



International Centre for
Pension Management



Rotman School of Management
UNIVERSITY OF TORONTO

ICPM Case Study

Dynamic Asset Allocation: Useful Tool or Dangerous Diversion?

Jack Gray and Stefan Lundbergh

September 12, 2010

This case was written by Jack Gray, Adjunct Professor, Paul Woolley Centre for Capital Market Dysfunctionality (Australia) and a member of the ICPM Research Committee; and, by Stefan Lundbergh, Head of the Innovation Centre at Algemene Pensioen Groep (Netherlands) and Chair of the ICPM Research Committee. Funding was provided by the Rotman International Centre for Pension Management, University of Toronto, Canada. This is a composite fictional Case Study based on historical facts.

For Further Information:

Rotman International Centre for Pension Management

151 Bloor Street West, Suite 702
Toronto ON M5S 1S4 CANADA

Tel: 416.925.4153

Fax: 416.925.7377

icpm@rotman.utoronto.ca

www.rotman.utoronto.ca/icpm

Dynamic Asset Allocation: Useful Tool or Dangerous Diversion?

Case Study Overview

What are the critical investment and organizational issues that need to be understood and resolved in order that (various types of) DAA add most value to a fund?

The Omen

As the sun's rays struggled through the mist over his adopted city, Nicholas Platescu abandoned rationality. He sensed that his days of peace were at an end, just as his beloved Ruritanian grandmother had predicted on her deathbed not two weeks before. He was only slightly embarrassed by his sporadic belief in omens—had they not led her to predict his rise from backbreaking work in the Ruritanian oil fields to Chairman of Europe's third-largest oil and gas company? On cue, his reflections were interrupted by the first bars of "Ode to Joy," the iPhone ring identifying the caller as his childhood friend, the Minister of Finance. Warily he listened to his friend's sharp request, which concluded with a twist of guilt reminiscent of his grandmother: "Please accept the Chairmanship of NaWeF. Your country needs you again."

The Fund

The now US\$80-billion National Wealth Fund of Ruritania (NaWeF) was in trouble. Designed to provide for the country's future once the oil and gas were depleted, NaWeF had captive money and a guarantee of no outflows for the next 20 years, which meant it could luxuriate in a genuinely long-term investment horizon. When NaWeF was established 12 years ago, the government accepted traditional advice and specified its objectives as:

1. Over the long-term, achieve real returns of at least 3% a year in USD, net of all costs and charges.
2. This return is to be achieved with acceptable levels of risk.

As a more specific measure of risk, and as a way of monitoring NaWeF's flight path, the government insisted on using a "health indicator" (*HI*) defined as the ratio of the market value of assets, including all net capital flows, to their value if assumed to grow at 3% real per year. *HI* is a theoretical benchmark "asset" that grows triennially with inflation plus 3%.

3. Over rolling three year periods *HI* must always be above 60%.

Although all investing was outsourced, the confluence of the NaWeF's newness and the Minister's global reputation made it easy to attract a high-flying alpha-squared¹ CEO supported by a small high-quality

1. *i.e.*, an *alpha*-extracting *alpha* male.

internal team to select managers and to automatically rebalance back to the strategic policy mix monthly or when there were substantial cash flows.

NaWeF's non-executive government-appointed Board had hired² a well-known global actuarial / asset consulting firm, WK Consulting, and adopted its standard *modus operandi*: Commission an asset / liability study based on the firm's long-term forecasts of returns and covariances. Using a stochastic target-optimizer constrained by $HI > 60\%$ and "tailored to NaWeF's unique circumstances," WK presented the Board with a range of potential strategic asset allocation (SAA) portfolios on an efficient frontier. From this the Board selected as NaWeF's policy portfolio that mix with the greatest probability of returning 3% real over the long term (Exhibit 1). WK Consulting repeated this asset / liability study every three years. It hardly changed. The largest deviation from one study to the next was a 3% underweight to global equities, a position the Board closed out after less than a year's disappointment. As part of its oversight, the Board "looked at the SAA" every year, tinkering with the weights based on the latest market sentiment.

