August 11, 2021

The Honorable Gordon Hartogensis
Director
Pension Benefit Guaranty Corporation
1200 K St NW
Washington, DC 20005

Re: Comments on the Interim Final Regulation for the Special Financial Assistance Program by PBGC (RIN 1212–AB53)

Director Hartogensis:

Invesco Advisers, Inc., appreciates this opportunity to respond to the Interim Final Regulation (“IFR”) as it relates to the investment guidelines for Special Financial Assistance (“SFA”) assets, on behalf of itself and its affiliates, all of which are indirect, wholly-owned subsidiaries of Invesco Ltd. (collectively, “Invesco”).

Invesco is an independent global investment firm that manages over $1.5 trillion in assets on behalf of clients worldwide. Invesco invests in every major asset class on behalf of clients, from multiemployer plans, corporations and endowments, to financial intermediaries serving individual investors.

Introduction

As of July 31st, 2021, the yield on corporate bonds with an investment grade rating was approximately 1.90%, and the yield on Treasury-issued bonds was approximately 0.80%. Since the beginning of the Covid crisis, US bond yields have reached the lowest levels observed in the modern era, caused by central bank direct intervention in the markets and the savings glut phenomenon.

For multiemployer plans, the SFA program will be a lifeline though, as structured, could result in minimizing the return potential for a high percentage of plan assets and thereby reduce a plan’s opportunity to achieve full funding. How can the PBGC balance the need to ensure that assets are invested prudently while also supporting a foundation of long-term economic growth?

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1 Invesco data as of June 30th, 2021. Total AUM figure includes all assets under advisement, distributed and overseen by Invesco Ltd. and its controlled entities.
Based on our investment models and experience, the solution may be derived from two potential approaches:

1. **Broader universe of authorized securities.** We agree with the PBGC’s suggestion that hybrid securities such as preferred securities and convertible securities could be beneficial instruments to meet the long-term needs of plans. Preferred securities have priority over common stock for the payment of dividends, are rated by rating agencies, and offer a higher yield than bonds from the same issuer. Convertible securities are a combination of bonds and equity options and can deliver equity-like returns in rising equity markets with lower downside risk than equities.

2. **Risk-managed portfolio construction.** Using the same risk budget as investment grade corporate bonds (estimated around 5.5%), it is possible to achieve higher long-term returns by combining asset classes with low correlation. Using the property of diversification, it becomes possible to allow allocations to asset classes such as high yield bonds, bank loans, private credit, or even low risk equities.

The below illustration shows that by expanding the opportunity set of the SFA asset portfolio (blue dot labeled “Diversified Fixed Income Portfolio” in the graph below) expected returns could potentially increase to approximately 3-4% annually (gross of fees, but excluding potential returns from active management) without a meaningful increase in risk from an investment grade corporate bond index.

![Efficient Frontier Diagram](image)

Source: Invesco, MSCI Barra. Structured credit included in portfolio, but not represented in the illustration due to scale.

However, especially for plans with a large representation of SFA assets, expanding the opportunity set to equities seems warranted to seek returns aligned with actuarial assumptions greater than 5%.
<table>
<thead>
<tr>
<th><strong>US investment grade corporate bond index</strong></th>
<th><strong>Target return (*)</strong></th>
<th><strong>Yield (</strong>)**</th>
<th><strong>Risk (</strong>*)**</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.6%</td>
<td>2.6%</td>
<td>5.6%</td>
</tr>
<tr>
<td><strong>Diversified fixed income portfolio</strong></td>
<td>3.9%</td>
<td>3.1%</td>
<td>5.5%</td>
</tr>
<tr>
<td><strong>Fixed income + low volatility and high dividend equities portfolio</strong></td>
<td>5.2%</td>
<td>2.6%</td>
<td>7.0%</td>
</tr>
</tbody>
</table>

(*) Invesco capital market assumptions, 10-year geometric return, gross of fees, based on asset class indexes, passively managed.

(**) Gross yield, as of 6/30/2021. Excludes yield of structured credit and private credit representing each 5% of the model portfolios. Dividend yield included for equity allocations in third scenario.

(***) Annualized standard deviation of returns using 8-year half-life risk model.

**Invesco Comments**

Please find our comments to the PBGC’s request for responses, with corresponding data, on the following:

(1) PBGC is interested in understanding the potential benefits and risks of investing SFA assets in other vehicles that are or have the nature of fixed income. These might include synthetic replications of fixed income securities, insurance contracts, hybrid securities, preferred stock or other vehicles.

