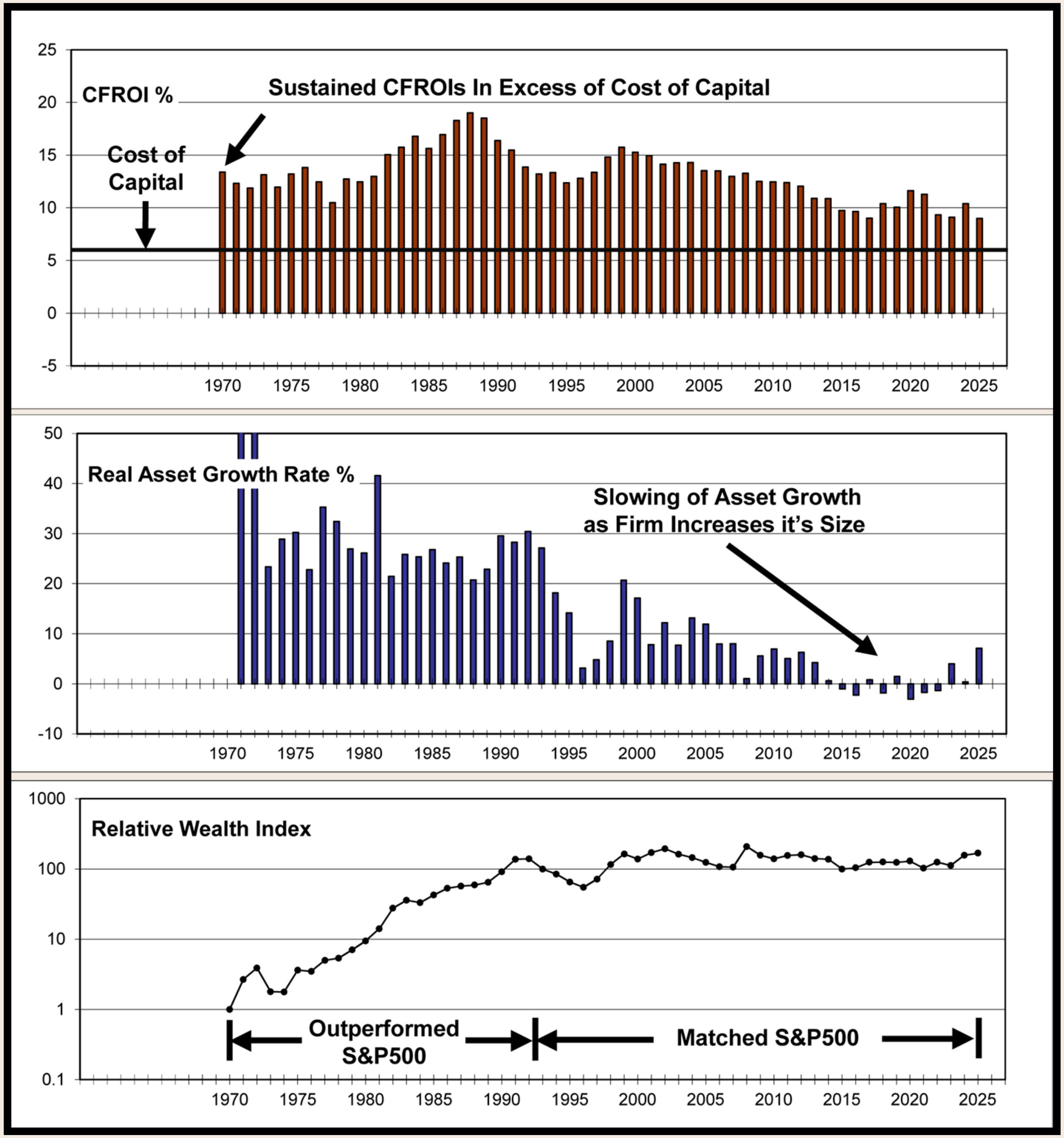
Madden (2025a)

3. FOUNDER CULTURE FOCUSED ON LONG-TERM VALUE CREATION

A FIRM'S HISTORY ENCAPSULATED WITH THE THREE PANELS OF THE LIFE-CYCLE CHART

- A firm's accounting statements are used to construct the top and middle panels.
- Top panel displays CFROIs (cash-flow-return-on-investment) that are economic returns, i.e., return-on-capital metric that minimizes accounting biases and is inflation-adjusted (real) Holland and Matthews (2018).
- Importantly, CFROIs can be compared to the long-term cost of capital (6% real) to gauge value creation/dissipation.
- Middle panel displays real asset growth rates as a proxy for reinvestment rates. Note that economic returns and reinvestment rates are the foundational drivers of long-term net cash receipts that determine a firm's market valuation (see Section 9).
- Bottom panel plots a firm's total shareholder returns over time versus the S&P 500.

WALMART 1970–2025



Source: UBS HOLT global database.

WALMART – IMPORTANT INSIGHTS

Walmart's life-cycle track record (prior slide) displays stellar financial performance, especially the absence of downward fade for both CFROIs and asset growth rates, 1970 to 1990. Walmart replaced Kmart as the dominant retailer and the conventional explanation is that Kmart was unable to match Walmart's efficiency in serving customers driven by the fast pace of Walmart's implementation of technological innovations such as bar codes, satellite communications, etc. Kmart eventually filed for bankruptcy in 2002.

What was the foundational cause of Walmart's success and Kmart's failure? It is apparent from reading the CEO shareholder letters in Kmart's annual reports in the 1970s that Kmart's top management had strong beliefs that their past success using a decentralized organization with store managers (close to the customers) making critical decisions such as inventory ordering and the like, would deliver similar success in the future. Sam Walton's worldview radically differed and can be distilled into his answer to the question: What is a store?

Sam Walton purged the faulty assumption that efficiency required decentralization and embraced systems thinking, i.e., he viewed a store as a node in a network. This critical difference is highlighted on the next slide. Everything changes. The locations of stores and distribution centers are viewed as interconnected components of a holistic system (firm). Also interrelated are the managerial tasks dealing with how work is organized, innovations pursued, and resource allocations made. Walton nurtured and sustained a culture of knowledge-building proficiency that perceived opportunities for implementing technological innovations far in advance of competitors. The firm has delivered on its vision (mission) of saving customers money so they can live better and, in so doing, benefitted all of its stakeholders.

LANGUAGE HIDES ASSUMPTIONS
WHAT IS A STORE?

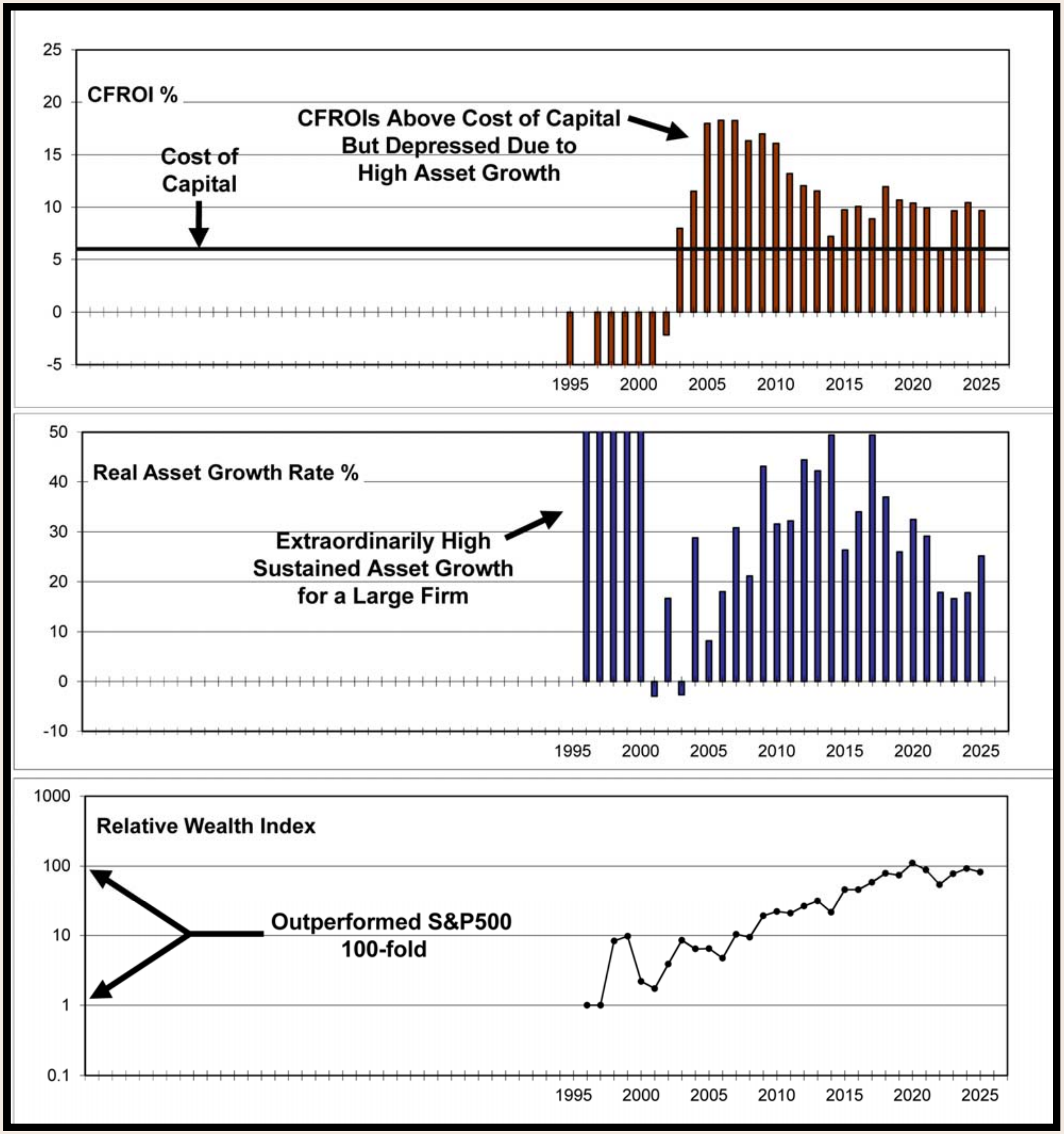
- KMART – a “store” is a stand-alone entity
- WALMART – a “store” is a node in a network

⬇

From 1970 to 1990, Walmart outperformed S&P500 100-x fold

In the early 1970s, Kmart was the number one retailer in the U.S. Walmart’s efficiency eventually drove Kmart into bankruptcy. The author verified in personal correspondence with Sam Walton that, in Walmart’s early years, he truly did see a store as a node in a network. See also, Rumelt (2011, pp. 25-28).

AMAZON 1995–2025



Source: UBS HOLT global database.

AMAZON – IMPORTANT INSIGHTS

What stands out with Amazon's life-cycle chart (prior slide) is the extraordinarily high asset growth rate being sustained by a very large firm while achieving well above cost of capital CFROIs. Let's focus on three creative initiatives orchestrated by Jeff Bezos, founding CEO of Amazon. These initiatives connect with how the PTF portrays the value creation process.

- Make long-term investments and not be deterred by related short-term, negative impacts on financial performance.

- Promote systems thinking that overcomes excessive reliance on linear cause-and-effect thinking and stresses interconnectedness.

- Sustain a culture of knowledge-building proficiency.

AMAZON

In his 1997 shareholder letter, Bezos asserted: “We will continue to make investment decisions in light of long-term market leadership considerations rather than short-term considerations or short-term Wall Street reactions.” Subsequent transcripts of quarterly earnings calls confirm that management behaved consistent with the 1997 shareholder letter.