Exhibit 1. Policy Mix

Asset Class	Policy Mix		Min, Max
Cash	0%		0%, 10%
Equities	40%		20%, 50%
<i>Global Markets</i>		25%	
<i>Emerging Markets</i>		15%	
Fixed Income	35%		25%, 60%
<i>Government</i>		15%	
<i>Corporate</i>		20%	
Alternatives	25%		10%, 40%
<i>Commodities</i>		8%	
<i>Real Estate (listed)</i>		12%	
<i>Other</i>		5%	
Total	100%		

For the first few years, NaWeF delivered annual returns well in excess of 3% real net of fees and costs, with more than acceptable levels of risk, and HI never fell below 112%. In those glory years the Board, the internal staff, the actuarial / asset consulting firm, NaWeF's plethora of managers, the Minister, and his government all basked in the reflected glory of high and stable returns well in excess of those of all known sovereign wealth funds. The CEO became a media star, hounded by paparazzi, whose counsel on investing was sought worldwide by investment professionals and policy makers of all political complexions. He was renowned for his alpha-generating focus on manager selection and his public

2. The Board merely "hired," rather than "partnered with," the firm.

advocacy of integrating environmental, social, and governance (ESG) factors within portfolios. Vulnerably endowed with rock-star-like status he found himself encircled by predators selling the latest and most complex structured products. His fame was enhanced by his early adoption of and the initial stellar returns generated by these products, all of which, the Board was assured, were within the philosophy and range of the static policy mix and all of which readily fell under the rubric of “liquid.” The atmosphere surrounding NaWeF was redolent with the sweet aroma of hubris. And that, the most ancient and striking of all omens, was missed by the Board ... but not by the gods of capital markets. When, late last year, they exacted their punishment, the damage was stark and painful. NaWeF lost more than 21% of its value, and the *HI* was dragged down to a mere 75% ... and seemed headed ineluctably towards 60%, if not beyond (Exhibit 2).

Exhibit 2. NaWeF Historical Performance

	3 Years Ago	2 Years Ago	Last Year	5-Year Average	10-Year Average
Total Return	16.2%	12.3%	-20.2%	4.5%	6.0%
Inflation	2.1%	1.9%	1.2%	2.2%	2.1%
Real Return	14.1%	10.4%	- 21.4%	2.3%	3.9%
Health Indicator	113%	112%	75%	107%	110%

This dire situation was inflamed when the Shadow Finance Minister claimed on TV that NaWeF had “massively” underperformed its peers as “a direct result of managerial and Board incompetence,” and that the “usual Wall Street suspects” had “offloaded onto the unsuspecting Board” large exposures to structured products, including CDOs, that neither the Board nor management understood. But it was his final throw-away comment that stuck in the Minister’s craw: “They’re all donkeys. Blind Freddie would have seen the crisis coming and got out of the way. When I’m in charge, Ruritania’s economic future will be secure.” The Minister was less than pleased, and expressed his displeasure ruthlessly by demanding and accepting the resignations of the Chair and a majority of members of the Board and by insisting on a more dynamic but disciplined approach to investing.

A New Chair, a New Board, a New Way

The morning’s phone call saw Nicholas “volunteer” to be the new Chair. Chairman Platescu’s first call was to meet the CEO, a meeting that confirmed his prior opinion that the CEO had inappropriate skills and temperament. Combined with the evidence that the CEO had misled the Board, Nick had no option but to fire him. His second and contemporaneous decision was to call an emergency meeting of the new Board with a single agenda item, one that echoed Lenin’s famous call: What is to be done?

After an all-day session against the still raw backdrop of last year’s crisis, Nicholas strategically led the new Board to conclude that

- The standard framework of asset / liability modeling and risk modeling were not fit for purpose, especially, but not only, in a crisis. The Board considered it essential that new management investigate and adopt more “dynamic” approaches to investing. It was especially concerned about tail risks and was drawn to the possibility of managing and hedging those risks.
- Previous management was misguided in its almost exclusive focus on the search for alpha, and later for the new-new thing, rather than on total return.
- Consistent with the old Board’s explicit investment belief that markets are micro-inefficient, management had focused only on active management *within* asset classes and, aside from automatic rebalancing, had made no serious attempt to extract value either from *absolute* mispricing of entire asset classes or from relative mispricing *across* asset classes.
- The organization’s culture resembled that of the investment arm of a bank selling retail funds, thriving on the excitement of the new while hugging benchmarks and minimizing career and business risk. The culture and decision-making had to be transformed to those of a genuine long-term institutional investor.

