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COME THE REVOLUTION! A NEW DAY FOR PENSION RISK MANAGEMENT

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Ithough investment strategies have not substantially changed for pension plans during the past decade, smoothing mechanisms embedded in accounting standards and funding regulations have been significantly reduced. These changes have increased the transparency of the risk associated with pension plans and reflect a shift in the pension paradigm—from a world heavily reliant on long-term return expectations to a world requiring stronger risk management of short-term volatility. Consequently, plan sponsors are reevaluating the level of risk being taken in their pension plans and their approach to managing it.

That reevaluation should include rethinking the traditional approach of maintaining the same asset allocation regardless of the economic environment, the funded status of the pension, and the financial strength of the plan sponsor. Why? Because the traditional approach does not sufficiently consider the following:

- Avoidance of ruin—that is, avoiding the asset value or funding level to which a plan could not afford to fall.
- Tail risk associated with the investment allocation—that is, the worst types of performance a certain portfolio could experience.
- Limitations on uses of surpluses in pension plans.

When plan sponsors do evaluate these three considerations, it becomes apparent that the attractiveness of any investment risk will vary depending on the situation. For example, if it is difficult for companies to use pension surpluses, it will be less advantageous to take risk in a well funded plan than in a poorly funded plan. It is important to shift the asset allocation to reflect changes in the pension plan's and company's financial situations.

The traditional process of determining the asset allocation for pension plans was developed to identify a long-term asset allocation. Consequently, the process employs models that rely heavily on long-term return and risk assumptions. In a world requiring strong risk management of short-term volatility, long-term expectations are less important because it is important for plan sponsors to understand the levels of risks created in the current markets.



This article does two things. First, it examines circumstances under which plan sponsors' fiduciary responsibilities to participants should cause them to be concerned about the investment risk in the pension plan. Second, it describes a process for dynamically managing risk in pension plans. This process forces plan sponsors to continuously make conscious decisions about taking risk in the pension plan rather than passively relying on static long-term allocations and assumptions. The dynamic risk management approach recognizes and makes adjustment for constraints and/or competitive advantages that pension sponsors have relative to other investors. It makes these adjustments by following a four-step risk management process:

- 1. Properly define risk,
- 2. Explicitly budget risk,
- 3. Efficiently allocate risk, and
- 4. Implement and monitor performance.

This approach puts a greater emphasis on implementing appropriate solutions after evaluating the best interest of stakeholders.

IMPORTANT PENSION RISK MANAGEMENT CONSIDERATIONS

Balancing Investment Risk Taking with Fiduciary Responsibility

In general, plan sponsors have a fiduciary responsibility to plan participants with respect to the management of pension assets. They have often sought to avoid lawsuits from participants for breach of this fiduciary responsibility by adopting a herd mentality to investing. Unfortunately, the herd's asset allocation does not necessarily represent the best interest of participants or shareholders (See Corporate Finance.).

The fact is that participants would likely have grounds to sue plan sponsors for breach of fiduciary responsibility only in the event that participants lose benefits. Fortunately, participants can only lose benefits if each of the following conditions occur at the same time:

- Benefits are not fully covered by pension insurance;
- The company sponsoring the plan declares bankruptcy; and
- The pension plan is underfunded as defined by the pension insurer (e.g., PBGC).

... PLAN SPONSORS SHOULD ADJUST INVESTMENT RISK TO REFLECT THEIR PLAN'S FUNDED STATUS AND, THEREBY, IMPROVE BENEFIT SECURITY.

As long as participants' pension benefits are fully covered by pension insurance,¹ participants should generally² have little interest in how much investment risk the plan sponsor takes in the pension plan. However, if participants' pension benefits are not fully covered, plan sponsors could improve the security of benefits by reducing the chance that the three conditions described above are met at the same time.

For example, if participants are not fully insured and their pension plan is poorly funded, plan sponsors could improve benefit security by taking investment risk because doing so would increase the likelihood that the plan would be well funded³ even if the plan sponsor declares bankruptcy. On the other hand, if a plan is well-funded, plan sponsors could increase benefit security by taking minimal investment risk. Consequently, plan sponsors should adjust investment risk to reflect their plan's funded status and, thereby, improve benefit security.