He recognized the top priority of firms (like Amazon) that are in the competitive fade stage (slide 12)—build or acquire new capabilities to accelerate innovation—as follows, Bezos (2008):

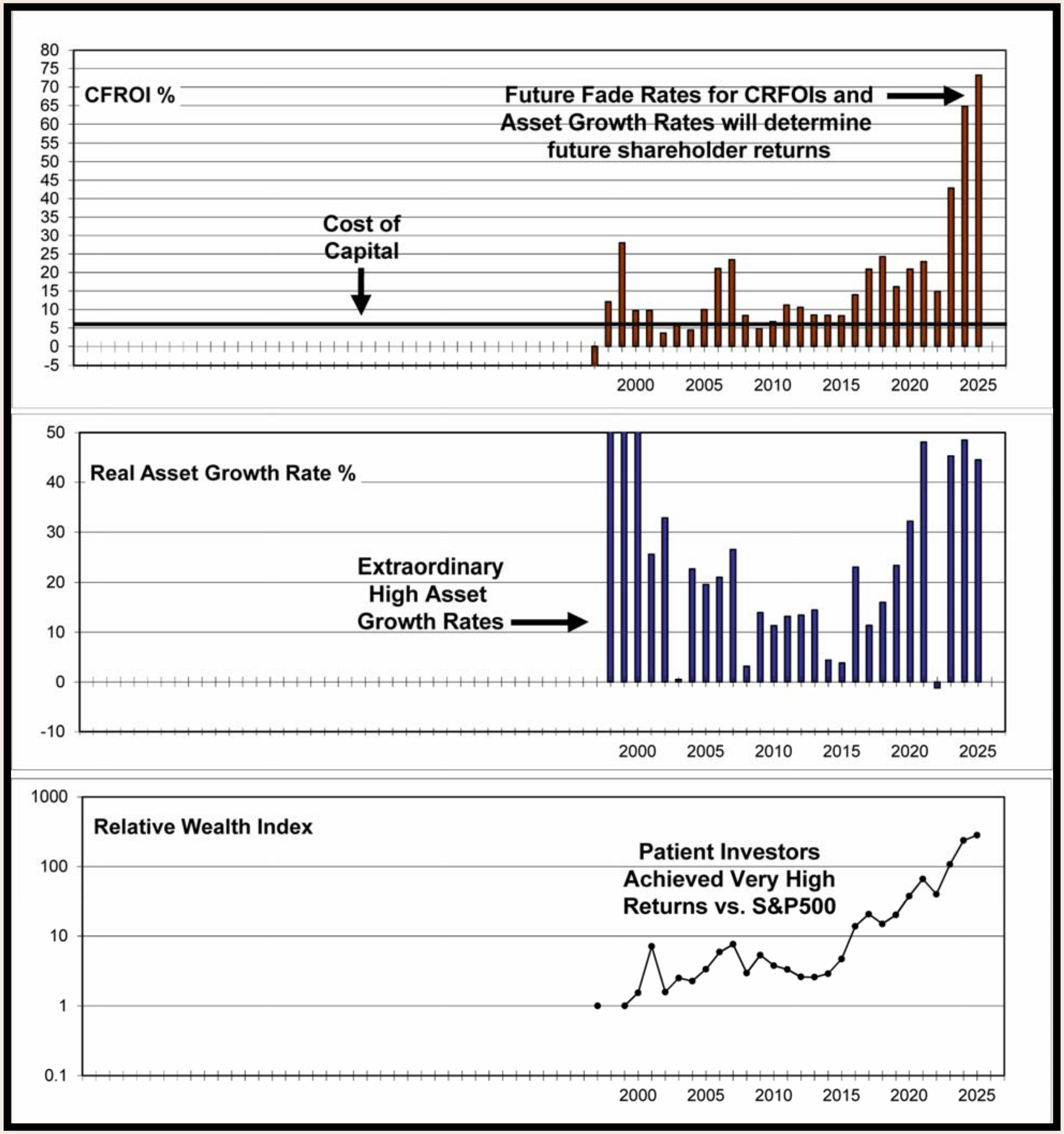
> Companies get skills-focused, instead of customer-needs focused. When [companies] think about extending their business into some new area, the first question is ‘why should we do that—we don’t have any skills in that area.’ That approach puts a finite lifetime on a company, because the world changes, and what used to be cutting-edge skills have turned into something your customers may not need anymore. A much more stable strategy is to start with ‘what do my customers need?’ Then do an inventory of the gaps in your skills. Kindle is a great example. If we set our strategy by what our skills happen to be rather than by what our customers need, we never would have done it. We had to go out and hire people who know how to build hardware devices and create a whole new competency for the company.

AMAZON

Bezos banned PowerPoints from meetings for new products/processes/businesses. The replacement is a six-page narrative that is carefully read at the start of meetings. Bezos explained: "… the narrative structure of a good memo forces better thought and better understanding of what's more important and how things are related. PowerPoint style presentations somehow give permission to gloss over ideas, flatten out any sense of relative importance, and ignore the interconnectedness of ideas," Bryar and Carr (2022, p. 83).

Another creative Amazon innovation is their Working Backwards process for major new products and initiatives. The important idea here is to start with the target customer experience, then work backwards by writing a press release announcing the product including anticipated tough questions and answers. Working Backwards is a knowledge-building process addressing a detailed understanding of the opportunity and the constraints. So simple, yet highly effective—and a way to avoid early commitment to the 'great idea' that may be clever but is incapable of leading to the desired customer experience.

NVIDIA 1997–2025



Source: UBS HOLT global database.

NVIDIA – IMPORTANT INSIGHTS

Founding CEOs have the opportunity to nurture and sustain a unique culture that engages all employees in delivering long-term value creation. Jensen Huang is an extreme outlier in terms of the intensity of Nvidia's culture (e.g., exceptionally long hours worked by all employees, speed, autonomy, and the absence of internal politics), and the extraordinary value Nvidia has created. His direct involvement with so many employees not only avoids bureaucracy but also (via extensive ongoing email exchanges with employees) positions himself on the leading edge of information flow about change. His big bets that were highly successful reflect knowledge-building proficiency. This same proficiency enabled Nvidia's ultra-fast design/produce cycle for their chips and the development of CUDA (Compute Unified Device Architecture), which is a parallel computing platform and computing model.

Briefly, the Nvidia innovation story began with its chips for PCs that were adored by die-hard gamers. Scientists learned that Nvidia's GPUs could facilitate simulations of complex natural phenomena. Nvidia's CUDA facilitated large scale acceleration in computing power while making it easy for developers to focus solely on Nvidia's hardware and software—the essence of a competitive moat. When AI emerged at scale in the early 2020s, developers were hooked on Nvidia's products for building AI applications.

NVIDIA

Jeff Bezos and Jensen Huang clearly are committed to knowledge-building proficiency. This led to Bezos reliance on the six-page narrative. For Huang, this led to extensive use of whiteboards in order to explain/critique his thinking and do the same for others. In his book, *The Nvidia Way* (2025, pp. 170-172), Tae Kim describes the reliance on whiteboards:

> Jensen's preference for whiteboarding runs counter to the way that the rest of corporate America talks to itself—through PowerPoint presentations … with little opportunity to work together or discuss topics in depth. [Jensen's] whiteboarding creates a specific kind of meeting, one dedicated to solving problems, not reviewing things that have already been done. … Whiteboarding forces people to be both rigorous and transparent … unlike with a slide deck, where you can hide incomplete thoughts … at the whiteboard there is no place to hide.

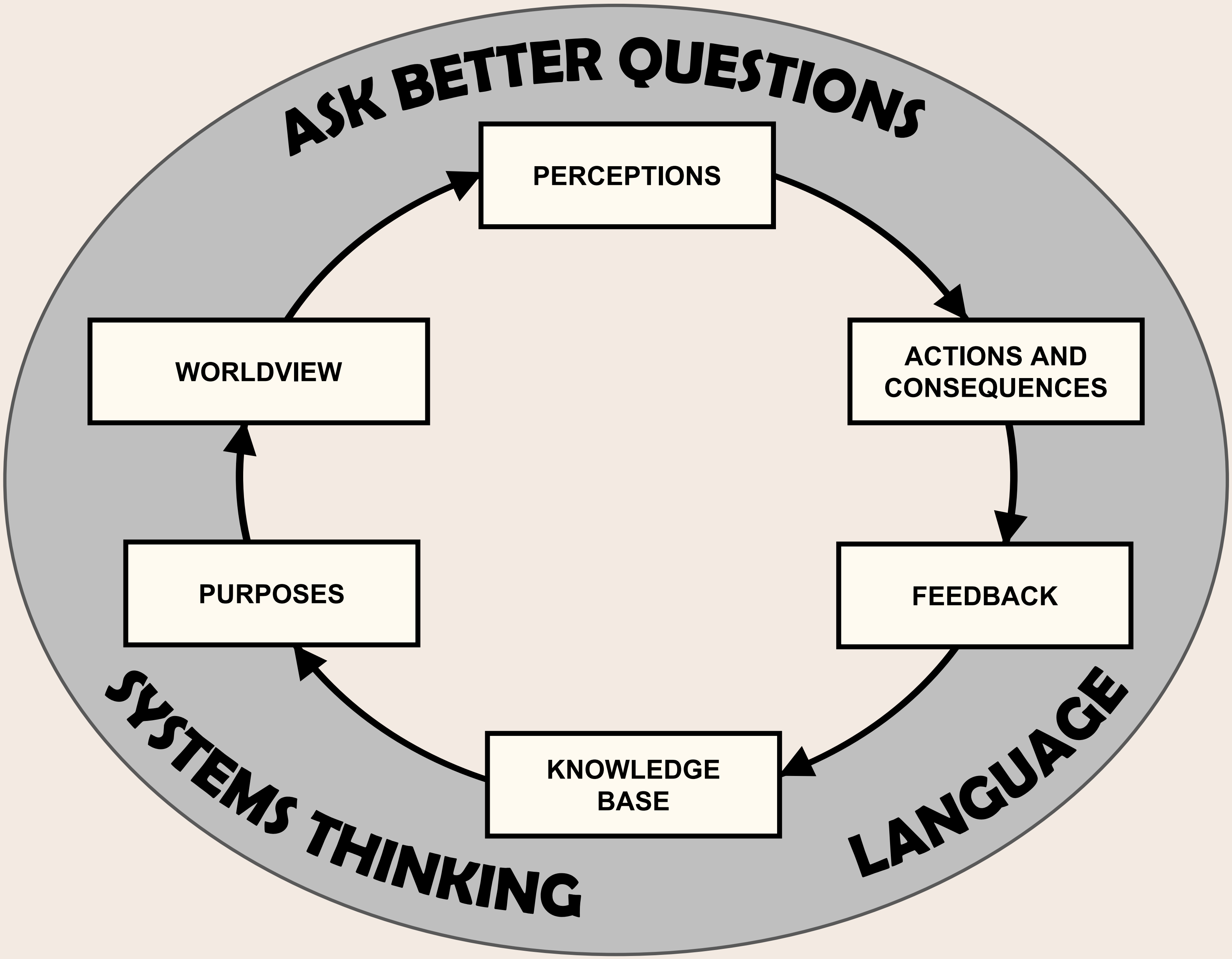
4. THE KNOWLEDGE BUILDING LOOP FACILITATES ANALYSIS OF INNOVATION SUCCESS AND FAILURES

We go through life traversing a Knowledge Building Loop (illustrated in the next slide) while continuously learning which actions help best to achieve our **purposes**. The components of the Knowledge Building Loop serve as guideposts that help audit how we know what we think we know. The **knowledge base** contains assumptions of varying degrees of reliability. One's **worldview** represents ideas and beliefs through which we interpret and interact with the world. A worldview that favors a deeper understanding of causality and nonlinear system complexities improves one's knowledge base, leading to more efficacious **actions that produce desired consequences.** Neuroscientists affirm that our **perceptions** are based on memories that facilitate predictions via analogy to the past. We see what our brains tell us to see. Especially important is orchestrating **feedback** that can overcome our automatic reliance on the past and reveal obsolete assumptions earlier than otherwise.