The Board spent considerable time discussing the *type* of person needed as a CEO: his / her experiences, temperament, and motivations and, especially, whether s/he was a “transformative” leader. With as much objectivity as possible, the Board assessed the previous CEO’s strengths and weaknesses. He had been selected partly on the basis of well-earned success as an aggressive equity portfolio manager who talked a great game; but his advice to the Board never seemed to vary: “Remain static in asset allocation and extract abnormal returns through alpha-hunting”—advice which, over time, had not added net value. Moreover, the previous Board had often complained that the decision items he brought to it were (intentionally?) not really Board issues and were occasionally misleading.

In reaction to this assessment, but mindful of not fighting yesterday’s war, the new Board was unanimous in its decision to search for a CEO with experience in “the real world”—that is, in the real productive economy, not just in the financial paper economy. Not for the last time, Nicholas’s leadership style was on display when he announced that he knew the ideal candidate, a woman he’d worked with who had the right temperament, values, and ethic—and, critically, someone he trusted implicitly. Angela Thompson (Ann to her friends and colleagues) was duly appointed.

As directed by the Minister, her somewhat inconsistent objectives were to

1. restore *HI* to 100% within five years, without risking “too much” on the downside;
2. ensure that *HI* never falls below 60% (anything less would be “totally unacceptable”); and
3. maintain high levels of liquidity.

Sotto voce, the Minister told Ann that at an appropriate time he intended to remove Objective 3.

The New CEO

Ann Thompson is over-endowed with the academic qualifications that are the price of entry to institutional investment management: a PhD thesis titled “A Quasi-Bayesian Approach to Stochastic Inverse Problems in Oil Exploration” and an MBA from a top-ranked business school. More importantly to Nicholas, she is known as a good leader with a strong moral compass, a reputation for firmness and decisiveness, yet wonderful with people. She tends to do things her own way, but in all her roles has consistently delivered results. Importantly, she is now independently wealthy and thus not financially dependent on her new role. She is largely motivated to work unselfishly for the “greater good” ... but not totally. She’ll fight to uphold her reputation as a high achiever, a long-term thinker, as one who delivers. In the sense of *Good to Great* (Collins 2001), she is a Level 5 Leader, “one who blends genuine personal humility with intense professional will.”

In the oil industry, she was responsible and accountable for some very large and very long-term financial and investment decisions across the value chain from exploration to extraction to refining. She worked at the Ministry of Finance early in her career, and spent eight years on the Board and Investment Committee of the large pension fund of her previous employer, the company founded and chaired by Nicholas. Through this work she developed a large global network in finance and investments that she hopes will provide access to a variety of experts and to relatively unbiased advice. With good reason, she is confident of support from the new Chair of the Board and of the Investment Committee, Nick Platescu, with whom she arranges to meet once a quarter.

Being new, she has not a whit of *system justification*, of instantly mounting powerful and coherent arguments in support of the status quo. She has yet to be steeped in the “right way” of doing things. Crucially, she has no “mates” in the industry to whom she owes favors. Both she and Nick recognize that the *yin* of her considerable strengths is inseparable from the *yang* of whether she can successfully transfer her skills from oil to portfolio investing. In discussing the advantages of a Buffett-type mentor, she expects Nick to have the ideal person in mind. She is not disappointed.

David Raubgraf made his considerable wealth in the design and manufacture of industrial knitting machines. Thirty years ago he sold his many businesses to manage the family fortune, which he found endlessly satisfying and as a result of which he was justly recognized as one of the wisest of institutional investors. Since making his first billion, David has been nagged by Andrew Carnegie’s admonishment that “the man who dies rich, dies disgraced.” Coincidentally, just as NaWeF was being established, he resolved to follow Carnegie and spend the rest of his days divesting, giving away his wealth. At that time he was offered the Board chairmanship, an offer he rejected after discussing it with his long-time friend Nick. Now, years later, he has to admit that neither his temperament nor his restless energy are suited to

divesting; *investing* is his very essence. On his way to see Nick to discuss his timely offer to mentor Ann, he tuned in to his favorite song and, for the thousandth time, heard how “You can check out any time you like, but you can never leave.”³ Here was an omen. David could never leave investing.