- ¹ In the United States, the PBGC guarantees benefits of qualified plans up to certain limits. Based on two studies, one of which is "PBGC's Guarantee Limits an Update" (can be found at http://www.pbgc.gov/docs/guaranteelimits.pdf), participants of plans taken over by the PBGC received the vast majority of benefits earned under their plan and benefits for 84 percent of participants were not reduced by any of the limitation provisions.
- ² If participants have a strong claim on assets (e.g., certain regulatory jurisdictions, union plans, etc.), participants effectively have a free put option against the plan sponsor and the pension insurer. Consequently, risk becomes more attractive to participants as the plan sponsor's credit strengthens and the level of benefits protected by pension insurance increases. Note that if plan sponsors are not required to sponsor pensions, this type of pension system is likely unsustainable.
- ³ Well-funded should be based on the definition used by the pension insurer (e.g., PBGC's measure of liabilities).
- ⁴ As described in Morgan Stanley Investment Management's August 2008 white paper Asset-Liability Management within A Corporate Finance Framework, which was co-authored by Michael Peskin and Chad Hueffmeier.

Before plan sponsors take investment risks in their pension plans, they should spend considerable time understanding how risks could be taken without significantly impairing the security of pension benefits. This requires plan sponsors to understand the extent to which they can withstand negative results from the pension plan, how to guard against certain levels of negative results (e.g., higher contribution requirements), and how to implement and monitor their exposure to risks.

*Corporate Finance*⁴

The mere act of taking passive risk (e.g., large cap equity exposure) in an underfunded plan sponsored by a financially weak plan sponsor should create value for shareholders. However, since it is difficult to access surplus assets in pension plans, the upside of creating surplus can be quickly outweighed by the downside of increasing a deficit. Consequently, as a financially weak plan sponsor's funded status improves, the investment risk in the pension should be adjusted to reflect a plan's funded status.

There is a common misperception that taking passive risk creates shareholder value for financially strong plan sponsors. In a transparent world, shareholders would demand additional returns at least commensurate with the higher expected returns from the pension plan (by discounting plan sponsor's stock price) because shareholders need to be compensated for the additional risk.

Current accounting standards allow plan sponsors to book expected asset returns and smooth experience gains (losses) on their income statement book. This creates artificial stability on the income statement; hence, it essentially hides risk. Although there is only an economic argument for taking passive risk in underfunded plans with financially weak plan sponsors, financial statements drive perception which can create economic consequences (e.g., stable earnings tend to be rewarded by the markets).

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Management needs to determine whether taking advantage of an accounting anomaly justifies the economic consequences associated with risk. To facilitate informed decisions, it is important for management to continuously understand risk relative to their liabilities and potential asymmetries associated with taking the risk. However, overanalyzing this trade-off may be futile because recent trends indicate accounting standards are migrating away from artificial smoothing mechanisms.

Avoidance of ruin

It is vital for plan sponsors to avoid ruin which occurs when plan sponsors find themselves in situations they cannot survive financially. For example, pension funding regulations and/or debt covenants may require pensions to maintain certain funding thresholds that, if not satisfied, would trigger adverse consequences (e.g., higher contribution requirements). If investment risk causes the pension's funding level to fall below these thresholds at a time when the company's business is performing poorly, the pension could lead to the demise of the company. Furthermore, its ability to tolerate the impact of certain cash flow requirements will be driven by its ability to attain credit. Consequently, plan sponsors should consider enterprise risk management (ERM) and credit market factors when they analyze the level and type of risk taken in the plan.5 These may become dominating considerations as the size of the pension plan relative to the plan sponsor's business increases because it becomes more difficult for the business to finance pension deficits.

In addition, it is important for plan sponsors to realize that the distribution of potential funding levels resulting from investment performance changes radically as the ratio between benefits and assets rises. Although two different sequences of returns can lead to the same geometric return, the introduction of cash flows can cause these paths to generate significantly different asset levels. For example, let's assume we have \$101 today and could make an investment that will pay 10.0 percent in one of the next two years and -9.1 percent in the other.

• Assume no cash flows => [$101 \times (1.1) - 0$] x (0.91) = [$101 \times (0.91) - 0$] x (1.1) = $101 \times (0.91) - 0$

Although the investment's value would fluctuate over the period, we would not consider this investment to be risky because the final outcome is known (i.e., the value would be \$101 at the end of two years). However, the order of the returns becomes important when cash flows are introduced. As you will see below, the introduction of a \$50 cash flow at the end of year one would create uncertainty about the final outcome (i.e., the value would be \$55.60 or \$46.10 at the end of the two years); hence, we would consider the investment risky.

