Putting the Long Term to Work: Shaping the Prudent Society Investment Model

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KEY FINDINGS

- There is an increasing need for a new investment model as climate change and transitions in the economy and financial markets cause a rethinking of the role of institutional investors.
- The Prudent Society Model is a promising emerging investment model that focuses on taking ownership of investments, becoming robust for short-run disruption, and unlocking new market opportunities as a result of various sustainability transitions.
- The Prudent Society Model requires investment leadership to reorganize itself. The new board culture will be much more dynamic than the current one of risk-averseness and static allocations.

ABSTRACT

Thinking small is the last thing institutional investors should be doing right now. A fundamentally new investment model, best described as the Prudent Society Model, is emerging to cope with the changes, risks, and opportunities resulting from the sustainability transition. Institutional investors who are the first to succeed in getting this model right will flourish. The model integrates three insights: focusing on short-term disruption for long-term success, developing tools to successfully exploit new instruments and unlock new markets because of climate change, and deepening the ownership of investments. The authors suggest that boards need to learn, adapt, and experiment to implement this model.

What will be the compelling alternative to today's dominant models for investing and asset allocation? Investors are increasingly getting back to the drawing board to tackle this challenge. For many years, investment officers in cutting-edge endowments, foundations, and pension funds have followed an investment model first introduced and articulated close to 40 years ago in David Swensen's *Pioneering Portfolio Management* (2000). But then in 2008, coping with the financial crises and liquidity crunch, investors wondered if the model had not been broken, finding that exploiting investment opportunities from alternative strategies was far more difficult to replicate. This led investors to explore and adopt elements of the Norway model (Chambers, Dimson, and Ilmanen 2021) as a compelling alternative where diversification was shaped with mostly publicly traded securities, strict benchmarks, and sustainability engagement. Ten years later, however, investment officers and boards are raising doubts on both models and searching to merge new insights with the best from both models. What are these challenges and insights, and what type of investment model and asset allocation must be developed to meet these challenges while delivering reasonable investment returns?

With the search for a new model picking up speed, it has the potential to reshape the financial sector as the endowment model once did. In this article, we describe and evaluate the emerging model that could best be described as the Prudent Society Model. We chose *prudent* because a prudent investor invests other people's assets as if they were her or his own, considering the needs of the trust's beneficiaries, which not only grasps but also leverages the investment impact on society. The Prudent Society Model combines building blocks to be robust for disruption, unlocking markets, and redefining investment ownership. By understanding this model, we can learn what might be profitably imitated and what organizations are likely to explore this approach in the future. Our article is structured as follows. We provide background on the main challenges investors working with their investment models face today and translate these into building blocks for a successful long-term Prudent Society Model implementation. We identify the differences and commonalities with the main existing investment models and discuss how governance and investment organizations must change to accommodate this.

BACKGROUND

Challenges for successful institutional investors have increased dramatically over the years. Not only has the number of financial crises they have had to cope with increased, but so has the severity of those crises. Unprecedented changes in monetary regimes and bailing out financial systems on several occasions have led to a call to rethink the role of financial institutions. Shocks such as the supply chain squeeze in the Suez Canal in 2021, the COVID-19 pandemic in 2020–2022, and the war in Ukraine demonstrate the vulnerability of globalization and question whether diversification in its current form is still workable within portfolio construction.

Financial crises are the culmination of societal changes, not standalone events. To make sense of these changes, investors typically explore them through scenarios, allowing an integral view of how these changes could interact. If any of the scenarios unfold in the way predicted, then society and the economy might be heading toward an unprecedented transition period in consumer and producer behavior, government regulation, and new demands on the financial markets to cope with the effects of climate transition.

In particular, the role of climate change stands out in these scenarios. Investors typically work with probabilities, based on repetitive patterns of securities in the financial markets, allowing investors to learn and adapt. Climate change, on the other hand, represents a singular path, where probabilities are less useful and a potential negative outcome might be irreversible for consumers and investors alike (Litterman 2021), and the costs of delaying mitigation to reduce these risks increase prohibitively (Kent, Litterman, and Wagner 2022). The scale and enormity of climate change have started a societal debate worldwide, questioning everyone's role in helping mitigate or contribute to potential solutions.