Exploring DAA

In her systematic but intuitive way, Ann begins thinking through the Board’s concerns by means of engaged listening and reading. From David Raubgraf she hears firsthand about the industry’s inner workings, of the herds of elephants in the room, of personal and institutional biases, of how decisions are really made, of corridor chats and power struggles, all of which chips away at her *yang*.

The Board has emphasized the weaknesses in the previous CEO’s investment approach and style, especially the lack of dynamism and the increasing difficulty of extracting net alpha from within asset classes. Ann is intrigued by the possibility of extracting value *across* asset classes and the greater likelihood of its persistence thanks to a weaker arbitrage mechanism, a consequence of silo structures, narrow mandates, and the dominance of business and career risk. She frequently hears about *dynamic asset allocation* (DAA) as she talks and listens to a variety of experts, whose views she filters through David’s overlay of wisdom and experience. Mischievously, he warns how fashion-conscious the investment industry is, how fads like 130 / 30 appear and disappear with equal rapidity, confirming Oscar Wilde’s pithy remark that “Fashion is a thing so ugly we have to change it every six months.”

Ann does extract some insights and draws a few tentative conclusions.

- From *internal staff* she senses a lack of clarity as to what the risk-free investment really is and, more generally, a lack of strategic vision regarding their roles and purpose.
- From *consultants* she learns their version of “best practice” and how, before the crisis, consultants eschewed any form of DAA as not possible. It concerns her that now they see value in DAA, with each firm claiming superiority. After a tiring day spent with consulting firms, she dreams of barn doors closing after bolting horses.
- From *academics* she feels the seductive power and beauty of rational expectations and the efficient market hypothesis. She observes how theory holds them in such sway that even when fundamental flaws are exposed, they continue to use the theory in teaching and research, partly for agency reasons and partly because of the abject lack of elegant alternatives. Refreshingly, she hears of academics using the financial crisis to challenge the dominant paradigm.

³ Eagles. 1976. *Hotel California*

- With *peers*, mainly sovereign wealth funds, she can only manage to brush past a few minor topics, thanks to a subtle but ever-present sense of competition between them—an attitude she finds odd in spite of a life spent in the brutally competitive world of oil and gas. She wonders if value could be added through far greater cooperation between like-minded people and funds, a topic she promises herself to return to.
- From *fund managers*, she witnesses different types of asset allocation. A very few multi-asset class managers have genuinely long-term approaches, making courageous “bets” based largely on valuations. More traditional “balanced managers” make small bets around a static SAA benchmark, bets that appear to churn without adding value, though at this stage Ann lacks hard supportive evidence. Others offer a *tactical* asset allocation (TAA) overlay that competitors claim has never worked. She senses elements of bait-and-switch from marketers who sometimes emphasize enhanced returns and at other times emphasize risk reduction. She invites presentations from managers claiming expertise in hedging tail risk as a special form of DAA, claims of which she remains deeply skeptical.
- With single- and multi-strategy *hedge funds*, some of which have been TAA overlay managers, she draws inspiration from their “absolute return” risk framework and the ability of the better ones to consistently extract net value from the relative mispricing of assets and standard asset classes and from newer investment opportunities such as royalties and insurance-linked securities. She is relieved to meet a small number of investors who think and act within an absolute return framework.

Having seen how highly correlated extreme tail risks are, Ann is open to risk models beyond the traditional framework of mean-variance, log-normality, irrelevance of starting price, and stability of correlations. She infers that it was an over-belief in the stability of correlations that failed, not diversification. With her academic and industry past, she is aware that correlations are a (linear) statistical artifact, and she therefore tends to the view that the critical factors in DAA are the (non-linear) “drivers” of returns that are intrinsically more difficult to identify and assess. A few key discussions lead her to refocus on Knightian uncertainty, as she did in the oil industry, in addition to quantifiable risk. As an oil industry senior executive, she could ill afford uncritical acceptance of quantifiable financial risks as an adequate proxy for real economic risks. She is amazed that investment people worry more about the probability of loss than about the expected *impact* of the loss. In oil and gas, Ann insisted on serious scenario analysis and planning as a hedge against what her new industry labels “tail risk.” She shivers when she recalls engineers’ assurance that her company’s gas pipeline in Ma’gikistan had “a 1:1000 probability of leaks over the next hundred years.” It was her advocacy of scenario planning, combined with a pragmatic insistence on integrating ESG within business practices that prevented a disaster that could have destroyed the company and perhaps even brought down a government or two.