• Assume a negative cash flow of \$50 at the end of the first year => [\$101 x (1.1) - \$50] x (0.91) = \$55.60 > [\$101 x (0.91) -\$50] x (1.1) = \$46.10

Finally, when we introduce another negative \$50 cash flow at the end of year two, it creates the possibility of ruin. If the return is -9.1 percent in year one, we would not be able to make the full payment at the end of year two. Consequently, it should be unattractive to the investor to take risk in this situation since the risk could lead to ruin.

For any level of risk, the probability of ruin increases as cash flows increase as a percent of assets. Pension funding requirements and pension insurance may make it impossible for certain pensions to come to ruin by actually running out of money. However, plan sponsors may wish to define ruin as the funding thresholds at which they are required to make accelerated plan contributions to certain levels.

⁵ Note that if credit spreads are considered in funding regulations (e.g., incorporating credit spreads in the measurement of liabilities or in the targeted funding level), it makes the availability of credit less of a concern.

For example, a plan sponsor may define ruin as falling below a certain funded ratio (60 percent) at the end of seven years. The graphs below illustrate the projected funding ratios of two frozen plans with \$1 billion in assets and \$1.2 billion in liabilities: (1) Plan X has annual benefit payments of \$50 million, and (2) Plan Y has annual benefit payments of \$100 million. Since benefit payments from underfunded plans like Plan Y always cause the funded status to deteriorate, plan sponsors should expect Plan Y's funded status to deteriorate more quickly than Plan X's. In this example, the probability of ruin is 7 percent and 33 percent for Plan X and Plan Y, respectively.

Increasing risk in the plan would cause the tails (i.e., the worst types of experience) to fatten with exaggerated results. In this

example, increasing volatility from 5 percent to 15 percent causes the probability of ruin to increase to 30 percent and 53 percent for Plan X and Plan Y, respectively.

Assumptions:

- Seven year projection period
- Risk free rates of 5.0 percent
- Paths and probabilities were created using a risk-neutral lattice model
- Asset volatility is assumed to be 5 percent and 15 percent (as indicated)
- Interest rate risk in liabilities has been hedged
- No contributions are made to the pension plan



Once plan sponsors define ruin, they should evaluate the chances of it happening. In general, the plan sponsor should want to avoid any chance of ruin. However, the cost associated with eliminating the possibility (e.g., buying insurance) may be prohibitive and cause the plan sponsor to retain some risk of ruin.

Tail Risk

It is crucial for plan sponsors to understand the tail risk in their portfolio. While plan sponsors would consider various factors about the plan's unique circumstances when they define ruin, tail risk describes the worst types of performance the pension plan could experience in isolation. If plan sponsors chose to take investment risk, they are exposed to tail risk. Consequently, they can only be certain of avoiding ruin when they fully understand and properly manage tail risk.

Management needs to evaluate the economic/accounting tradeoff for both normal economic environments and less stable environments that are often linked to the poorest types of portfolio performances. Modern portfolio theory is useful for understanding and managing risk in normal environments because volatility is an appropriate (but not necessarily sufficient) risk metric and diversification is a relatively good risk management tool during those times.

However, it may be difficult for management to weigh the trade-off between tail risk and the cost of hedging or insuring tail risk because it is impossible to make an informed decision without understanding the risk. In general, normal distributions and Value at Risk (VaR) has been used most often by institutional investors when contemplating tail-risk. Although these measures are easy to understand, there are at least three important shortfalls that prevent them from helping us make informed decisions about taking risk in the real world.

- VaR does not describe the tails, it describes a certain percentile event;
- (2) The percentile is not correct—there is a reason why one in 20 events seem to occur every five or six years—the models are wrong; and

(3) The process does not consider the financial strength of the plan sponsor during the tail event (i.e., tail events often coincide with poor business performance).

In general, a good rule of thumb may be that if plan sponsors do not understand the risk, they should not take it. It is difficult to reconcile the fulfillment of fiduciary responsibilities with taking risks that are not understood. Consequently, plan sponsors should seriously consider hedging/insuring against tail risk or implement a process, described in the second part of this article, to ensure the risk is better understood.