This debate especially resonates with institutional investors. For over a decade, many investors have unwillingly or unknowingly moved toward short-term risk-averse behavior. After the Global Financial Crisis of 2007–2008, regulation has been a driving force for this, and for good reasons, aiming to increase financial stability or enhance investor protection. A side effect has been that entrepreneurial activities have been discouraged, and institutional investors have been encouraged to stay close to their strategic knitting, but this knitting has been unraveling for some time. Pension funds, endowments, and sovereign wealth funds are committing themselves to a wide range of pledges, covenants, and other sustainability initiatives with a longer horizon and of a more entrepreneurial character because they clearly see a role for themselves in the transition and changing society.

Long-Term Challenges

In speaking with investors and boards, the more innovative ones are transforming their investment model to tackle three challenges. The first challenge is to become more robust for disruption. They must stay in business, managing short-term risk successfully to earn the long-term premium to the fullest. Boards increasingly recognize that any transition—the process or a period of changing from one state or condition to another—is seldom a smooth ride. Given the amount of uncertainty that investors are facing as a result of the climate transition and its interaction with and possible unintended consequences for financial markets, a sound assumption is that the coming decade will see more booms and busts, not fewer, and most likely with greater severity. Following this line of reasoning, boards will reshuffle their agendas to include developing robust short-term balance sheet management strategies simply to survive and be around to earn the long-term risk premiums that the transition might offer.

The second challenge is to take ownership of investments. Institutional investors can fund and facilitate climate transition, but the hard work must be done by the companies in which institutional investors invest. They are on the frontlines of the transition. Some companies are not adaptive enough and will not play a role in the transition. Others will successfully develop technologies to exploit opportunities that require a long investment horizon and thus patient investors. Holding a diversified portfolio without any knowledge of the underlying business activities will not suffice anymore because too much is at stake. Investors increasingly feel the necessity to understand companies on a business level again, assessing which companies will flourish and which ones might not. This will force a reassessment of important investment beliefs about diversification or active management. Is a board prepared to let agnostic market capitalization decide portfolio composition, or will it play a role in actively identifying and stimulating companies it is investing in to be more adaptable and exploit opportunities? If the answer is yes, then this implies that there are self-imposed limits to diversification as well as the number of securities to invest in, which is also a departure from the other leading investment model, the Norway model.

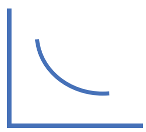
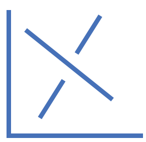
The third challenge will be to unlock and exploit new markets in which to invest. The need as well as opportunities to invest in new technology, infrastructure, redeveloping real estate, and transforming complete industries will require billions of dollars of fresh funding, the development of new innovative financial instruments, and the infrastructure to open market opportunities that did not previously exist or were only in the embryonic stage. In the 1980s, these financial markets and investment opportunities came into existence because of *de*regulation, which considerably expanded the investment universe. In the coming period, new markets will be created due to *re*regulation, such as carbon emission. Does this require a new approach to selecting and exploiting those markets, or do existing skills suffice?

Long-Term Strategy

As challenging as the transformation toward a new investment model might be, the good news is that we can build on accumulated knowledge over the years to develop pillars for this investment model (see Exhibit 1). For developing robust balance sheet management, insights from behavioral finance have been building up since the 2000s. Understanding the companies one invests in has a long and proud

EXHIBIT 1

Building Blocks of Prudent Society Model

Building Block	Characteristics
1. Robust for Disruption 	Separating portfolio construction and balance sheet management; managing short-term risk dynamically with deterministic scenarios; long-term portfolios based on stochastic assumptions
2. Ownership of Investments 	Constructing and managing concentrated portfolios; in-depth analysis of investments; robust for different scenarios; developing and intensifying long-term ownership
3. Unlocking Markets 	Expanding investment set through new instruments and strategies that are developed because of (re)regulation to cope with climate change and other societal challenges

tradition beginning with Graham and Dodd (2005), whose book, *Security Analysis*—first published shortly after the crash of Wall Street in 1934 and at the beginning of the Great Depression, also a period of transformation—laid the intellectual foundation for financial analysis. Finally, the unlocking and exploiting of new markets have been part of institutional investors' toolbox since the late 1970s when the endowment model leveraged the rise of financial markets and deregulation to include new markets and assets in portfolio construction to earn new risk premiums. So how do we adapt these insights in the Prudent Society Model? We will discuss the three building blocks in detail.