During her exploratory stage, Ann reads widely.

- Peter Bernstein’s paper on how traditional SAA is insufficiently dynamic (Bernstein 2003) impresses her with its challenging of the status quo. David Raubgraf earns his keep by giving her David Swensen’s contrary response (Swensen 2003) and by revealing a hidden reason for Swensen’s position. In the United States, asset allocation calls are traditionally made by investment committees; Swensen believes they lack the capacity and temperament to undertake this task effectively. For him, static allocations are the safest way of hedging committees’ or CEOs’ temptation to fiddle.
- Her academic persona writhes as she sees Gary Brinson et al.’s studies of asset allocation (1986, 1991) twisted to suit commercial interests. Ibbotson and Kaplan (2000), patiently illustrating the difference between *variability* and *level*, slightly restore her confidence in the investment community.
- David Raubgraf insists that she read and re-read Keynes’s *General Theory*, chapter 12, “The State of Long-Term Expectations” (1936). Keynes’s insights and prescience about markets, organizations, and people, combined with the power and complexity of his ideas and their inseparability from his eloquent, creative language are, in the words of her 13-year-old daughter, “like totally awesome, dude.” With tongue only slightly in cheek, she promises David she’ll read Chapter 12 every night before bed.
- Evidence of different regimes from a variety of ICPM research papers on asset allocation, governance, and ESG in the investment industry and the *Ambachtsheer Letter* on “seven coherent investment regimes in the last century” (Ambachtsheer 2010) reinforces her belief in the need for more dynamic allocations.
- In reading *Fortune and Folly* (O’Barr and Conley 1992) and the more recent *An Ethnography of Wall Street* (Ho 2009), Ann is reminded of the negative impact inappropriate cultures can have on outcomes.

She is surprised by the ubiquitous industry pattern of long-termism, since all she sees and hears are short-term thinking, attitudes, and decisions. Her experience in *real* investing, as compared to portfolio investing, has imbued her with the stomach, the mind, and the temperament for long-term decision making. As a *real* investor, she finds it strange that market-weighted benchmarks are the norm when those portfolios bear little relevance to the return target of CPI+3%. As part of her learning she investigates the latest ideas on risk parity, fundamental indexing, and minimum variance benchmarks. The main cultural oddity with which Ann struggles is why implementation risk (alpha) is discussed, monitored, and managed so carefully while solvency risk (beta) is left more or less unmanaged, aside

from regular *pro forma* asset / liability studies. Her interest in various forms of risk budgeting is mitigated by the frequent lack of clarity about the definition of risk. On the one hand, asset classes' risk / return tradeoffs do have a modest degree of stability, which argues for allocating risk rather than capital. On the other hand, in a mean-reverting world, long-term investors should have substantial exposure to equities, even if the total portfolio's risk is then dominated by the equity risk premium. These and other oddities, and their potential impact on Board attitudes, she discusses with Nick at their first quarterly meeting.

Scratching the Organization

Much as Ann has enjoyed the intellectual conundrums, her finely honed commercial sensibilities trigger a call to action. Her first step is to get to know people by walking around, a technique fraught with challenges, especially the first time by a new boss. People will watch her as children watch their parents; they will see and interpret signals, including some that aren't there. Though knowing the critical importance of the back office, Ann has little empathy for administration and so needs to be particularly sensitive to its people. She starts there. With a few pointed questions, she penetrates the team's façade of effectiveness. She is astonished at the poor quality of people and processes, the lack of automation, and the inadequacy of reporting tools. Two failures are especially pertinent: timely portfolio holding reports are not available, and no one can provide a costing of business units. Her initial assessment, supported by her oil-industry experience, is that, not being core, administration should probably be outsourced—otherwise it will consume valuable management time. Though outsourcing is a relatively easy fix, Ann relegates it to the bottom of her priority list, with one exception: as of today, the back office no longer has veto power over investments.