Limitations on Uses of Surplus Assets

As described earlier, pension insurance may cause participants to be indifferent to investment risk taken in the pension plan. In this situation, plan sponsors may choose to take investment risk to help finance the pension plan.

In most countries, participants do not own⁷ the excess assets in the pension. Shareholders are generally able to receive value from excess pension assets by using it to pay for future benefit accruals (i.e., contribution holiday). However, with fewer participants accruing pension benefits than in the past, plans today need fewer assets for this purpose. Outside of using assets to pay for future benefit accruals, it tends to be difficult for shareholders to realize the full value of pension assets. When the cost of annual benefit accruals decrease, shareholders require less assets to pay for future accruals.

Although shareholders can try to access pension assets by terminating⁸ the plan to have assets (when owned by the plan sponsor) revert back to the company, in the United States the company would be required to pay excise taxes on any reverted assets.

⁷ In the United States, by law, surplus in contributory pension plans is owned in part by participants.

In addition, surplus is often considered during labor negotiations and effectively causes surplus to be partially or fully owned by participants.

⁸ Generally this is a situation where the plan sponsor purchases group life annuities to transfer their liability to an insurance company.

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Pension assets that shareholders cannot recoup full value on will be referred to as excessive assets. Value for shareholders decreases when plan sponsors take risks that could create excessive assets. Essentially, the taxing authority is provided a free call option on a portion of the excessive assets at the expense of shareholders. And when plan sponsors maintain the same allocation of assets regardless of the plan's funded status, they increase the chances of creating excessive assets.⁹ For example, if participants have no claim on the surplus and excise taxes are 50 percent of the value of reverted assets, the taxing authority would have a call option on 50 percent of excessive assets. Using Black-Scholes option pricing and the following assumptions, we have estimated the shareholder value destroyed by continuously maintaining a constant asset allocation in four examples.

	Value of Tax Authority's Option (\$ millions)	
	80% Funded	100% Funded
Frozen Plan	\$10.8	\$56.8
Closed Plan with future accruals equal to 10%	\$4.8	\$33.3

Assumptions:

- Liabilities of \$1 billion¹⁰
- Demographic experience will match expectations
- Interest rate risk in liabilities (and future accruals) is fully hedged
- Liability tracking error¹¹ of 10 percent
- Risk-free returns are 4 percent
- The plan will be terminated in five years

From the perspective of shareholders, assets are less valuable due to the taxing authority's free call option. In our example of a frozen plan that is 100 percent funded, the assets would only be worth \$943.2 million (i.e., \$1 billion less \$56.8 million) to shareholders.¹²

In certain situations,¹³ participants essentially own pension assets; hence, the free call option is provided to participants rather than the taxing authority. We would need to modify our assumption to reflect that participants own 100 percent of excessive assets (rather than the taxing authority owning 50 percent of it). In this situation, the assets of a frozen plan that is 100 percent funded would only be worth \$886.4 million (i.e., \$1 billion less \$56.8 million x 2) to shareholders.¹⁴

As illustrated in Figure One below, management (i.e., agents) could enhance value for its shareholders by dynamically managing risk: by either selling out-of-the-money call options to capture premiums (second approach in Figure One) or systematically adjusting asset allocations (third approach in Figure One). Either approach should avoid the creation of excessive

FIGURE ONE



- ⁹ In the United States, excise taxes can be limited to 20 percent by taking certain actions.
- ¹⁰ Based on a termination liability
- ¹¹ Measures the volatility asset returns have relative to liability returns.
- ¹² These numbers are not adjusted for corporate income taxes.
 ¹³ Participants may have a strong claim on pension assets in
- contributory plans, union plans, or in some jurisdictions.
- ¹⁴ Note that it is not possible for shareholders with a fully funded frozen plan to benefit from taking risk in these examples.

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assets and, thereby, enhance value for the company's shareholders since the free call option would have no value.

DYNAMIC RISK MANAGEMENT PROCESS

Plan sponsors' decisions to take investment risk must be fully informed. That means they should consider the implications of all the concepts and constraints raised so far in this article: the security of participant benefits, ruin, tail risk and uses of surplus. Doing so will help them identify situations that may make risk unattractive. Plan sponsors are likely to understand these implications more clearly when they follow the process described here.