One key insight from the knowledge-building loop is the importance of continuous awareness of the need for constructive skepticism about strongly-held assumptions that influence our perceptions and our actions. **Scrutiny of the language we use can help discover the root cause of problems. So too, for systems thinking. Extensive experience leading to fast and effective traversing of the knowledge building loop promotes skill in asking better questions.**

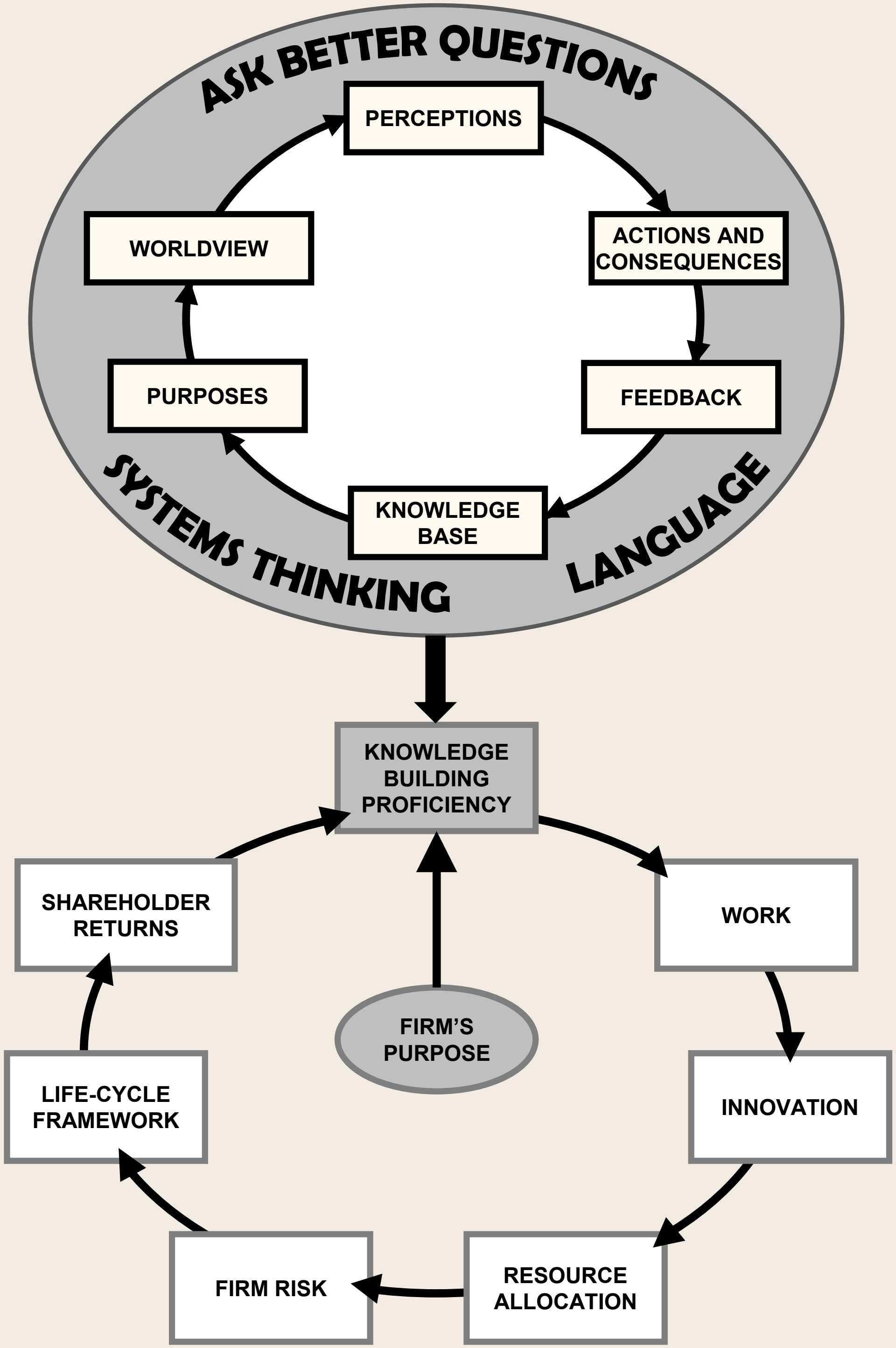
Madden (1991); Chris Firth (2007); Felin, Koenderlink, and Krueger (2017).

THE KNOWLEDGE BUILDING LOOP



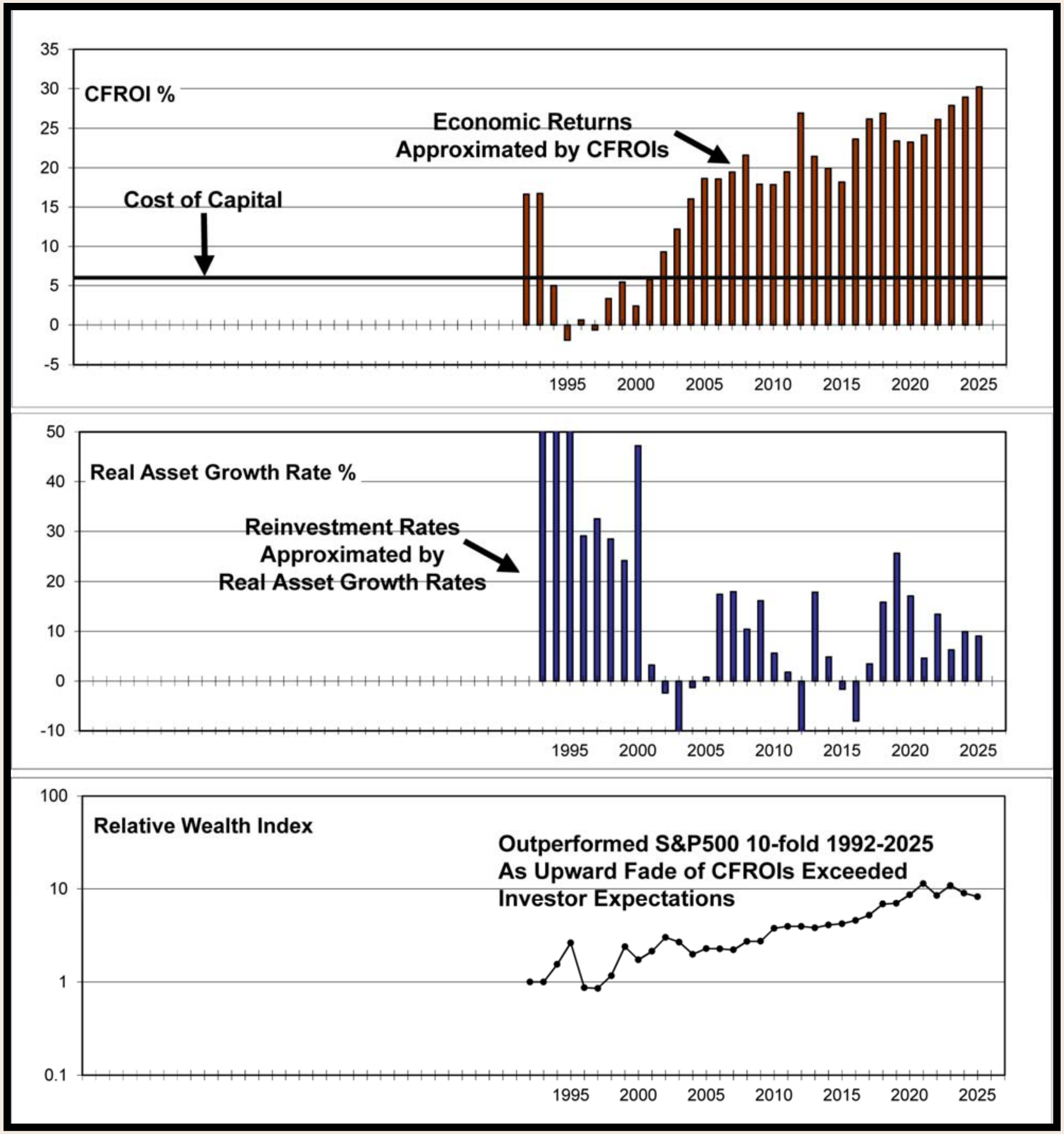
Madden (2025a) Chapter 2 provides insights about how the Wright brothers taught the world how to fly via fast and effective traversing of the Knowledge Building Loop.

THE KNOWLEDGE BUILDING LOOP COMPLEMENTS THE PRAGMATIC THEORY OF THE FIRM



Madden (2025a)

INTUIT 1992–2025



Source: UBS HOLT global database.

INTUIT – IMPORTANT INSIGHTS

Scott Cook cofounded Intuit in 1983. The firm's life-cycle track record displays sustained long-term value creation in delivering personal and small business financial software. Intuit's culture evolved as Cook improved his innovation skill while also enabling knowledge-building proficiency throughout the firm.

The Knowledge Building Loop promotes more specificity versus using words such as 'learning.' Consider the early years (see slide 27) when Intuit's *Quicken* software product for personal finances competed against *Microsoft Money*. How did Intuit's *Quicken* win the competitive battle against a huge, financially strong firm that employed programmers who (most probably) had higher technical skills?

Cook instilled an almost religious fervor in Intuit's employees to observe in minute detail how customers used their software. Product changes were attuned to the job customers needed to get done, Christensen, Cook, and Hall (2005). However, Microsoft programmers stayed in their offices and did not experience the *feedback* (see slide 25) that could have enabled them to purge faulty assumptions as did Intuit's programmers.

As to small business financial software, Intuit's fast and effective traversing of the Knowledge Building Loop generated insights (new knowledge) about the job customers needed to get done that sharply differed from the approach taken by competitors. Intuit's software developers of *QuickBooks* discovered that customers wanted to avoid learning about accounting principles that were needed for using competitors' products. Moreover, the extensive accounting capabilities (and added complexity) were mistakenly viewed as benefits by the CPAs who guided the development of competitors' products. *QuickBooks* avoided increased capabilities and dominated the market.