On her way to meet the investment team, Ann berates herself for her bluntness and poor performance with administration. "So much for signals and sensitivity," she muses.

Her introduction to the two-person equity team is slightly better. They appear to think and behave more like day traders than like long-term investors, but by all measures they have done well, which she publicly acknowledges.

She knows the ESG team well from an occasionally adversarial position. It is known throughout heavy industry as ferocious in driving its agenda through corporations, threatening the Wall Street walk when negotiations faded. So Ann is taken aback to find the ESG team internally separated from decision making and almost totally marginalized—a wolfhound outside, a puppy inside.

The small combined risk management and asset allocation areas are dominated by the values of the previous CEO: short-termism, mean-variance thinking, and a purist approach to constructing "optimal" portfolios, notwithstanding the team's frequent challenges. In a world of uncertainty, robustness should, but didn't, play a key role in portfolio construction. At Ann's request the team presents a short summary

of the traditional ALM results, which convinces her that “business as usual” is unlikely to allow NaWeF to reach its targets. Exhibit 3 shows the output from a range of static portfolios on the efficient frontier.

Exhibit 3. ALM Output

Portfolio	#1	#2	#3	#4	#5
Pr(long-term real returns > 3% pa) ($HI > 1$)	2%	12%	43%	53%	68%
Pr($HI > 60\%$ over rolling 3 years)	21%	27%	44%	69%	57%

In the two-person fixed income team she finds a gem, 26-year-old Silvio Al’Fazi, who, unbeknownst to the organization, has been managing what is effectively a fixed income / credit hedge fund and doing it extremely well.

Though Ann is heartened by the talent she has found, her priority will be to reinvigorate and redirect them and firmly but sensitively ease out the weak. In the privacy of her boudoir, though admitting to a mediocre success rate in hiring and firing (probably 55%), she is somewhat cheered to recognize 55% as the hit rate of top-quartile equity managers. On the dark side, she detects an attitude of superiority from a few senior people. Whether it’s a reaction to her being an outsider or to her gender doesn’t concern her, though it does mean she will need to improve her less-than-perfect diplomatic skills.

Two to three years will be needed to transform the organization. But if Ann moves too fast, she will be alienated and will surely fail. She needs to give people opportunities to show their abilities so that, over time, she can move them to positions of greatest added value. She already suspects that some investment people may be more effective in risk management.

Decision Time

Ann’s overall conclusion is that some form of DAA is both necessary and achievable, though she is alert, as only an outsider can be, to its inherent contradictions. On the one hand, many investors spoke of “market timing” in almost fearful terms, notwithstanding confusion as to its meaning. The fearful were irritated by and unresponsive to her pointed question, “Does that mean you *never* change your asset allocation under any circumstances?” On the other hand, Ann is skeptical about the D-word, whose connotation of regular and systematic activity has blatant marketing appeal (especially to men). She witnesses an investment industry obsessed by activity, dominated by people eternally wanting to *do something*. With security selection all but completely outsourced, “doing something” centres around asset allocation. Swensen’s wisdom on active asset allocation is refracted through evidence that industry-wide fiddling detracts value. As her mentor puts it, they have “fun fiddling funds,” and, as he repeatedly emphasizes, undisciplined activity is the antithesis of patient long-term investing, of the Zen-like art of thoughtful inertia that is “accretive to value-add.” (Ann’s silent use of that phrase gives her pause. Has the obfuscating language of investing already become second nature?)