Step One: Properly Define Risk

In general, investment risk in pensions should be managed relative to pension liabilities. Plan sponsors should determine an appropriate liability benchmark against which to manage risk. The benchmark does not have to be the accounting or funding liability. In fact, these types of measures tend to be artificially biased toward certain types of risk (e.g., credit risk) and impossible to hedge.

As an alternative, plan sponsors should consider establishing a liability benchmark for managing risk that is investable and does not bias the risk allocation process toward certain types of risk. The benchmark would be based on projected benefit payments and risk free¹⁵ interest rates. This type of benchmark would help identify two items: (1) the level of assets that would be expected to be sufficient to pay for future benefit payments with relying on neither returns from investment risk nor future contributions; and (2) the level of risk premiums and alpha¹⁶ required to make up the shortfall without relying on future contributions.

The risk management benchmark would not impact accounting and funding calculations. It would only be used to help make decisions about how much risk to take and it could influence the types of risk taken.

Step Two: Explicitly Budget Risk

It is critical for investment committees to understand how

much risk is appropriate for a pension plan's stakeholders (i.e., participants and shareholders). The risk budget is simply the vernacular used when identifying this level of risk and, as such, the crux of the risk management process. As discussed, the security of participant benefits and certain concepts of corporate finance suggest that reducing risk as the funded status improves is appropriate. Consequently, the plan sponsor should not only determine the amount of risk that is initially appropriate, but also develop an approach to assure the level of risk in the pension plan continues to be appropriate over time.

As also discussed, it is necessary for plan sponsors to incorporate ruin into the risk budgeting process. When plan sponsors can clearly define their idea of ruin (e.g., funding levels that trigger certain events), sponsors should dynamically manage risk—by either paying for protection (e.g., put options) or systematically adjusting asset allocations—to avoid ruin.

When benefits are fully insured, the participants should be indifferent to risk taken in the pension plan. If management does choose to take investment risk in this situation, they must understand limitations on uses of surplus assets to identify excessive assets. Doing so should prompt plan sponsors to consider dynamically managing risk by either selling out-ofthe-money call options to capture premiums or systematically adjusting asset allocations.

As illustrated in Figure Two, if plan sponsors decide to take investment risk in their pension plans, it is important to manage the risk within the limits imposed by excessive assets and ruin. This is done by dynamically managing risk with option strategies, systematically adjusting asset allocations, or a combination of both.

¹⁵ We have not defined "risk free" because the issue is debatable and would require significant discussion. These rates are commonly defined as interest rates implied in either sovereign debt prices or forward LIBOR/swap markets.

¹⁶ Alpha refers to returns that, theoretically, are not generated by taking risk.

STATIC ASSET ALLOCATIONS DO NOT LEAD TO STABLE LEVELS OF RISK BECAUSE ALL THE AFOREMENTIONED TRANSFORMATIONS LEAD TO CHANGES IN VOLATILITIES AND COR-RELATIONS.



If funded status improves, systematically adjusting the asset allocation to take less risk may be most practical because the plan sponsor would likely want to permanently reduce risk. However, if funded status deteriorates, it may be more practical to retain the asset allocation and pay for protection (e.g., put options) because the plan sponsor would likely want to return to the previous level of risk once the funded status improves—ultimately the funded status will improve due to funding requirements. Consequently, plan sponsors may favor a dynamic risk management strategy that protects against ruin through option strategies and against excessive assets by systematically adjusting the asset allocation as their plan's funded status improves.

As we know, plan sponsors can improve the security of benefits by reducing the likelihood of having plan underfunding coincide with corporate bankruptcy. Plan sponsors should consider constraining the correlation between pension plan performance and business performance. For example, the plan sponsor could choose to invest in a manner that provides a funded status volatility of 10 percent (i.e., a one standard deviation event would cause the plan's funded status to fluctuate by 10 percent) and has a correlation of less than 0.5 with the plan sponsor's stock price.

Step Three: Efficiently Allocate Risk

As witnessed in 2008, economic environments can change rapidly. Furthermore, asset classes and new asset categories continue to evolve. Static asset allocations do not lead to stable levels of risk because all the aforementioned transformations lead to changes in volatilities and correlations. A disciplined risk management process requires plan sponsors to modify asset allocations to reflect changes in the portfolio's risk.