Building block 1: Robustness for disruption. Boards usually do not differentiate between balance sheet management (the amount of risk the fund should take under different circumstances) and portfolio construction (the composition of assets and strategies to reflect the amount of risk). In the Prudent Society Model, however, this differentiation is key to long-term success. Boards focusing on redesigning balance sheet management to become more robust for disruptions and cope better with the volatile short-term effects in financial markets might seem counterintuitive when the overall goal is to exploit long-term investment opportunities. Successful boards, however, will have to spend more attention on developing robust short-term balance sheet management strategies simply to survive and be around to earn the long-term risk premiums that the transition might offer.

The surge in gas prices in 2021, the sudden out-of-stock of electronical chips, and the delay in container transport, all of which caused unrest in the financial markets, are apt illustrations of what investors will experience in the coming decade. Transitions are disruptive by nature, let alone once-in-a-lifetime transitions that affect countries, economies, consumers, and investors. Unexpected shocks as a result of asynchronous interaction of trends will increase. For example, the transition to sustainable energy sources will lose speed, increasing the reliance on existing energy sources at a time when institutional investors, because of the expected transition, are pulling away their funding and investments and creating temporary price shocks. These transitions will probably also cause unexpected shocks owing to an increasing awareness about externalities. More information is being generated about externalities—the costs or benefits that a company imposes on others without this being reflected in the market or asset prices. The awareness and knowledge about these externalities might lead investors to act on them in a similar way, however, potentially increasing herd behavior and reinforcing the need for effective balance sheet management. As the world transitions away from high-carbon activities, research into externalities identifies all technologies and investments that cannot be adapted to low-carbon and zero-emission modes and may become stranded. In this process, however, it seems difficult for investors to differentiate between more and less adaptable companies, as in the oil and gas sector.

Boards will prepare for more complexity and unexpected shocks, assuming that financial markets in a transition might become temporarily more disruptive. In this transition, successful boards will differentiate between uncertainty and risk. Risk and return measures will still be applied to long-term portfolio construction. For the short term, however, boards will prepare for and manage the uncertainty with the Prudent Society Model. Balance sheet management—managing how much investment risk under which circumstances—will be redesigned and become more dynamic, where the latest thinking in behavioral risk is incorporated (Statman 2019). This means that in practice risk strategies will become more dynamic, and static asset allocation will lose its dominance. Static asset allocation strategies, the current default for most institutional investors, are strongly based on assumptions, such as that mean reversion in financial markets works, allowing investors to comfortably earn risk premiums. However, when markets become more volatile and uncertain, upholding mean reversion might become a stretch as well. Portfolios will be readjusted on a more frequent basis to adjust the overall risk budget to avoid being dependent on (old) investment assumptions. Balancing short-term disruption and long-term focus is key here. Short-term disruptive shocks simply do not agree well with long-term stochastic measures. Investors will increasingly manage and adjust short-term balance sheet risk with deterministic scenarios, which are updated regularly, where, given the amount of risk, the portfolio construction will be based on long-term stochastic measures. Portfolio construction rekindles an old debate: how to design investment strategies in such a way that the core allocation choices of the portfolio, due to the long-term perspective, are upheld while a flexible shell allows for the dynamic readjustment of risk.

Building block 2: Taking ownership of investments. After 40 years of many investment firms downsizing security analysis and reducing the role of financial analysis of companies in portfolio construction, the pendulum now swings the other way. The overall risks and returns are only as good as its underlying constituents. To be robust for shocks and transitions, boards will feel the need to understand the individual company's capacity to absorb these shocks, and to what degree, or even profit from them. Realizing this, boards typically ask the follow-up question: How far can we reduce the number of securities, freeing up resources to better analyze and monitor the companies while still upholding effective diversification?

Research into climate change accelerates this approach. According to a report by the Intergovernmental Panel on Climate Change (2019), climate change creates externalities that fall outside the markets in which they are created. This leads to the underpricing of risks, the overestimation of returns, and suboptimal portfolios. One approach is the internalization of externalities. Pension boards spend vast amounts to unearth this information to integrate the information in the selection and monitoring of investments, acknowledge that the quality of data as well as its usefulness is a work in progress, and impose limits on purely quantitative sustainability strategies (*The Economist* 2022). A more promising route is to embed qualitative information. They can analyze what the internalization of externalities would be to valuation and what strategic choices of company management to support by working with small concentrated portfolios. As this approach extends to most asset categories in the portfolio, investors are (re)discovering how to be patient, engaging investors with a long-term horizon with the intention of holding on to the investment for decades.