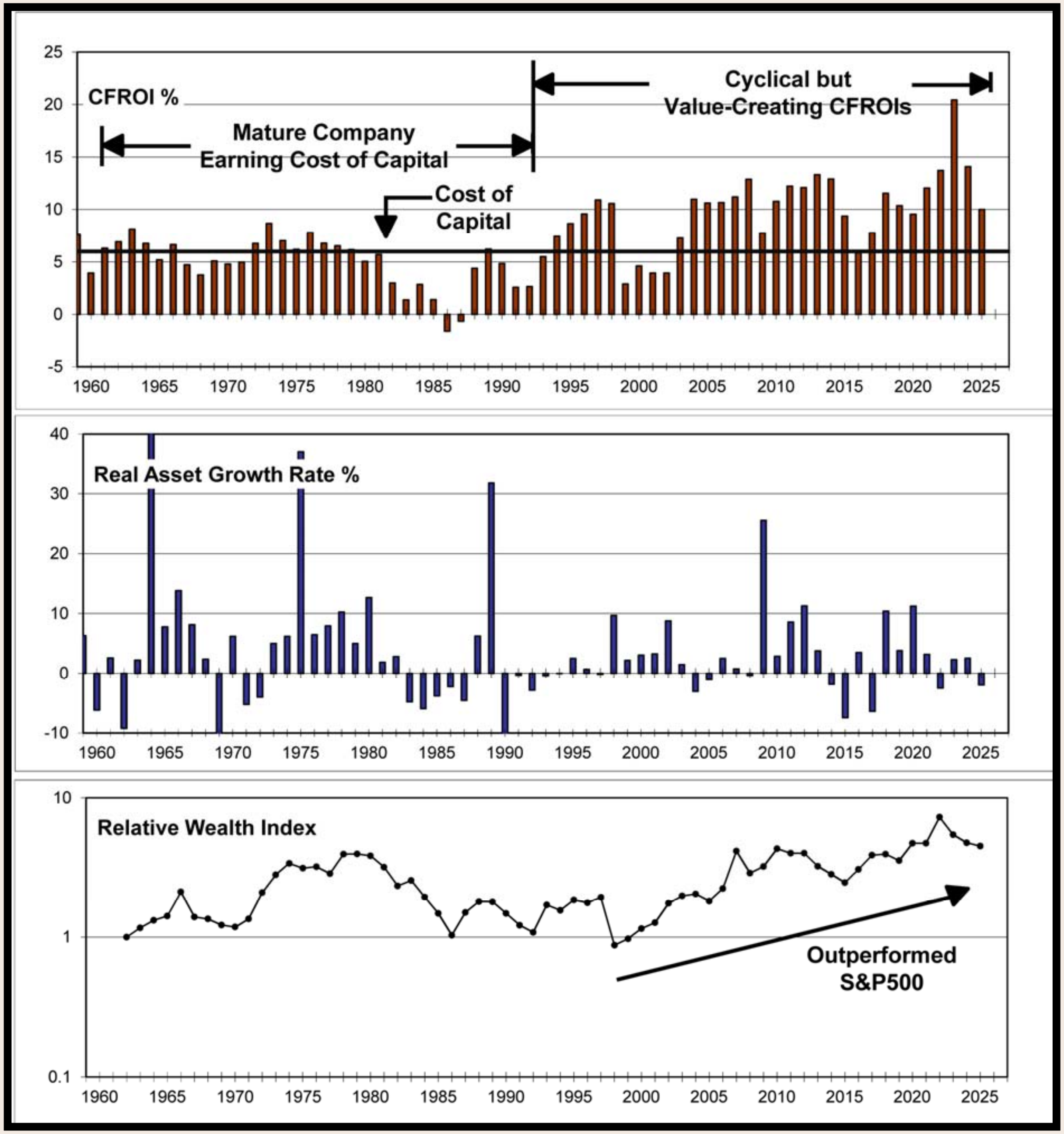
CEO BRAD SMITH DESCRIBES INTUIT'S PURPOSE-DRIVEN KNOWLEDGE-BUILDING CULTURE

"The culture you create lays the foundation that enables every other part of the company to grow and succeed. … **job one in creating a culture is building a *purpose-driven culture.*** What is the mission of the company? What is the bigger idea that we are all part of? It is the CEO's job to articulate and communicate this purpose across the company, so team members at every level have something to rally around. **At Intuit, our mission is to improve our customers' financial lives so profoundly they can't imagine going back to the old way.**

… One way leaders can create an action-oriented environment is to match inspiration with rigor, adopting a rapid experimentation culture. Great ideas are simply hypotheses unless matched with tangible proof they deliver meaningful impact. ***A rapid experimentation culture* cuts through hierarchy (especially if leaders hold their own ideas to the same scrutiny of testing), creating an environment where everyone can innovate, and debate turns into doing.**"

Smith (2016)

5. IMPACT OF NEW CEOS ON THE FIRM'S CULTURE DEERE 1960 TO 2025



Source: UBS HOLT global database.

DEERE – IMPORTANT INSIGHTS

The prior slide depicts Deere's journey to currently having 75,000 employees and being a leading innovator in agriculture, forestry, and roadbuilding equipment and well known for its farm tractors. From 1960 to the early 2000s, Deere was in the mature life-cycle stage earning CFROIs approximating the cost of capital. Over the next two decades, Deere substantially improved its financial performance achieving cyclical but mostly value-creating CFROIs well above the cost of capital.

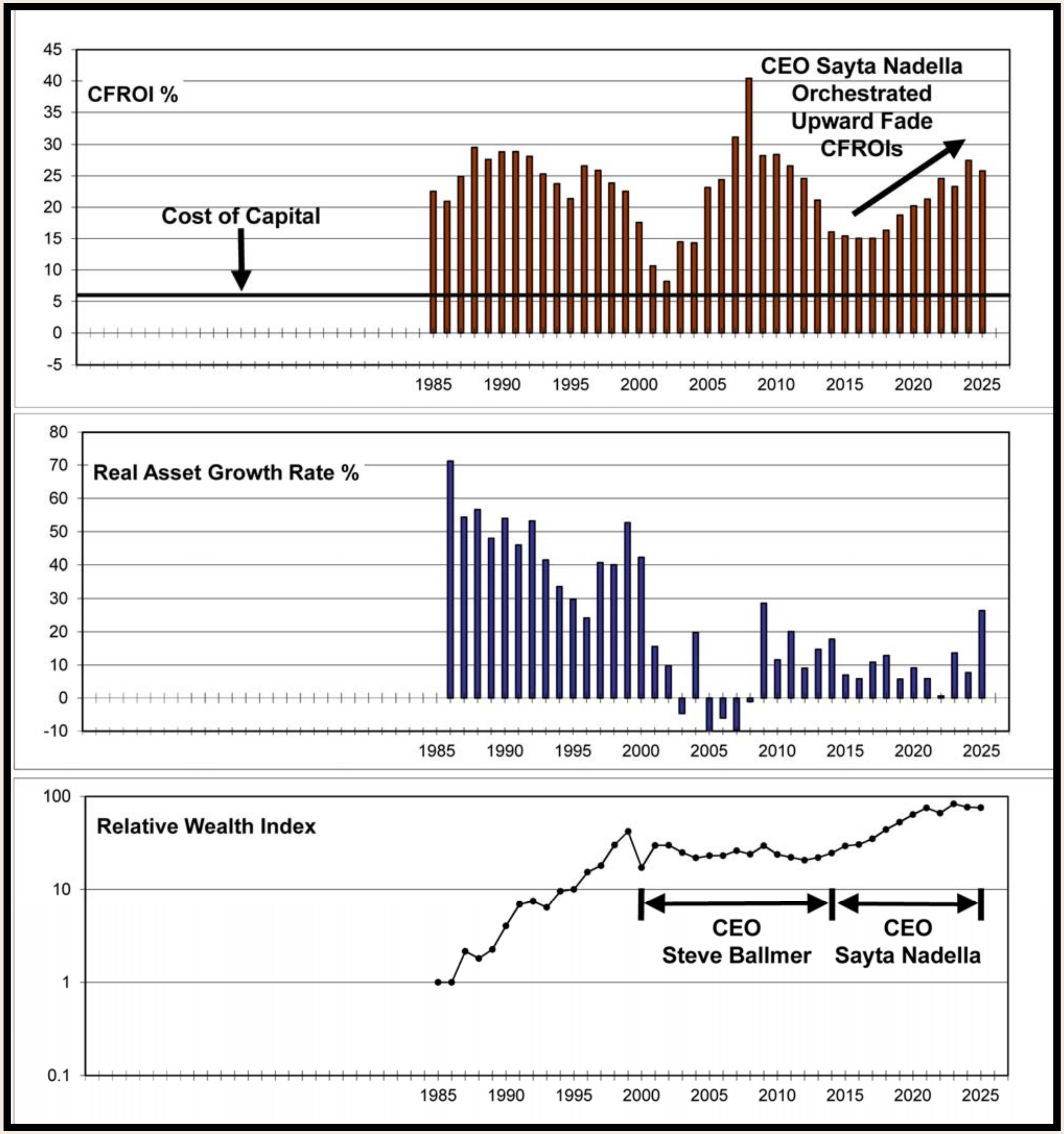
Since 2000, Deere has mostly outperformed the S&P 500 as shown in the rising relative wealth index (bottom panel of prior slide). Investors did not expect Deere to generate a favorable (upward) fade of CFROIs. Deere successfully transitioned from a product-centric mature business to a financially strong, solidly profitable, platform-centric, information-based firm focused on precision agriculture services utilizing sensors and probes in the soil combined with specialized software. Farmers increased their yields and decreased their costs, i.e., significant value experienced by customers. What is the foundational cause of this successful transition?

DEERE

Robert Lane became CEO in 2000 and clearly understood the immediate challenges facing Deere: (1) avoid the failing business model life-cycle stage, (2) fix the lack of discipline for allocating resources, and (3) change the existing adversarial culture between unionized employees and management. The intensity of the adversarial culture is reflected in the following: “In those days, every Deere factory had, near the entrance, a big sign featuring a dozen shop rules for wage employees, including ‘You will not assault a member of management,’ Stahl (2013, p. 53).

A uniquely skilled manager, Dick Klein, was given the responsibility to change Deere’s adversarial culture. Klein was adamant that without trust culture will not change. He systematically, plant-by-plant, successfully orchestrated change—in Klein’s words: “Labor and management coming together to utilize the knowledge and skills of all employees by involving them in an ongoing basis in problem solving and decision making,” Stahl (2013, p. 70). From a systems perspective, this change was a prerequisite to implementing a lean, Toyota-style, manufacturing process that upgraded the firm’s knowledge-building proficiency and delivered remarkable improvements in manufacturing efficiency. The significantly more profitable Deere was then able to become the leader in precision agriculture to the benefit of all its stakeholders.

MICROSOFT 1985 TO 2025



Source: UBS HOLT global database.

MICROSOFT – IMPORTANT INSIGHTS

The top panel of Microsoft's life-cycle track record shows when Steve Ballmer was CEO followed by Satya Nadella. The shareholder returns versus the S&P 500 (bottom panel) suggest that that these CEOs had different skill levels. Ballmer sustained a command-and-control bureaucratic culture. Nadella unleashed the value-creation potential of Microsoft by changing the firm's culture. His tenure as CEO is an affirmation of the foundational prerequisites (slide 8) to sustained value creation—shared values and social norms facilitate trust, and combined with a shared purpose, enables a knowledge-building culture to flourish thereby significantly facilitating long-term value creation.

Nadella's approach to leading Microsoft is a hand-in-glove fit with the PTF's four-part purpose; in particular, a vision (mission) which inspires and motivates employees to work for a firm committed to behaving ethically and making the world a better place. In his words, Nadella (2025, pp. 70-71):

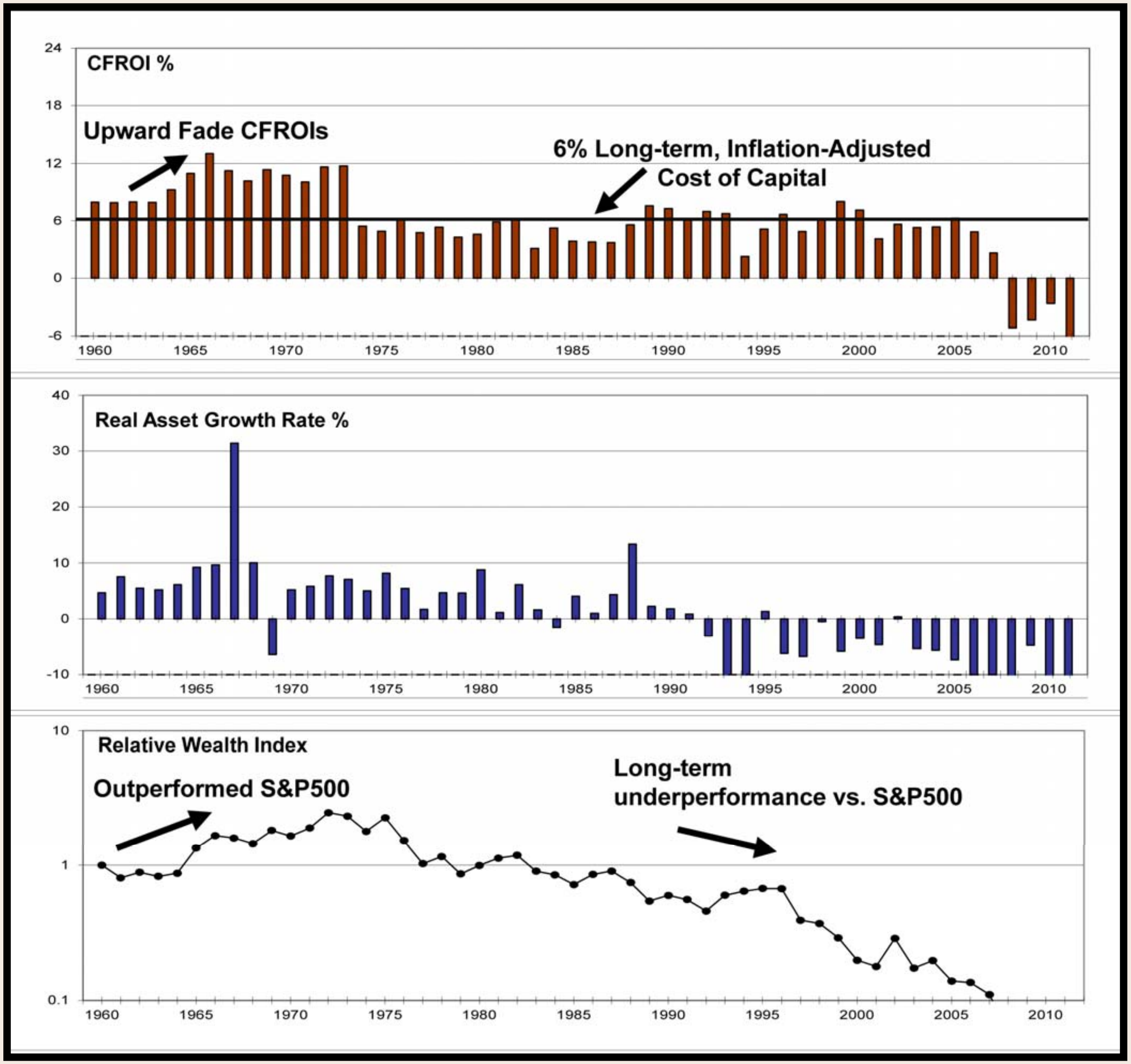
> I … encouraged Microsoft to become mobile-first and cloud-first. Not PC-first … We needed to envision a world where the mobility of the human experience across all devices was what mattered, and the cloud made that mobility possible, enabling the new generation of intelligent experiences. The transformation we would undertake across all parts of our businesses would help Microsoft and our customers thrive in this new world.
>
> It might be easy to be motivated to change through envy. … But envy is negative and outer-directed, not driven from within, and so I knew that it wouldn't carry us very far down the path to true renewal.
>
> We could also motivate ourselves through competitive zeal. Microsoft is known for rallying the troops with competitive fire. The press loves that, but it's not me. My approach is to lead with a sense of purpose and pride in what we do, not envy or combativeness.