By this stage Ann has comfortably accepted the Board’s insistence on some form of DAA. She is especially convinced by Peter Bernstein’s arguments about the failure of maintaining a static policy mix. Her inchoate working hypothesis on DAA is that its style and methods should probably differ in different parts of the return distribution. In the “common” regime, where returns are less than, say, 1.5 standard deviations from the long-term mean, the simple contrarian tool of automatic rebalancing should add a modest amount of value. In this regime, volatility is probably a reasonable proxy for risk. In the “occasional” regime, where returns lie, say, 2–3 standard deviations from the mean, sliding, in some non-linear way, into sizable, largely valuation-based shifts of asset allocation should add long-term value, provided the Board has the courage to live with longish periods during which it doesn’t and, consequently, NaWeF underperforms its peers. In this regime, career risk is likely to be the best proxy for risk. In the “extreme” range—beyond, say, 3½ standard deviations—the techniques of multi-strategy and other hedge funds might be able to add value by managing extreme tail risk. In this regime “risk” is inappropriate and should be replaced by “uncertainty.” But can these regimes be identified *ex ante*? Are markets sufficiently regular and stationary for the notion of standard deviation to be useful? Is objective probability meaningful in these contexts? (It has left much to be desired in oil discovery.)

Ann decides that her first task is to develop and get the Board to approve a preliminary set of firm but flexible *investment beliefs*. But the Board must transcend mere approval; it must *believe* them and actually *use* them as a guide to decision making. Crucially, there must also be beliefs about organizational design and culture (Exhibit 4).

Exhibit 4. Investment Beliefs

	Market
#1	Inefficient markets: in broad terms, capital markets are relatively <i>micro</i> -efficient but relatively <i>macro</i> -inefficient.
#2	Diversification helps, but is not a free lunch; over-diversification is to be avoided.
#3	Simple but not simplistic: see things for what they are and avoid the latest fashions and conventional ways of classifying assets (such as market-weighted benchmarks).
	Organization
#4	People driven: investments are a skill-driven business. Process should not dominate having the right people and a strong culture.
#5	What gets measured gets managed, but the critical factors in investing, such as uncertainty and courage, cannot be measured, while far less important factors, such as monthly returns and correlations, can.
#6	Governance and organizational design: having the right governance is one of several necessary conditions for building a successful investment organization.

During this honeymoon period, Ann feels sufficiently empowered and virtuous to exclude any mention of relative performance. Guided by David's experience and a healthy dose of cynicism, however, she understands that the purity of these beliefs may not persist. In preparing for this exigency, Ann wonders how the Board, the government, and she herself will react if (when?) NaWeF does return CPI+4% over a long period but simultaneously most peer funds return CPI+6%. Will the *realpolitik* of comparative status trump NaWeF's investment beliefs? Being privy to Nicholas's idiosyncrasy, she wonders if Keynes's 80-year-old warning about being "wrong and alone" is an ill omen. DAA will be the most likely cause of relative underperformance, simply because few seem able to consistently extract value that way.

To the Board

Like cells dividing and recombining, questions form and reform. What should be the guiding principles of DAA? Is the working hypothesis helpful? Should the Fund have an SAA, or should the benchmark be the "liability" of real 3%? How should DAA be implemented? What are the relative advantages of quantitative model-driven approaches versus purely judgmental approaches versus a combination of the two? How many distinct styles are there for both approaches? How will she recognize emerging success and failure? What are the roles and responsibilities of the Board? David has warned her of instances in which this was so blurred that everyone, and therefore no one, claimed responsibility. What other DAA alternatives should she present to the Board? Should NaWeF allocate capital or risk? How far should she press for her preference?

Ann decides to prepare a preliminary memo, rather than a fully documented paper, for the Board, outlining in broad terms the pros and cons of two quite distinct approaches to DAA, which she calls *Traditional Plus* and *Absolute*. Because each demands different structures, people, and expectations, the Board must decide between the two and must fully understand the basis of their decision. If Nick is not able to "guide" the Board to a decision, Keynes's warning will surely transmute into an ill omen. If this happens, the Board's choice will become a millstone around her neck rather than a milestone on the road to success.

DAA Option 1: Traditional Plus

This approach, more science than art, argues that the best way to meet NaWeF's return and risk objectives is to (1) follow the well-developed path of ALM, constrained by $HI > 60\%$, and select an SAA benchmark on the efficient frontier that maximizes the probability of meeting the real return target; and (2) actively manage the allocations around the benchmark within prudent ranges, relying largely on valuations and implemented through a largely rule-based approach.