In this regard, the following questions are of interest:

- What are the advantages of investing in such vehicles, relative to a portfolio of investment grade fixed income, in terms of expected returns, reduced risk or other improved outcomes?

Investing in a broader range of fixed income instruments could increase the ability of multiemployer schemes to meet their return targets by 2051. We have listed below the key characteristics of additional investment grade securities, such as preferreds and convertibles, as well as non-investment grade securities which could also be included as part of an investment portfolio. As illustrated throughout this letter, through the properties of diversification and thoughtful portfolio construction, the addition of non-investment grade securities does not have to meaningfully increase the risk beyond that of an investment grade portfolio.

The advantages of including such vehicles may include:

- Higher coupon payments or return expectations than traditional corporate bonds
- Diversification of returns which can increase returns or reduce risk
- Allowing some equity-like upside participation, which may buffer any negative impact from interest rate risk especially at a potentially low point in the cycle.

The yield for traditional US investment grade fixed income indexes ranges from approximately 2% for longer dated US Treasuries to approximately 2.6% for US investment grade corporate bonds and US agencies falling anemically below 2%. With rate of return assumptions based on a discount rate closer to 5.5% there is considerable shortfall risk, as the PBGC has noted in the IFR.
Based on our analysis, multiemployer plans could potentially enhance the expected return of the SFA assets by introducing additional permissible investments while maintaining a risk level similar to an investment grade corporate bond index.

In addition to US Treasuries and US investment grade corporate bonds, such investments could include:

**Fixed Income – Investment Grade**

US preferreds
- Higher yielding than other similarly rated asset classes
- Broad pool of investment grade issuers including highly rated financial institutions
- Senior to traditional equities
- Hybrid payoff profile, comparable to bonds and equities

Convertible bonds
- Convex return profile combines significant equity upside potential and lower income than corporate bonds
- Fits between equity and fixed income allocations
- Limited issuance of traditional convertible bonds
- The opportunity set can be greatly expanded by synthetic convertibles using investment grade bonds and equity options

US securitized debt (MBS, ABS, and CMBS)
- Strong risk-adjusted yield with unique idiosyncratic opportunities
- Low default rates with ability to analyze collateral
- Deep and liquid market

Taxable municipals
- US general obligation, higher education and school districts comprise the majority of the market
- Tend to be higher in credit quality than corporate bonds
- Can be an effective portfolio diversifier
- Lower issuance than tax-exempt municipal bonds

**Opportunistic/non-Investment Grade**

Bank loans
- Attractive current income independent from market environment
- Minimal duration risk providing a hedge against rising interest rates and inflation
- Historic record of low volatility of investment returns compared to traditional asset classes

Structured credit/Collateralized Loan Obligations (CLOs)
- A CLO is a portfolio of leveraged loans that is securitized and managed as a fund
- Tend to perform well in a rising rate environment
- Risk/return profile can be tailored to the needs of investors, ranging from highly-rated with low expected return to equity-like with commensurate expected returns
Private credit
✓ Allowing for benefit from an illiquidity premium while accessing additional sources of income and growth not available through traditional markets
✓ Wide range of seniority options spanning the risk and return spectrum
✓ Includes investment grade equivalents with a higher spread than traditional corporate bonds

Equity
✓ Low volatility equity strategies invest in the least volatile stocks of the market, potentially resulting in about 20% to 30% less risk than capitalization-weighted indexes
✓ High dividend strategies can help supplement traditional income securities

We would also suggest allocations to US high yield, non-US developed market fixed income and emerging markets debt (hard currency or local).

The main advantage of combining these diversified assets is the potential to increase the expected return of the SFA assets, while maintaining the expected risk of the Bloomberg Barclays US IG Corporate Bond index.

We believe that this aligns well with the PBCG’s desire to “balance between certainty and safety of investments on the one hand, and the opportunity for plans to have flexibility to decide appropriate overall investment policies on the other”.

Where there may be some tolerance for a slight increase in overall risk of the SFA assets portfolio, there could also be the opportunity for greater return. Additionally, this modeling does not take into consideration the potential for greater return from active management.

• What are the disadvantages of investing in such vehicles relative to a portfolio of investment grade fixed income, including lower returns, higher risk, inequitable outcomes amongst participants or other issues?

When taken one by one, many of these asset classes may have a higher expected or historical risk than US investment grade bonds, however, when looked at in a diversified blend of asset classes, we have illustrated that a potentially higher return is still achievable with a negligible increase in expected risk at the portfolio level.

In the case of accessing private credit markets, there is the potential for additional risk and lack of liquidity. This, however, can be mitigated by accessing a diversified, open ended, private market vehicle.