MICROSOFT

Keep in mind that the PTF is the result of extensive study of the long-term histories of firms. That led to the conclusion that the critical determinant of a firm's long-term performance is its knowledge-building culture. A stellar example is Microsoft's performance under the leadership of Satya Nadella who summarized, Nadella (2025, p. 100):

> I like to think the C in CEO stands for culture. The CEO is the curator of an organization's culture. As I told employees … anything is possible for a company when its culture is about listening, learning, and harnessing individual passions and talents to the company's mission. … I planned to use every opportunity at my disposal to encourage our team to live this culture of dynamic learning.

6. FAILED BUSINESS MODEL LIFE-CYCLE STAGE EASTMAN KODAK 1960 TO 2011



Source: UBS HOLT global database.

EASTMAN KODAK – IMPORTANT INSIGHTS

In the prior slide, Eastman Kodak's CFROIs surged in the early 1960s reflecting the successful introduction of the Instamatic cartridge, which greatly simplified loading and unloading film. Subsequently, Kodak faded to a mature, cost-of-capital firm and then entered the failing business model stage with bankruptcy in 2012. Both Kodak and Kmart followed a similar pattern that begins with a business-as-usual, dysfunctional board of directors who are clueless about the top priorities for management dependent upon the firm's current life-cycle stage (see slide 12). The pattern includes a revolving door of CEOs who unveil a new strategy and focus on short-term improvements in financial performance. So begins a series of acquisitions, divestitures, and restructurings that consume resources while returning to earning at least the cost of capital remains elusive. The more entrenched the firm's bureaucratic culture due to excessive layers constituting a command-and-control organizational structure, the more difficult to achieve meaningful improvement.

Note that Kodak hired a very smart young engineer, Steve Sasson, who promptly invented digital photography. When asked about how management responded during meetings in which he explained his invention, Sasson replied that management showed little interest, Larish (2012, p. 28). A sad state of affairs for a firm in the mature life-cycle stage with (what should be) the top priority to improve efficiency *while developing new businesses*.

My study of the history of firms strongly suggests that by missing opportunities to improve large mature firms, i.e., business as usual, boards' inaction leads to firms slipping into the failing business model life-cycle stage with a concomitant huge increase in the degree of difficulty to significantly improve performance. In particular, boards typically do not even perceive the firm's organizational structure as a source of downward competitive fade. Why? Because they achieved their business success typically by excelling in a command-and-control pyramid-type firm. Section 8 expands upon this topic.

8. ORGANIZATIONAL STRUCTURE

> "In the permissionless corporation, fast, inexpensive experimentation takes over from slow, involved analysis, enabling organizations to pounce on opportunities as they arise. And at a time when speed and adaptability, rather than predictability and consistency, are the main sources of competitive advantage … a model [organizational structure] that allows people close to the customer to make as many decisions as possible is valuable. Companies with three or four layers, faster problem-solving, and a permissionless mindset will outcompete traditional players with 10 layers and slow decision-making processes. In fact, though it may take time, we anticipate that organizations that operate in the traditional way will eventually cease to exist."
>
> —McGrath and Charan (2023)

This section contrasts command-and-control organizational structures with flatter structures which are increasingly being adopted worldwide. Three firms are discussed: the preeminent steel manufacturer, Nucor (relatively flat structure since its beginning); the Haier Group—a large global firm that has evolved into a high-performing flat organization; and Bayer AG, a large, diversified health care firm which currently is dismantling its command-and-control hierarchy.

Madden (2025c)

THREE OBSOLETE BELIEFS

The firm's organizational structure should be shaped to facilitate the nurturing and sustaining of a knowledge-building culture that operates at all levels of the firm. Today's command-and-control organizational structure originated based on three beliefs: (1) important knowledge about running a business is generated by top management, (2) budgets and targets are needed to incentivize lower levels of the firm to do what top management wants, and (3) employees at low levels are not to be trusted. All three beliefs are obsolete in today's fast-changing world where superior results depend upon intangible (employee-created) assets and not merely scaling up tangible assets. The alternative to command-and-control is a flat organizational structure.

The lifeblood of command-and-control hierarchies is the budget that sets in motion the target marching orders for those at lower levels. Of course, budgets invariably lead to gamesmanship in setting lower forecasts of future performance which are then easier to beat thereby earning a 'performance' bonus.

See Madden (2025a, pp. 82-86) for practical issues involving the improvement of organizational structure.

IMPROVED PERFORMANCE BY ELIMINATING BUDGETS IN TRANSITIONING TO A FLATTER ORGANIZATION

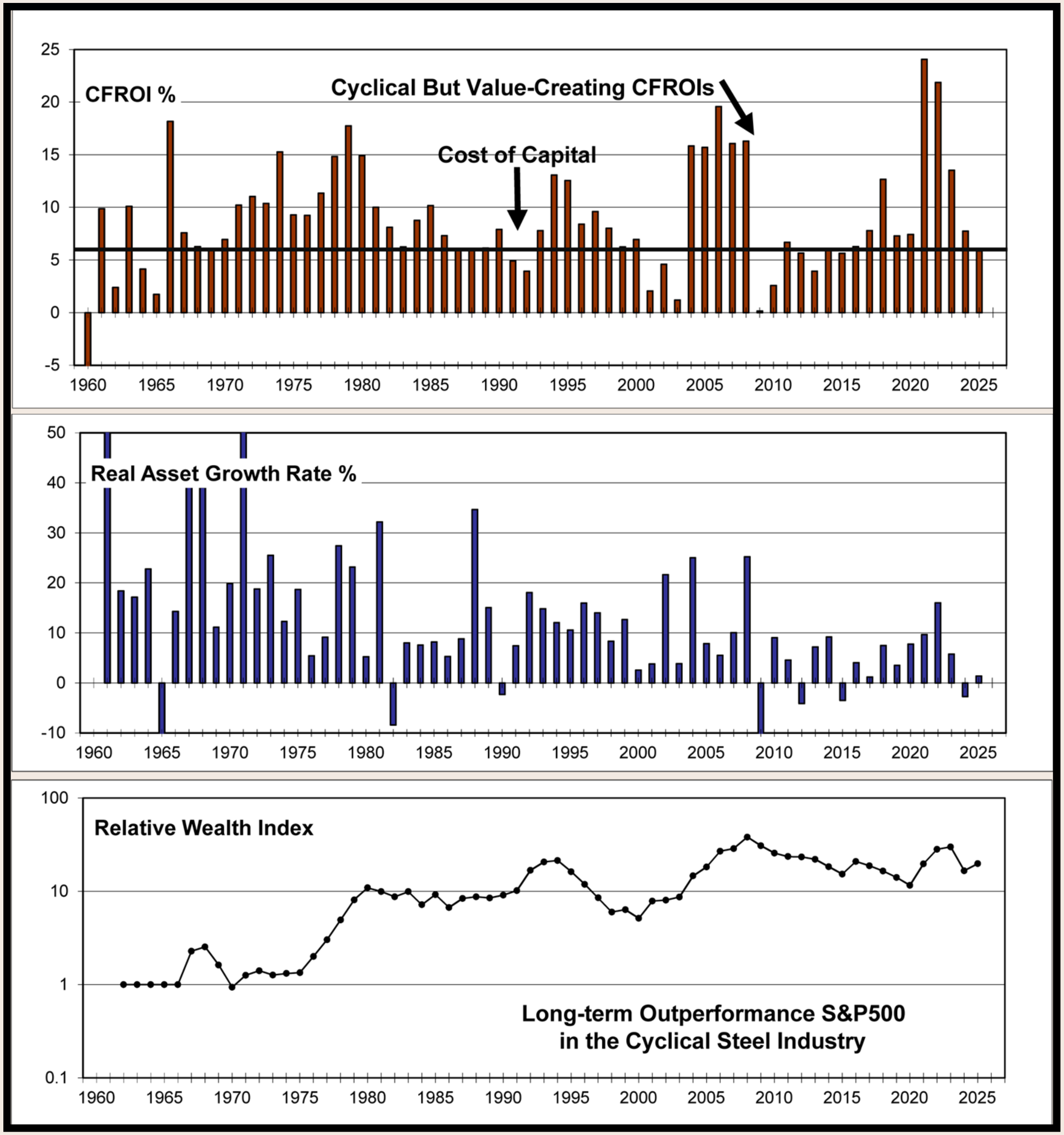
BJARTE BOGSNES:

“The three purposes [of the budget] should be separated and then solved in three different processes because they are about different things. A target is an aspiration, what we want to happen. A forecast is an expectation, what we think will happen, whether we like what we see or not. And resource allocation is about optimization of resources.

… Some tell me it is impossible to operate without a budget. My response is that this separation lets us do everything the budget tried to do for us, but now in much better ways: better targets, better forecasts, and a more effective resource allocation. It also improves how we measure, evaluate, reward, and coordinate. How impossible and how scary is that?”

Bogsnes (2023, pp. 36-37)

NUCOR 1960 TO 2025



Source: UBS HOLT global database.

NUCOR – IMPORTANT INSIGHTS

Nucor is the preeminent steel producer with the highest productivity (and highest paid) employees (teammates) that produce high-quality steel at the lowest cost. Management has sustained a flat organizational structure (four layers of management from the CEO to employees working in the steel mills) and culture (win-win partnerships, team bonuses tied to productivity, and no layoffs) nurtured by Ken Iverson, CEO from 1965 to 1996. Iverson understood technology and bet big and early on mini-mills that use recycled steel and thin-slab casting—innovations that led to long-lived core competencies.