Exhibit 5. Pros and Cons for Traditional Plus

Pros	Cons
It extends the current approach.	The choice of benchmark dominates the risk / return outcomes.
It represents the common or so-called best practice approach.	The SAA will have a strong gravitational pull, which can marginalize asset allocation activity.
It is relatively easy to explain to internal and external stakeholders.	The “risk-free” investment can be purchased cheaply, which might reduce necessary risk taking.

DAA Option 2: Absolute

This approach, more art than science, argues that the “best” way to meet the Fund’s objectives is to totally focus on the sole objective and the sole risk. It eschews pre-specified restrictions on allowable asset classes or on exposure sizes (subject to prudence) and takes directional trends when within risk constraints. This more opportunistic but disciplined style mimics the strategies of many successful hedge fund and prop desk managers.

Exhibit 6. Pros and Cons for Absolute

Pros	Cons
Investment decision making is driven by the target return and the <i>HI</i> risk. There is no need to separate alpha and beta in performance attribution.	It is essential to have top-class, experienced people with proven investment judgment who think like hedge fund investors.
Asymmetric risk profiles to better manage downside risk can be included, as the process is not constrained by asset class exposures.	It requires a Board prepared to fully understand and delegate.
It forces appropriate risk taking because the benchmark can’t be bought cheaply.	It demands people with the temperament to build in and seriously consider contrary views and “what if I’m wrong?” scenarios.

Balancing the Alternatives

Ann believes she has sufficient information to decide between the two broad alternatives. From past experience, she is confident that she can weigh the pros and cons in an unsentimental way.

While she has a clear but far from total preference for Absolute, she ponders questions Board members might ask to be reassured that her decisions were unsentimental. For instance, the Traditional Plus “pros” seem only to provide comfort to stakeholders. Are there not sound investment reasons for adopting Traditional Plus? Didn’t at least some funds that used Traditional Plus survive the crisis

reasonably well and capture the subsequent rebound? Have the users of this approach learned and improved in light of the past few years? What sort of people and structures could make this approach succeed?

Ann feels curiously comfortable with Traditional Plus; she has few doubts that she could lead and manage this approach effectively. Nonetheless, she ponders questions Board members might ask in seeking re-assurance. For instance, the Absolute “pros” seem too strongly supportive of meeting the key risk / return targets. Is Traditional Plus as inappropriate as she implies? Did not many funds that used Absolute do poorly in the crisis and then fail to capture the subsequent rebound? Will she be able to attract those few special people on which success depends?

Ironically, Ann is less comfortable with her ability to lead and manage her preferred Option 2 than she is with Option 1. She has doubts about her ability to fully appreciate the workings of Absolute, doubts she will discuss with her mentor but probably not with Nick.

References

Ambachtsheer, Keith. 2010. “Repricing Risk: Is The Equity Premium Big Enough Now?” *The Ambachtsheer Letter* 296.

Beethoven, Ludwig van. 1824. *Ode an die Freude*. Vienna

Bernstein, Peter. 2003. “Are Policy Portfolios Obsolete?” *Economics and Portfolio Strategy*, March 1.

Brinson, Gary, B. Singer, and G. Beebower. 1991. “Determinants of Portfolio Performance, II.” *Financial Analysts Journal* 47(3), May-June. 40-48.

Brinson, Gary, R. Hood, and G. Beebower. 1986. “Determinants of Portfolio Performance.” *Financial Analysts Journal* 42 (4), July-August, 39-44

Coleridge, Samuel Taylor. 1797. *Kubla Khan, or a Vision in a Dream*. London.

Collins, Jim. 2001. *Good to Great*. New York: William Collins.

Eagles. 1976. *Hotel California*



Ho, Karen. 2009. *Liquidated: An Ethnography of Wall Street*. Durham, NC: Duke University Press.

Ibbotson, Roger, and P. Kaplan. 2000. "Does Asset Allocation Policy Explain 40%, 90% or 100% of Performance?" *Financial Analysts Journal* 56 (1). January-February. 26-33

Keynes, John Maynard. 1936. *The General Theory of Employment, Interest and Money*. London: Macmillan.

O'Barr, William, and J. Conley. 1992. *Fortune and Folly*. New York: McGraw-Hill.

Swensen, David. 2003. "The Interplay Between Asset Allocation and Security Selection in a Well-Managed Portfolio." CMS Investment Seminar, NYC. November 10.