Developing a deep understanding of your investments means choosing investments that require a portfolio construction that focuses on the robustness of the overall portfolio in many different scenarios—not the benchmark but the quality and composition of the underlying securities will lead. As mentioned before, this is not a new approach; in fact, it forms the basis for portfolio management as a discipline, pioneered by Graham and Dodd (2005). Increasingly, investors identify this as a promising approach for integrating multiple goals in the investment strategy; however, this approach requires a major rethinking of selection and monitoring. Quarterly and half-yearly financial updates will remain relevant but decrease in importance. The organizational goals that the fund invests in and the different time horizons for achieving these underlying goals will set the pace. Monitoring will be based on the impact in the real economy, with the understanding that the real economy affects intrinsic value, which in turn could affect long-term returns, essentially an extension of Graham and Dodd's approach. In particular, real assets lend themselves to steer and manage impact.

Building block 3: Unlocking markets. Institutional investors will start working to open and create new markets. This was and will be a cornerstone to earn illiquidity premiums, but the focus is different: New markets will increasingly be tied to financial instruments, challenges, and solutions that are needed for the energy or climate change transition. As an institutional investor, being able to adapt to, help create, access, and develop new markets will be a key differentiating element in the new investment model, and this is where we can learn a lot from the endowment model.

Governments worldwide will change the markets, and subsequently, investment opportunities will change dramatically. The initial success of deregulation—creating new and better functioning markets and instruments and subsequently enhancing welfare—was used as a blueprint for deregulation in international trade and globalization. But markets have a logic of their own, and they tend to generate externalities that happen outside their markets and that are not priced in. Thus, worldwide reregulation of markets is on the agenda. This regulation is not an attempt to reduce the role of markets, but rather an attempt by (supra)national organizations to ensure that the externalities are priced in the current market supply and demand or are addressed in a new market.

The need for creating new markets has never been greater than today. We are missing markets for existing problems where financial instruments have not (yet) been developed or some are not functioning, despite economists agreeing that they add value, such as the market for carbon emissions. Many initiatives that we call impact investments are basically nonexistent markets. The US Securities and Exchange Commission (2022), as well as the European Union, proposed rules for climate-related disclosures, creating awareness for issues that need to be solved, while the European Commission (2019) called on institutional investors to create new solutions, products, and instruments and, hence, new markets.

Creating new markets and fixing existing ones for supporting the adaptation as well as the transition translate into fixing the carbon emissions market, funding a wide range of technologies to heed future challenges, adapting consumer behavior, and redesigning financial incentives and instruments to make this happen. However, investing in local agricultural markets, education, or cheap local transport would be equally valuable. Investors are rediscovering these themes. In particular, pension funds as long-term investors are very well placed for this, as it is one of the few areas where they can add value, especially once they figure out how to scale up these investment opportunities and bring the necessary skills on board.

Creating new markets is not a new model. This model has been pioneered by Swensen (2000) and other investors (McGowan 1993). Swensen's research focused on how to exploit the unique advantages of long-term institutional investors. Although markets and the economy have changed, the underlying questions for investment organizations have not. Do we really grasp and exploit the consequences of a long horizon? What entry into new markets should we consider? How do we shape existing markets into investable markets to earn a first-mover premium?

The challenge in the Prudent Society Model is to reimagine the endowment model—not simply copy it but adapt to it successfully. This will not be easy. From a financial perspective, most pension funds adopting this model have not been able to achieve above-average returns. According to Ennis (2021), it has taken us 30 years to understand the success factors behind the endowment model, and its merits are still fiercely debated. Here, too, a reassessment might be on the way. Institutional investors have created and shaped private markets like private equity. In the Prudent Society Model, they have the clout to change the characteristics of such asset classes to make them contribute more effectively to their own long-term goals, in other words, learning the right lessons from the endowment model (Siegel 2021).