The vehicles we have listed do not create specific inter-generational issues as they can be suitable for pools of current, deferred or retired employees. In contrast, cash-flow matching strategies or annuity buy-outs can be problematic in that they guarantee the payment of benefits for retired employees while the future benefits of current employees are not yet fully secured.

• What are the implementation and management costs of investing in such vehicles?

Most of the markets we have proposed can be accessed in a variety of vehicles ranging from exchange-traded funds (ETFs), commingled trusts to segregated mandates. This allows for considerable fee
sensitivity at many asset ranges. Additionally, investments can be made in passive index-based investments, which can be lower cost, or actively managed strategies, which can be higher cost, but provide an incremental return through “alpha”.

Management costs will tend to vary greatly depending on the complexity of the asset class. Some asset classes can be as low as 0.05% of annual management fees while others might be as high as 1.00%.

At the lower end of the cost range for example, preferred securities or bank loans can be accessed through ETFs. Fixed income factor strategies can apply systematic ways of matching or increasing return over an index while keeping trading costs at a minimum by being more agnostic to the bond issuer and focusing on bid-ask spreads when looking to obtain market exposure. Higher management fees and implementation costs can exist for higher return-seeking strategies in private or public markets.

One way to alleviate some of the fee pressure may be to engage with investment partners that can provide a discount by bundling fees across the various asset classes.

- **Which organizations are qualified to manage and advise on these vehicles?**

Most of the investments and vehicles we are proposing are widely adopted by industry participants and therefore would not likely require a plan sponsor to seek out expertise beyond their current consultant and asset management partners.

That being said, there are economies of scale when it comes to accessing bonds, obtaining best execution, and negotiating fees and expenses. Therefore, we believe that there are significant advantages to working with a large, diversified asset manager that can help provide product-agnostic perspective on these investments/vehicles, as well as working with plan sponsors to seek to maximize returns while minimizing cost.

For public market strategies, but even more importantly for private market strategies, we believe it is important to engage with organizations that can provide in depth due diligence and minimize operational risk, as well as market risk.

- **Can the vehicles, as they might be used in multiemployer plan portfolios or in the pool of SFA assets, be clearly defined and easily used?**

Yes. All of these vehicles/markets can be accessed through means that are likely very familiar with the multiemployer plans whether that be through collective vehicles like ETFs, mutual funds or collective investment trusts, as well as segregated accounts for larger plan sponsors.

Accessing the broad fixed income and equity universe we have suggested may be possible for all sizes of multiemployer plans. The U.S. capital markets are the largest in the world and continue to be among the deepest, most liquid, and most efficient. In recent years, issuance across corporate bonds, mortgage-backed securities, Treasuries and municipals have increased substantially, as have equity issuance – both common stock and preferred shares. Similarly, there has been steady issuance in private markets for many years.

With that said, in any fixed income strategy beyond Treasuries and mortgage-backed securities, liquidity is a key consideration. For reference, the daily average trading volume of equities in 2020 (NYSE and Nasdaq combined) was $375bn, compared to $39bn for US corporate bonds (source: 2021 SIFMA...
Capital Markets Fact Book). Partnering with managers with deep global trading networks and access to multiple markets is essential.

As one moves down in overall investable market size or liquidity, such as hybrid securities or private markets, we believe there is still a strong case for investment, but with smaller or limited allocations to prevent liquidity issues. In cases where there has been limited issuance such as convertibles, we recommend implementing synthetic convertibles, combining investment grade bonds and equity options. For private markets, as would be the case in public markets, diversification of asset classes and managers can alleviate some of the liquidity and other risk concerns.

(2) Should permissible investments of SFA assets be limited to fixed income securities? For instance, should the rule permit investment of a percentage of SFA assets in certain stock ETFs or mutual funds that have investment profiles that are not materially riskier than fixed income-based investment grade securities?

We believe that an allocation to equities would likely be necessary for the SFA assets to reach a return assumption in line with an actuarial rate of over 5%. Our modeling shows that with an allocation of at least 30% equities, in addition to a broad opportunity set of fixed income assets, one may see a potential increase in expected returns that begins to exceed 5%.

![Efficient Frontier](image)

Source: Invesco, MSCI Barra. Structured credit included in portfolio, but not represented in the illustration due to scale.

By adding equities to the permissible investments, plans may benefit from the higher return potential of equities and some risk reduction through the diversification between equities and bonds.

Additionally, there are some equity strategies which inherently can be lower risk than a traditional equity index, thereby providing plan sponsors with exposure to higher returning investments, while still keeping an eye on risk management.
An example is low volatility equity strategies that are systematic in nature, meaning they are governed by a specific set of rules. Typically, the rules dictate that the vehicle will have exposure to the lowest volatility stocks in a particular index.

