Considerations for Public Plans

June 2020

Current events are an important reminder to all institutional investors that a well-thought-out investment plan is the best way to navigate volatile times. Reacting during a crisis would otherwise likely lead to suboptimal outcomes for most investors. In this piece, we introduce a simple framework for public pension plans to consider in relation to some important risks they face.

- How can we ensure we meet benefit obligations?
- How do we mitigate the investment impact should we experience another significant drop in equity markets?

These themes will be developed further in future publications.

Cash flow matching – continue to meet benefit obligations

Among the main objectives of a pension plan is the need to ensure the safety of benefits paid to its members, in a sustainable way.

Adopting a cashflow matching framework is a proactive approach to pay pension obligations as they come due.

Having a sleeve of the portfolio dedicated to this type of approach can help to meet immediate cash flow needs and insulate the benefit payments from the rest of the portfolio - hence protecting the members in case of severe market stress. These portfolios are often designed with the primary goal of mitigating downgrades and defaults. This is done by:

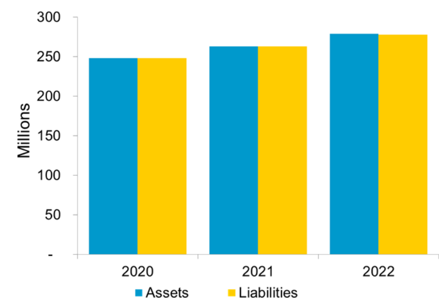
- Buying high-quality names
- Implementing long-term strategic themes/views
- Diversifying across both sectors and issuers

By building a cashflow-matched portfolio, plans can:

- Earn income (coupon and principle distributions) as benefit payments come due
- Avoid selling assets at the trough of a drawdown
- Reallocate other assets to investments with an increased risk budget since most immediate liquidity can be handled

Example portfolio overview	
Portfolio value ($mm)	787
Number of Positions	53
Yield to Maturity (%)	2.00
Duration (yrs)	1.58
Spread (bps)	38
Average Credit Quality	A

Figure 1: Resulting cashflow match



Source: LGIMA. For illustrative purposes only.

Portfolio insurance - reduce the impact of further drawdowns

Significant drawdowns can erase years of funding progress and cause meaningful disruption for plan sponsors. Let's consider a few ways to think about reducing the magnitude of market drawdowns on a plan's assets.

Downside protection

Buying insurance against further drawdowns can help better position the plan to deliver on its long-term objectives.

Equity protection is similar to buying insurance to protect a house or car from an adverse event. In the case of equity protection, this insurance can be obtained in two ways: Paying for the protection upfront or selling the right to future equity returns above a certain threshold.

Implementation options can be summarized as follows.

Full protection

- Paying the insurance premium upfront for a fixed protection period
- Upon expiry, plan must pay another premium for another term of protection

Partial protection

- The "premium check" can be reduced by selling a portion of protection
- In this case, the plan would be protected "until a certain point"

Partial protection and reduced upside

- Receive premium to forego some upside - this helps offset the cost of protecting the downside
- The plan would only benefit from market gains up to a certain level but would be protected against equity market falls "until a certain point"

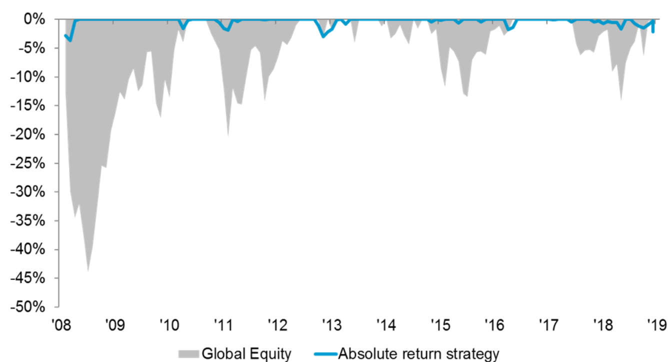
Strategy	Equity portfolio		Insurance premium
No protection	↗↗	↘↘	0.00
Full protection	↗↗	→	$$$
Partial protection	↗↗	↘	$$
Partial protection and reduced upside	↗	↘	$ or 0.00

Alternative investment structures - reduce sensitivity of portfolio to market movements

One concern some plan sponsors have expressed in relation to equity downside protection is deciding when it makes sense to enter such structures. It is not dissimilar to any other form of insurance – everyone would love buying insurance the day before the fire ignites and not incur the expense the rest of the time. For plan sponsors, implementing a structure that is not costless might be too expensive. Similarly, implementing a costless structure might result in another type of cost: opportunity cost ("what if… the market rallies 20% and my upside is capped at 7%?").

One alternative is implementing investment strategies that have a reduced sensitivity to broad market movements. This will reduce the likelihood that the plan experiences severe stress when the broad equity market is tanking. While upside participation is also reduced, this may help guide the plan along a steadier course on the path to full funding. Figure 2 illustrates how a simulated strategy with an "absolute" return target exhibits little sensitivity to global equities, outperforming in periods of market stress (as measured by maximum drawdown). The objective in this case, will be to participate more when markets go up ("upside capture") than when markets go down ("downside capture").

Figure 2: Drawdowns



Source: Bloomberg and LGIMA. For illustrative purposes only.

Continuing the conversation

As experienced asset allocators, we believe the right combination of the three approaches highlighted above can help public plans reduce the impact of adverse market conditions, meet their obligations and achieve growth in a sustainable and manageable way.

In this short piece we sought to introduce these concepts, which we intend to illustrate in more detail in future papers to show how they can help achieve desired investment outcomes.

For further information about LGIMA, find us at www.lgima.com.

Views and opinions expressed herein are as of June 2020 and may change based on market and other conditions. The material being presented is confidential and intended for the person to whom it has been delivered and may not be reproduced or distributed. The material is for informational purposes only and should not be construed as a solicitation to buy or sell any securities or other financial instrument or to provide any investment advice or service. LGIMA does not guarantee the timeliness, sequence, accuracy or completeness of information included. Past performance should not be taken as an indication or guarantee of future performance and no representation, express or implied, is made regarding future performance. All concentration, credit and other pertinent information is subject to change.