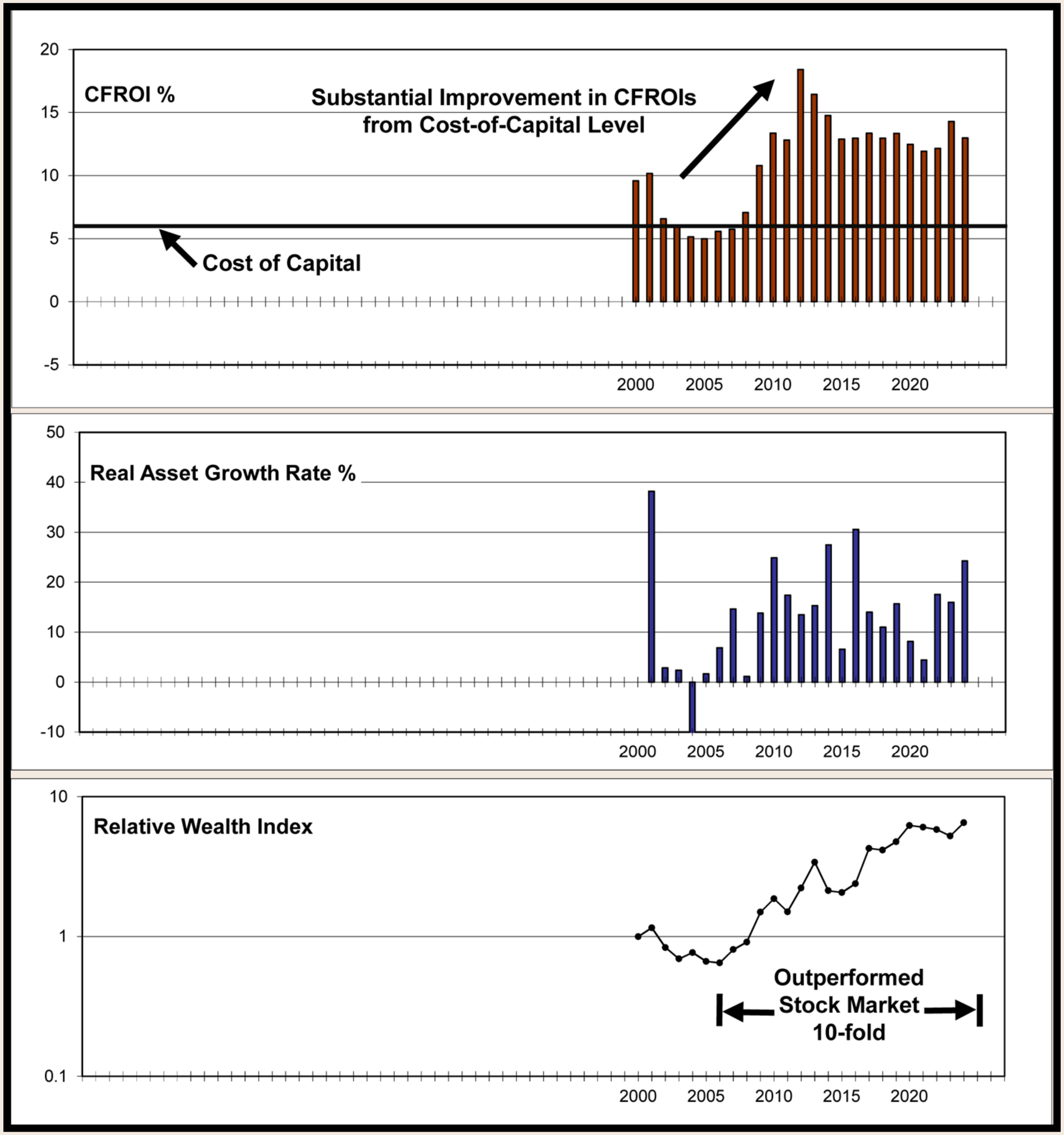
Keep in mind that historically the steel industry has generated miserably low (and cyclical) returns on capital. The top panel of Nucor's life-cycle track record from 1960 to 2025 (see prior slide) displays CFROIs distinctly higher than its main competitors. The middle panel shows significant asset growth as Nucor expanded and earned a higher share of the steel market. Big Steel (U.S. Steel and Bethlehem Steel) with their bureaucratic, pyramid command-and-control hierarchies were unable to reorganize their business model and change the adversarial relationship with their unionized employees. The relative wealth index in the bottom panel records significant outperformance of the S&P 500 from 1965 to 1995 as investors continually raised their expectations of future profitability.

IVERSON'S KEY TAKEAWAYS

Here are key takeaways noted by Ken Iverson in his autobiography, *Plain Talk: Lessons from a Business Maverick*:

- We anticipate that roughly half our investments in new ideas/technologies will fail.
- Our independent business units have an unusually active exchange of problem-solving ideas.
- We (management) have been able to get employees to identify their own interests fundamentally with management.
- We have no job descriptions. We let our employees define their own jobs in ways that optimize their productivity.
- Our business units are autonomous, and we accept the added cost from duplication since this eliminates bureaucratic control that comes with centralization—it works for us.
- If your success requires uniformity and consistency (McDonalds and Walmart), centralized decision-making may be required. But if success relies more on innovation and flexibility, push decision-making power lower.
- We built Nucor under the assumption that most of the 'genius' in our firm is found among the people doing the work.
- We focus on shaping an environment that frees employees to determine what they can do and should do, to the benefit of themselves and Nucor.

HAIER GROUP 2000 TO 2024



Source: UBS HOLT global database.

HAIER GROUP – IMPORTANT INSIGHTS

Haier's life-cycle track record (see prior slide) displays its value creation journey in financial terms. In early years (top panel), CFROIs declined below the cost of capital and the stock underperformed the market (bottom panel). The subsequent 10-fold outperformance of the market was driven by increasing investor expectations for sustaining much higher CFROIs coupled to high asset growth rates (middle panel).

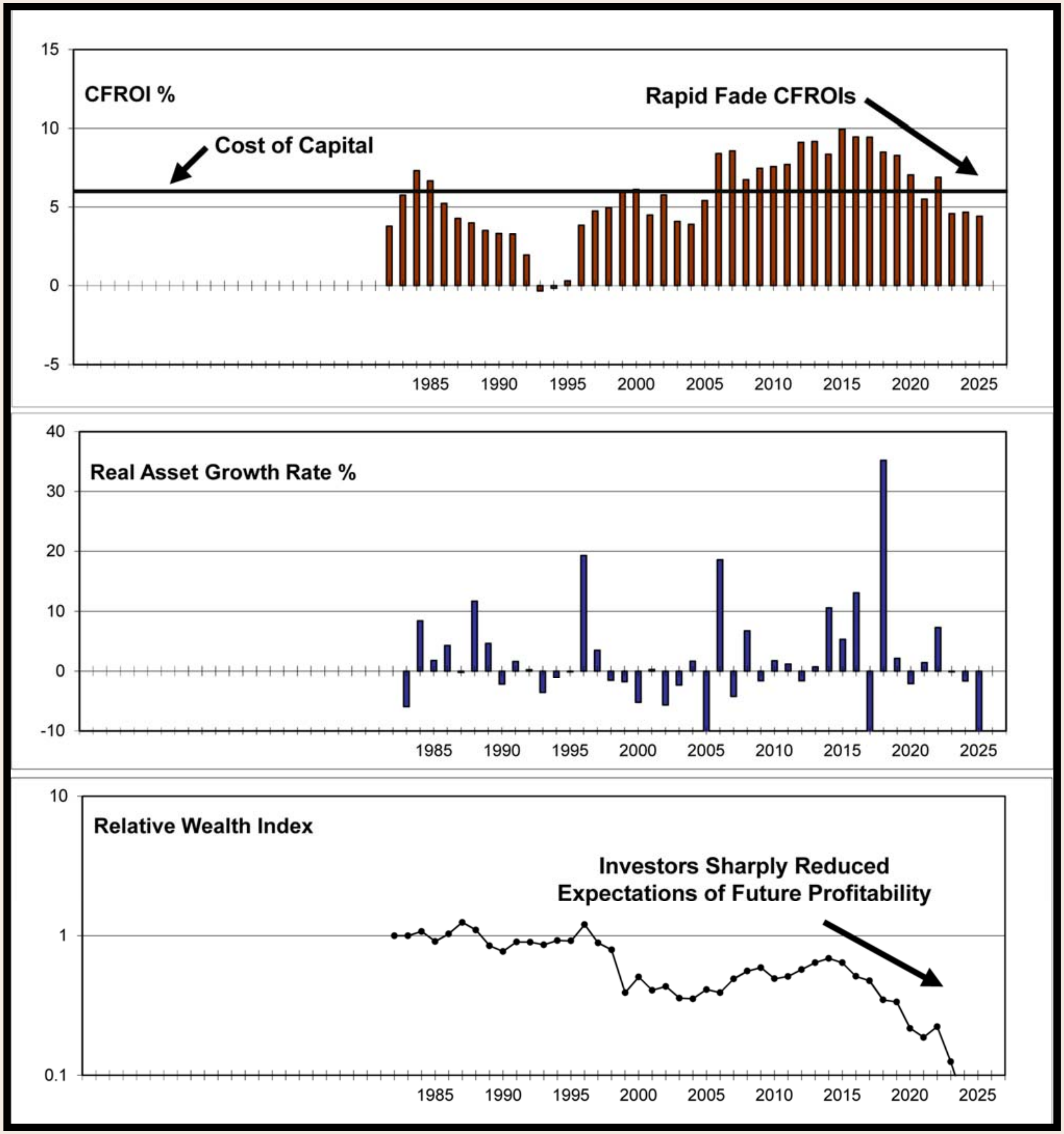
A visitor to the Haier Group's corporate headquarters in Qingdao, China will see a glass-enclosed sledgehammer mounted on the wall. This is a reminder of the beginning of a value creation journey for Zhang Ruimin when he became CEO in 1984 of Qingdo General Refrigerator Factory. This was a money-losing Chinese refrigerator manufacturer with 800 employees and clearly in the failing business model life-cycle stage. The level of employee morale was reflected in Ruimin's first new rule: do not pee on the factory floor. As to product quality, Ruimin got employees' attention by using the sledgehammer on many defective refrigerators recently manufactured.

Haier became the global leader in whitegoods (refrigerators, ovens) by evolving to a flat organization with thousands of microenterprises (MEs) that orchestrate design, manufacturing, and delivery of unique customer experiences as part of an ecosystem-driven organization. The success of Haier's MEs is evidenced by many of them having been, or soon to be, spun out as publicly traded firms in a wide array of businesses.

HAIER GROUP

Ruimin evolved a management framework (philosophy) that he labeled RenDanHeyi to emphasize employees ('ren'), committed to continually provide users ('dan') with superb value-creating experiences ('heyi'). RenDanHeyi aligns value creation for users and value sharing for employees. Haier is adamant about being exceptionally close to its customers to both understand/serve current needs and anticipate desirable future experiences. Haier calls this zero distance, achieved via Haier's platform networked to collaborating firms that contribute to the customer experience. Danah Zohar in her book, *Zero Distance*, notes that Haier does more than strive for zero distance relationships. Haier broadly communicates customer problems and requests for ideas to hundreds of thousands of potential contributors (not just known experts) Successful contributors earn a share of profits, with some becoming leaders of new MEs. An ecosystem focused on knowledge building, with Haier as the hub of a large multi-company network.

BAYER AG 1982 TO 2025



Source: UBS HOLT global database.

BAYER AG – IMPORTANT INSIGHTS

Bayer AG is a German firm whose two major businesses were pharmaceuticals and consumer health when Werner Baumann became CEO in 2016. He immediately orchestrated a mega-acquisition to create a third major business, crop science. Bayer paid $63 billion, a significant premium to acquire Monsanto. This sharply increased Bayer's debt load and also bought ownership of tens of thousands of ongoing and future lawsuits claiming that Monsanto's Roundup herbicide caused cancer. Litigation costs skyrocketed. And coupled with interest on the debt load, pharmaceutical R&D fell short of what was needed to replace Bayer's top drugs coming off patents. Meanwhile, Bayer grew beyond 100,000 employees, all managed with a bureaucratic command-and-control organizational structure.

After intense shareholder pressure, Baumann resigned and Bill Anderson became CEO in mid-2022. The prior slide displays Bayer's life-cycle track record with fast fade of CFROIs since acquiring Monsanto. Recognizing the severity of Bayer's situation, the board supported Anderson's multi-year radical reorganization which he named 'Dynamic Shared Ownership.' Commenting on the extensive bureaucracy spawned by Bayer's command-and-control structure, Anderson noted that Bayer's manual for company rules covered 1,362 pages.