Plan sponsors should seek to maximize risk-adjusted returns (i.e., efficiently allocate risk). Explicitly budgeting risk from the outset forces the plan sponsor to weigh the trade-off between taking one type of risk rather than another type. Under the traditional approach, it has been difficult for plan sponsors to make decisions to reduce interest rate risk (i.e., hedging the interest rate risk inherent in liabilities) because they have not been forced to evaluate opportunity costs. In a dynamic risk management framework, it is easier for plan sponsors to make this decision because reducing interest rate risk allows the plan sponsor to take other types of risks.

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Sponsors, reluctant to deviate from the herd, have been slow both to invest in new asset classes and to utilize state-of-the-art risk management tools. Nevertheless, it is important that plan sponsors reflect the evolution of asset classes and investment tools in their allocation process. Because it is important that plan sponsors understand the risk before accepting it, they should consider partnering with professionals to identify nontraditional investment opportunities.

For example, non-traditional investments are often associated with liquidity risk premiums that should be attractive to pensions.¹⁷ These types of asset classes (e.g., direct real estate, private equity, infrastructure, etc.) require risk management decisions to be integrated within the investment process because it is difficult to manage the risk after the investment is made. Although significant due diligence is essential when evaluating such opportunities, history has shown the risk-adjusted returns can be substantial.

Finally, it requires a sophisticated set of skills to manage tail risk. For this reason, plan sponsors should consider establishing a tail risk portfolio in which a certain percentage of pension assets are set aside to explicitly manage tail risk. Establishing



FIGURE THREE

this portfolio would allow traditional asset managers to remain focused on their specific task and would leave the management of tail risk to someone with the appropriate skills. As risk is reduced in the overall portfolio, the allocation to the tail risk portfolio could also be reduced.

Step Four: Implement/Monitor

Corporate finance must define excessive surplus and ruin and the Chief Investment Officer (CIO) and investment team should allocate assets in a manner that efficiently manages risk within the boundaries established by these definitions.

In addition, the finance and investment teams should work together to identify financial triggers that make risk more or less attractive. Ideally, the allocation of risk within the risk budget should continuously evolve because risk premiums and the relationships among risks change. The development of new asset classes also creates opportunities for diversification and could potentially enhance returns. Practical considerations, such as the pension governance process, may require the investment team to recommend predetermined allocations for each trigger.

Figure Three illustrates how risk would be dynamically managed by systematically adjusting the asset allocation as a pension plan's funded status approaches excessive surplus or ruin.

- Other Upper Triggers
- Upper Trigger 1: a% equity, b% fixed income, c% other
- Optimize Initial Portfolio
- Lower Trigger 1: x% equity, y% fixed income, z% other
- Other Lower Triggers

Unless contemplating the termination of the pension plan, liquidity is not required for a significant portion of the assets. Hence, pensions can receive a premium for holding illiquid assets for little or no risk.

MANAGEMENT HAS COMMONLY SOUGHT PROTECTION BY ADOPTING THE HERD'S INVESTMENT APPROACH RATHER THAN DETERMINING THE APPROACH THAT IS IN THE BEST INTEREST OF STAKEHOLDERS.

Once the investment strategy has been identified, responsibility for monitoring the financial triggers and modifying the asset allocation appropriately must be assigned by the plan sponsor. While liquid assets and pension liabilities can be monitored daily, it may be possible to monitor illiquid assets, such as private equity and direct real estate, only on a monthly or quarterly basis. Finance and the investment team should agree upon a methodology for estimating the value of illiquid assets.

Risk management reports should be developed to keep management informed of the evolving situation. It is critical that these reports provide the returns from risk and remind decision makers why risk is taken. It is possibly more important that these reports remind decision makers that they should view the performance of peers related to passive risk exposures as irrelevant.

CONCLUSIONS

In general, boards and investment committees have both judged investment performance against peer groups and allowed their concern about being sued by participants for breach of fiduciary responsibilities to outweigh strong financial management decisions. Management has commonly sought protection by adopting the herd's investment approach rather than determining the approach that is in the best interest of stakeholders.

The traditional investment process fails to take into account many issues that plan sponsors should consider if they are to fulfill their fiduciary responsibilities. Often, these issues may be addressed by substantially reducing the risk in pension plans. However, if plan sponsors continue to take significant risk in pension plans, it is in the best interest of all stakeholders that they adopt a strict risk management approach and implement a dynamic strategy. **å**



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