Implementation of the Prudent Society Model

Adopting these building blocks can fundamentally change the investment industry, the investment process, portfolio construction, and governance to create a new investment model. Yet, the model is also called the Prudent Society Model for another reason: The application of the building blocks is known skills and techniques for fiduciaries when fulfilling their fiduciary duty. The combination and approach are different, however, and require innovative thinking. The task ahead for a board is to design a coherent combination of goals, risk appetite, investment beliefs, and governance of investment implementation. This provides a blueprint for achieving the pension fund's goals on behalf of its participants, guides the investment decisions and resources of the fund, and directs the board on what strategic tenets they should focus (Koedijk, Slager, and Van Dam 2019).

More specifically, boards have their work cut out for them with three challenges ahead. First, recalling the license-to-operate discussion, boards and their investment staff in this model need to become more entrepreneurial. Rather than investing in equities, bonds, and real estate, they will need to figure out what new markets will be needed and start shaping them, that is, which ones will leverage the characteristics of pension funds, and is this reflected in the mandates for the investment organization?

Second, boards need to shed comforting yet limiting beliefs. Boards have been trained and recruited in a period where being in control has dominated the board culture. The focus on broad diversification, benchmarks, tracking errors, and allocating to existing assets and securities had been very much part of the Norway model and must now be reconsidered by boards adopting elements of this model. For example, diversification as an investment belief is key, but does this mean diversification over 5,000 or 50 equities? Boards seldom have a discussion on the effectiveness of diversification or read up on the new insights researchers have been producing. Worryingly, some boards skip the discussion altogether and let asset managers fill it in, who, with the best intentions, revert to the broadest and most commonly used solutions, which are not necessarily the best for the fund. In fact, as shown in Exhibit 2, there are many investment beliefs that, if not discussed and understood properly, hinder boards from participating in the climate transition and hinder them from adapting to become or remain successful long-term investors.

A third challenge for a board is to decide on how to move toward the Prudent Society Model. Over the years, institutional investors preferred an incremental over

EXHIBIT 2
Challenges to Existing Investment Beliefs

Investment Belief	Challenge to Consider
Diversification	Optimal diversification does not mean including all available securities but also being robust for different scenarios.
Pricing in of information	Short-term information is priced in, but long-term trends resulting from its uncertainty might well not be.
First mover advantage	Would you as a fund invest in different investment opportunities in the start-up phase, accepting diverse outcomes but contributing to the transition, or invest in a later mature phase, and how is this choice linked to the competencies of the organization?
Long-term horizon	Is "long term" simply patience, holding on to the investment, or stimulating the company to make strategic choices that with short-term investors would not have been considered?

a radical approach, steadily adopting elements along the way. Successful investors apply investment models that are seldom truly new investment models. They are adaptive and evolve. They absorb new elements and lose old features; however, transitioning boards must be aware that successful investment models are consistent as well as consequential in the execution of their strategy. They focus on tightly integrating investment philosophy, implementation, and organization.

PLANNING FOR THE FUTURE

This investment model will dominate markets for the coming decades. It will evolve and adapt but tap in on the main fundamental drivers. There is work cut out for you as a board, on the portfolio management side as well as on the organizational side.

Most boards will not start from scratch. Boards are currently experimenting with different elements of the Prudent Society Model. This article presented the full integral picture to help boards in their strategic discussions, that is, what will be the overarching strategy when sustainability is considered, and to what investment model should we transition to realize this successfully? Pension boards could wait and see how this evolves, but they can also start learning and preparing for the Prudent Society Model by shaping up the fund to become robust for disruption, taking active ownership of investments, unlocking new markets, and leveraging the characteristics of long-term investors.

One of the reasons that the endowment model was so successful for Yale and Harvard was because their organization and investment philosophy were developed before markets really took off. A truly successful investment model not only identifies a fundamental driver but also has a thorough understanding of why this driver is so important and steps in at an early stage. The endowment model came into existence when financial markets deregulated in the late 1970s and early 1980s. Then, there was a deeply felt desire to allow financial markets to self-regulate supply and demand and to let financial innovation drive the creation of new markets. A key differentiating element, access to new and other assets, went hand in hand with the fundamental deregulation drive.

Long-term investment success will depend on the fund's culture and competence and on building and retaining professionalism. The board needs to exploit the competitive edge of its long horizon by unlocking new markets and deepening ownership of its investments while building more dynamic strategies to successfully cope with volatile and transitioning markets. The model might not be for every board, but it has the potential to deliver sustainable returns for participants as well as the society they live in.

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