Additionally, we believe the inclusion of equity options can provide a means of synthetically replicating fixed income strategies, like convertibles, but with a strong risk-return profiles.

(3) What is the appropriate amount of SFA assets that may be permitted to be invested in non-investment grade securities?

We interpret this question to cover fixed income assets that are not investment grade and distinct from the proposed allocation to equity assets.

Traditional US investment grade assets are under significant yield pressure, and accordingly, we believe there should be some healthy allocation to non-investment grade securities to remedy this, and allow multiemployer plans the ability to meet their liabilities with SFA assets. Understanding that this is an exercise that is as much about risk as it is about return, in our opinion, an approach that allows for at least 25% of non-investment grade fixed income assets will likely increase return, but provide a diversified approach that can still maintain risk levels that remain reflective of corporate bond risk and that are still considerably less than equities.

4) What is the proper relationship to restrictions on SFA asset investments to other plan asset allocations?

We have modelled the probability distribution of returns of a multiemployer plan pre- and post-SFA capital contribution and found that it would be essential to consider qualifying plans’ overall investment policy to fulfill the objective of returning plans to a fully funded situation by 2051.

Based on our capital market assumptions and scenario simulator, a typical multiemployer plan has an **85% chance** of achieving a return in excess of 5.5% for the next 30 years. After a capital injection from the SFA invested entirely in bonds and representing 50% of total assets post-injection, the plan would see the probability of achieving a 5.5% return reduced to a **50% chance**. In this simulation, the plan would therefore fail to achieve full funding in about half of all market scenarios.

[illustration follows on next page]
The asset allocation used for this analysis is shown in the table below. Bonds represented 30% of the allocation pre-SFA and 65% post-SFA.

### Distribution of Annualized Returns in 2051

![Distribution of Annualized Returns in 2051](image)

**Source:** Invesco, Moody’s.

<table>
<thead>
<tr>
<th>Percentile</th>
<th>Pre-SFA investment policy cumulative annual return</th>
<th>Post-SFA investment policy cumulative annual return</th>
</tr>
</thead>
<tbody>
<tr>
<td>95%</td>
<td>11.8%</td>
<td>8.6%</td>
</tr>
<tr>
<td>85%</td>
<td>10.2%</td>
<td>7.3%</td>
</tr>
<tr>
<td>50%</td>
<td>7.7%</td>
<td>5.4%</td>
</tr>
<tr>
<td>15%</td>
<td>5.5%</td>
<td>4.0%</td>
</tr>
<tr>
<td>5%</td>
<td>4.2%</td>
<td>3.2%</td>
</tr>
</tbody>
</table>

The asset allocation used for this analysis is shown in the table below. Bonds represented 30% of the allocation pre-SFA and 65% post-SFA.

<table>
<thead>
<tr>
<th>Asset class</th>
<th>Pre-SFA investment policy (in $)</th>
<th>SFA assets (in $)</th>
<th>Post-SFA investment policy (in $)</th>
<th>Post-SFA investment policy (in %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>US Equities</td>
<td>30</td>
<td></td>
<td>30</td>
<td>15.0%</td>
</tr>
<tr>
<td>International equities</td>
<td>30</td>
<td></td>
<td>30</td>
<td>15.0%</td>
</tr>
<tr>
<td>Bonds (US Aggregate)</td>
<td>30</td>
<td>100</td>
<td>130</td>
<td>65.0%</td>
</tr>
<tr>
<td>Unlisted Real Estate</td>
<td>5</td>
<td></td>
<td>5</td>
<td>2.5%</td>
</tr>
<tr>
<td>Private Equity</td>
<td>5</td>
<td></td>
<td>5</td>
<td>2.5%</td>
</tr>
<tr>
<td>Total</td>
<td>$ 100</td>
<td></td>
<td>$ 200</td>
<td>100%</td>
</tr>
</tbody>
</table>

SFA assets as a % of total assets: 50%
Finally, the table above shows another aspect to consider: most plans will need to reorganize their asset allocation based on the size of the SFA contribution. The PBGC may want to consider acceptable asset allocation ranges for the plans’ investment policy in addition to the allocation of SFA assets. An unintended consequence of the SFA program could be to create significant transaction costs due to major asset allocation changes.

We appreciate the opportunity to comment on the IFR. If you have any questions regarding our comments or would like additional information, please contact:

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Sincerely,

Vincent de Martel
Head of North America Client Solutions

Tony Wong
Head of Fixed Income Investments