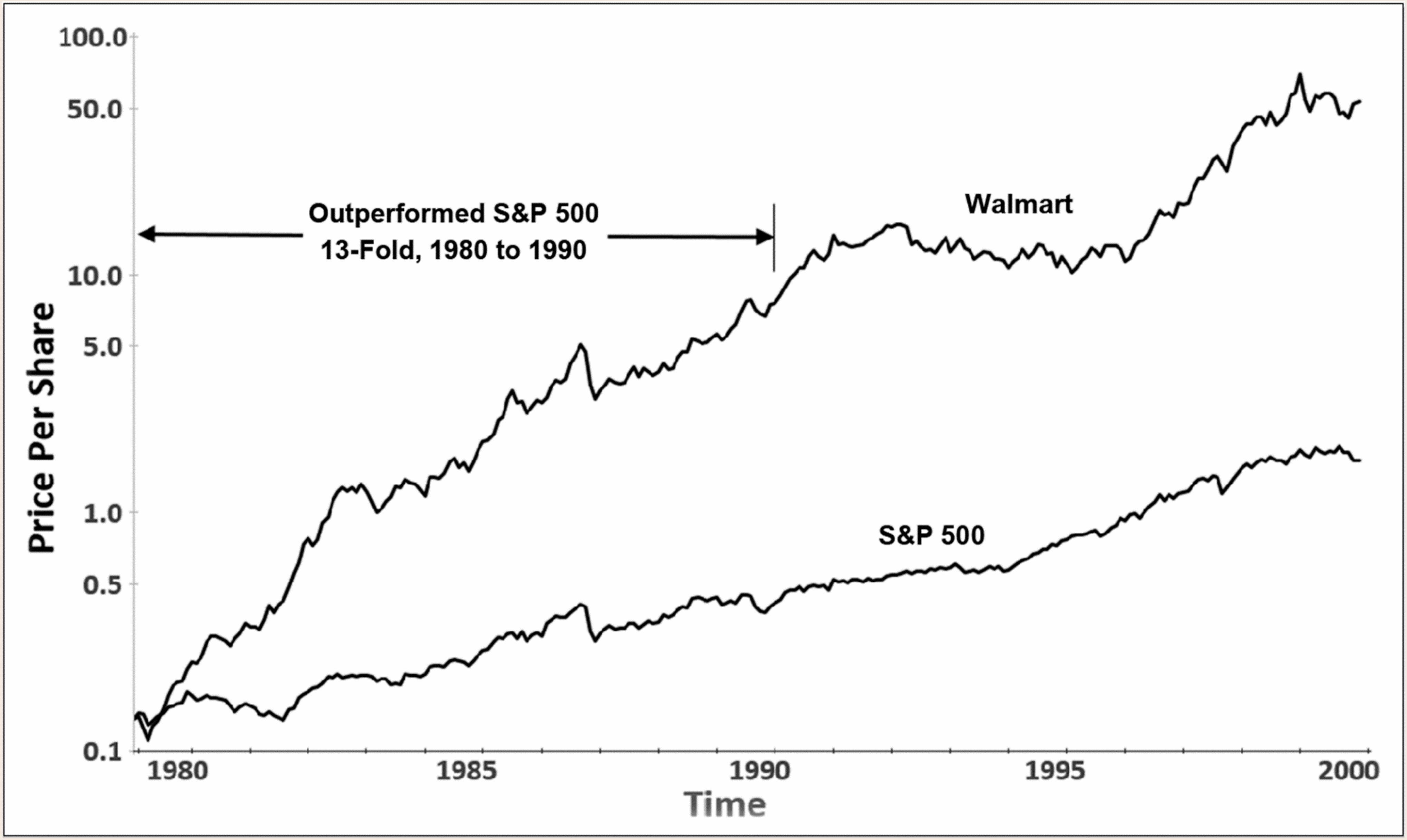
BILL ANDERSON'S VISION FOR THE NEW BAYER AG

Anderson's 2023 letter to shareholders summarizes:

> Bayer has huge potential. But, as in many large companies, we often make life difficult for ourselves. There is a whole lot of coordination, monitoring and supervision going on. In some areas, we have 12 hierarchy levels between the CEO and the customer.
>
> Why is that a problem? Because this traditional approach of top-down management doesn't place products and customers at the heart of daily work. Decisions take far too long. Initiative and creativity are stifled by bureaucracy.
>
> That's why we want to turn our system on its head. In the future, 95 percent of the decision-making will shift to the people actually doing the work. We are introducing a new operating model, which we call Dynamic Shared Ownership. This new system will reduce hierarchy levels, eliminate bureaucracy and significantly accelerate decision-making. We will primarily work in small, self-managed teams, totally focused on improving our products and the lives of our customers. This shift will enable us to unleash the entrepreneurial power of each individual and ensure that all of our efforts are focused on the needs of consumers, patients, and farmers.

Anderson is leading the Bayer team to overcome significant short-term problems and to excel in delivering on Bayer's long-term vision: 'Health for all, hunger for none.' To execute this vision, Michael Lurie, point person for implementing dynamic shared ownership, remarked: "Instead of designing the organization despite what it means to be human, you design the organization around what it means to be human," Morree (2024).

8. VALUATION PRINCIPLES AND PRACTICE
WHY DID WALMART OUT-PERFORM S&P 500, 13-FOLD 1980-1990?



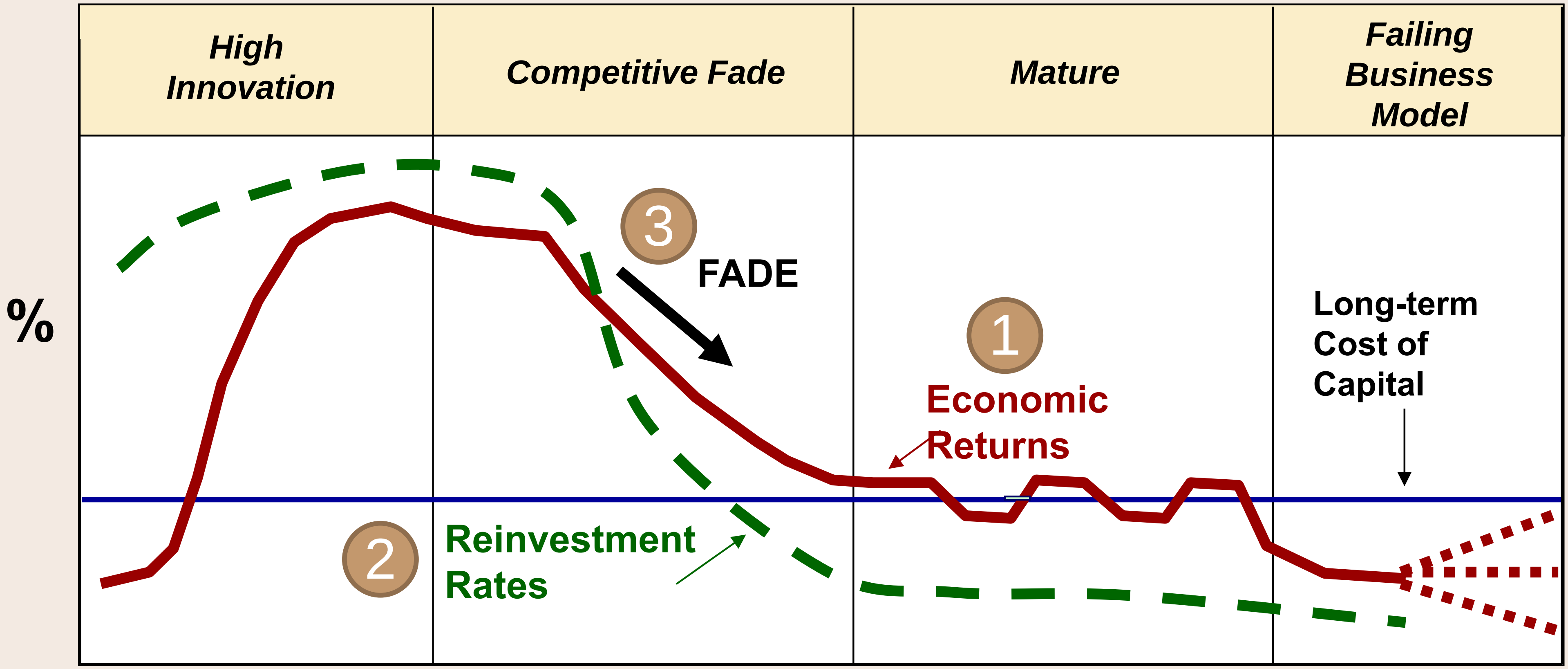
A TOTAL SYSTEM APPROACH TO VALUATION

A valuation model is a mechanism to generate an expected long-term net cash receipt (NCR) stream for the firm and then translate this into a present value. Why not simply specify each year's NCR over the long term? This would result in users of the model then having no benchmarks to gauge the plausibility of the specified NCRs, especially those in the distant future. The valuation model should facilitate a learning process, and not just be a logically sound application of discounted cash flow mathematics. With a learning process in mind there is a compelling rationale to use the three life-cycle variables to generate the model's NCR stream. Users can then study life-cycle track records (the past) and make judgments about likely future track records. The same language is used to understand and communicate about the past and the future. With such a common language in place, users can much more easily explain and discuss with others why they are using a particular set of optimistic/most likely/pessimistic forecasts. Different opinions can be debated in a useful way. Experience suggests that the more experience users gain with analyses of historical life-cycle track records, the better their forecasting skill will be with future life cycles. *In summary, the life-cycle valuation model is designed to enable users to better understand firms' past performance, pinpoint key valuation issues, decode market expectations, and help judge the plausibility of forecasts*.

The life-cycle valuation model using CFROIs for economic returns was developed at Callard, Madden & Associates in the 1970s and UBS HOLT continues this research program today. Most large money management organizations subscribe to the UBS Holt Global database.

Madden (1991), (2020)

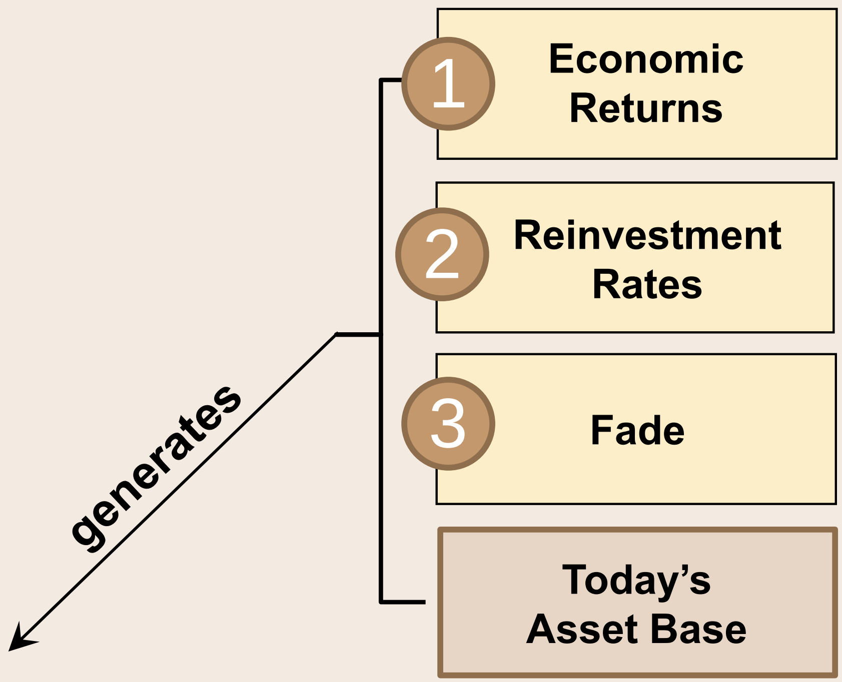
USE LIFE-CYCLE VARIABLES TO FORECAST LONG-TERM NET CASH RECEIPTS



There are important technical challenges in transitioning RONA/ROIC, based on as-reported accounting data, to economic returns, i.e. adjusted for intangibles and more, Madden and DeMuro (2025).

Madden (2020)

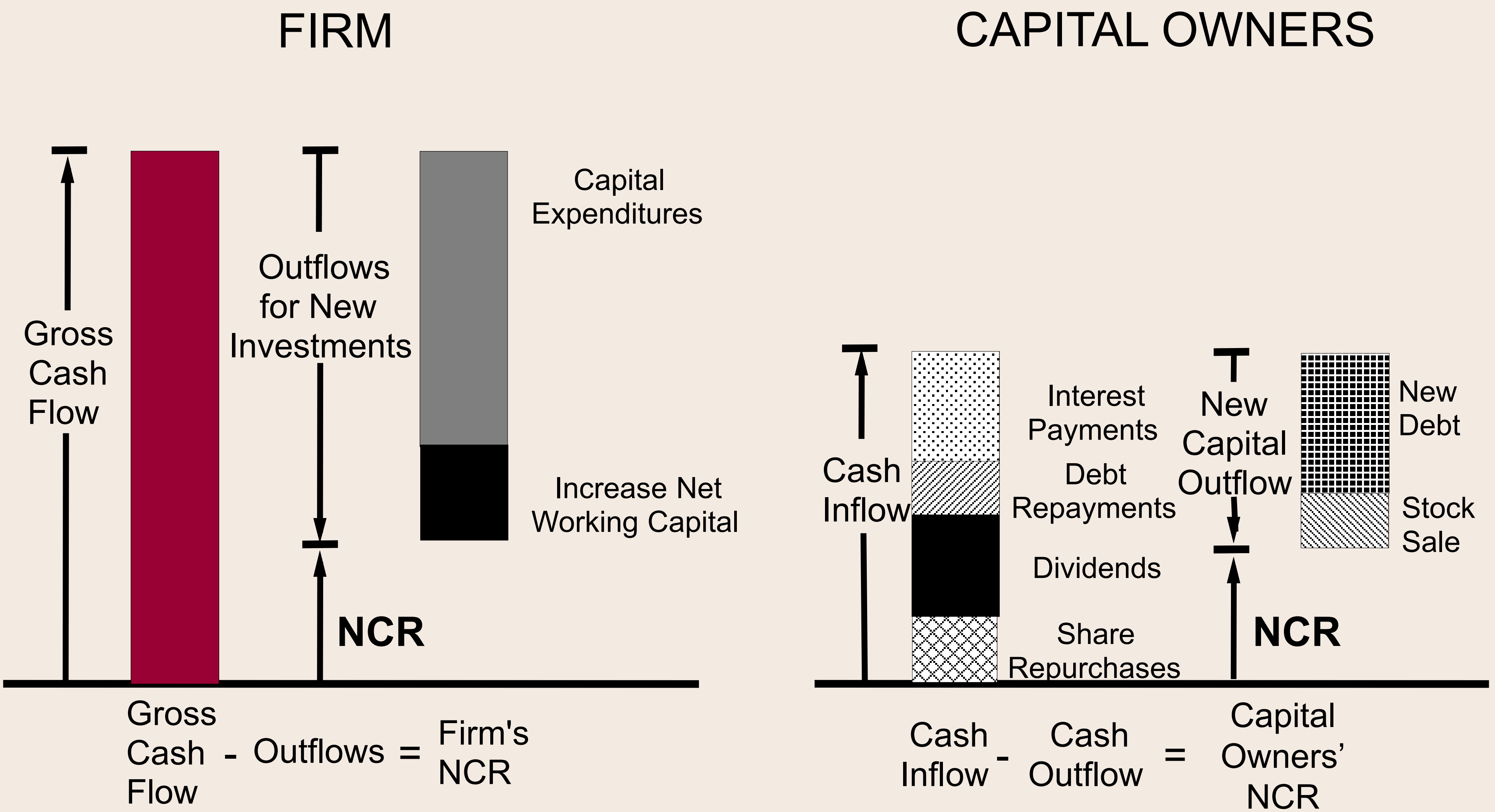
LIFE-CYCLE VALUATION MODEL



$$\text{Warranted Value} = \sum_{t=1}^{\text{LIFE}} \frac{\text{Net Cash Receipts}_t}{(1+\text{Investors' Discount Rate}_t)^t}$$

Madden (2020)

TWO EQUIVALENT CALCULATIONS OF NET CASH RECEIPTS



There are myriad definitions of free cash flow used as a proxy for net cash receipts (NCRs). It is useful to clearly specify NCRs which, from the firm's perspective, are gross cash flows less investment outlays. Readers with a sharp pencil can verify that NCRs from the firm's perspective equal NCRs from the capital suppliers perspective.

THE DETERMINANT OF EXCESS (POSITIVE/NEGATIVE) SHAREHOLDER RETURNS

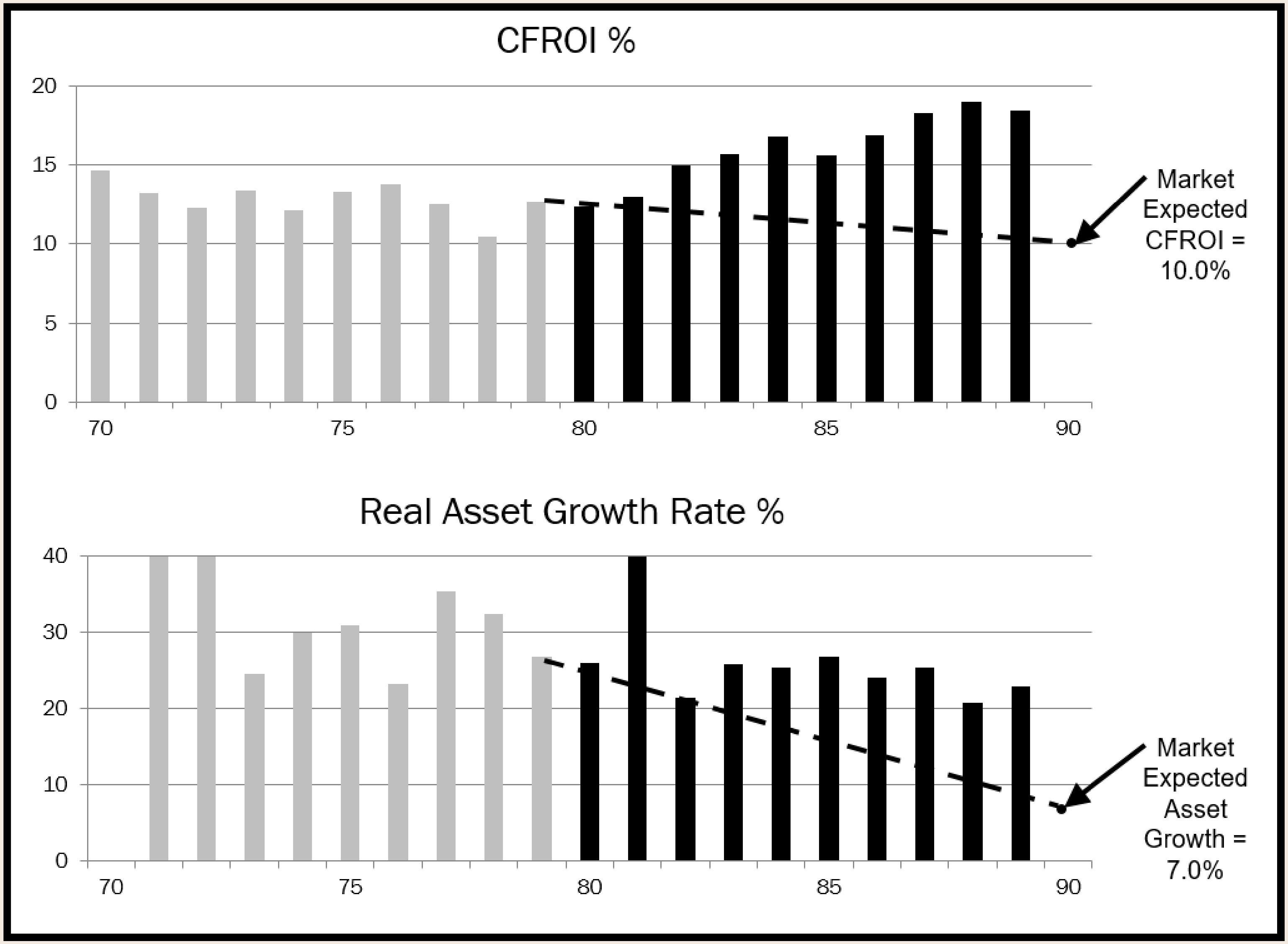
Dealing with the question of what causes excess shareholder returns over the long term requires quantification of investor expectations of financial performance at the beginning of the period and comparison to subsequent financial performance. The life-cycle framework is ideally suited for this task.

At the beginning of the period, given the known market value of the firm and the estimated investor discount rate, use the life-cycle valuation model to derive the implied future net cash receipt stream expressed in life-cycle language (future fade rates of economic returns and reinvestment rates). Deviations from expected life-cycle performance versus actual are the determinant of excess shareholder returns.

Interestingly, professional money managers who utilize the life-cycle framework (and valuation model) routinely quantify investor expectations of future fade rates implied in current stock prices. In seeking excess (positive) shareholder returns, they use the term “best the fade” for the possibility that a firm will generate a future fade rate that is more favorable than the market currently expects.

The topic of estimated (market-implied) discount rates is covered in detail in Madden (1999). For a recent and more technical explanation see Holland and Mathews (2018).

WALMART, 1980 – 1990, SIGNIFICANTLY EXCEEDED INVESTOR EXPECTATIONS AT YEAR END 1979



Source: UBS HOLT global database. Madden (2016). Figure 6.6.

CONNECTING A FIRM'S FINANCIAL PERFORMANCE TO VALUATION

We have now addressed the four essential criteria for evaluating a theory of the firm:

- ✓ Facilitates systems thinking
- ✓ Clarifies the purpose of the firm
- ✓ Identifies the critical determinant of the firm's long-term performance
- ✓ Connects the firm's long-term performance to market valuations and shareholder returns

The PTF deserves large-scale implementation, Ambachtsheer (2026), Madden (2025b). On a personal note, the importance of the value creation process is reflected in the mission statement for the Madden (family) foundation:

> Our mission is to promote value creation principles as the foundation for a prosperous society. Prosperity is more widely shared through a society rooted in dynamism with enthusiastic support for experimentation, knowledge building, and innovation by firms, and especially by entrepreneurial startups. With value creation as a guidepost, we are better equipped to transcend the polarization epitomized by capitalism versus socialism or Republican versus Democrat. In so doing, we can build a more civil society where we seek to build knowledge, to create value for others, and to ensure that no one is left behind.

9. ACCELERATING THE COMMUNICATION OF THE WHY AND HOW LONG-TERM VALUE CREATION (CAPITALISM) DRIVES PROSPERITY

Principled Business, https://www.principledbusiness.org, is a nonprofit organization that convenes and equips investors, executives, and founders to advance the principles of capitalism. Here are their thoughts on how the Pragmatic Theory of the Firm will facilitate their educational initiatives in partnership with our family foundation, Madden (2024, p. 207):

"Public debate about capitalism often collapses into caricature. Critics reduce firms to extraction. Defenders reduce them to profit maximization. In the absence of a widely understood and viable theory of the firm, polarization has intensified, debates over shareholder versus stakeholder capitalism have become circular, and many management teams have defaulted to short-term earnings optimization rather than long-term value creation. Neither side offers a coherent explanation of why some companies compound value for decades while others decay.

The Pragmatic Theory of the Firm provides that missing foundation. It offers a rigorous, systems-level explanation of how firms create sustained economic returns through knowledge-building proficiency, disciplined reinvestment, trust-based stakeholder relationships, and life-cycle awareness. It reframes shareholder value not as the purpose of the firm, but as the result of fulfilling a coherent multi-part purpose grounded in ethical conduct, sustained innovation, and long-term stewardship. In doing so, it dissolves the false dichotomy between shareholder and stakeholder models and demonstrates that purpose, culture, decentralized decision-making, and long-term capital discipline are structural drivers of durable performance. This is precisely the kind of framework our movement needs. *Our work requires a coherent operating framework that explains how principled leadership translates into sustained institutional performance. PTF provides that framework. PTF is the intellectual operating system, and Principled Business is the formation and distribution engine."*

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