

Pension Benefit Guaranty Corporation
Special Financial Assistance by PBGC
RIN 1212-AB53

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?

There are two distinct advantages of expanding the fixed income opportunity set to include instruments such as synthetic replications, insurance contracts, hybrid securities and preferred stock – higher return potential and improved portfolio diversification. For example, collateralized debt investments such as CLOs, CMOs, or CDOs (as an application of “synthetic” replications of fixed income securities) can offer enhanced return potential relative to traditional corporate or other investment grade (IG) credit securities with similar credit ratings established by nationally recognized agencies such as Moody’s and Standard & Poor’s. When combined with other IG rated instruments in a diversified manner, these investments (as well as hybrid securities and preferred stock) can potentially **reduce** overall expected portfolio risk through broader diversification if structured prudently.

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?

The disadvantage includes a higher level of portfolio complexity relative to a portfolio comprised solely of investment grade corporate bonds. With complexity comes additional risk factors such as subordination risk, enhanced credit risk, counterparty risk and other idiosyncratic risks. However, a diversified well executed program managed by a Fiduciary with expertise would mitigate the risks. In terms of inequitable outcomes, the risk is higher for those plans whose overall asset allocation is dominated by the SFA proceeds (currently insolvent plans or expected to be insolvent within the next few years). Two factors contribute to the higher level of risk. First, Plans dominated by SFA assets are more restricted in their investment guidelines and asset allocation strategy. These Plans do not have the ability to holistically combine the legacy assets and SFA assets to construct the same level of overall diversification, risk-efficiency and cost effectiveness as those Plans that have a higher ratio of legacy assets to SFA assets. Second, those plans have

virtually no ability to rebalance and purchase securities at lower prices in the event of a market downturn. In this respect, restricting SFA asset guidelines to one particular asset class or segment of the market increases both systematic and unsystematic risk and skews toward more inequitable outcomes for insolvent plans.

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

Higher levels of portfolio complexity could lead to incrementally higher transaction costs and investment management fees. However, the offsetting incremental return should mitigate these additional expenses.

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

We believe each Plan should utilize a qualified and experienced institutional investment advisor / manager who accepts Fiduciary responsibility associated with the advice / management related to SFA assets.

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. A specific Investment Policy Statement (IPS) can be created to clearly define the guidelines and restrictions associated with the SFA assets.

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 certain stock ETFs or mutual funds that have investment profiles that are not materially riskier than fixed income-based investment grade securities?

Given that the investment rate of return assumption requirement to determine the amount of relief is the lesser of the third segment corporate bond rate plus 200 basis points (currently 5.5%), or the interest rate assumption used for Funding Standard Account (FSA) purposes, - in most instances the 5.5% rate will be used to discount the projected liability. If the SFA proceeds are restricted to investment grade bonds, then mathematically the SFA grant will not be sufficient to make all benefit payments and expenses through 2051, in most cases, due to the mismatch between current interest rates and the discount rate used to project the amount of relief

As outlined in the chart below, based on Segal Marco's 2021 capital market assumptions, a portfolio of Core Fixed Income bonds (includes Treasuries and non-Treasuries with credit rating of BBB or better) is projected to earn approximately 2.5% annually over the long-term (Column A). In order to construct a portfolio expected to earn the discount rate of 5.5% (and therefore expected to keep a Plan solvent through 2051) the SFA grants would need to be invested in a balanced portfolio of 50% bonds and 50% equities (Column C). At a minimum, consideration

should be given to allow for an allocation of 15% to equities. A portfolio comprised of 15% equities and 85% bonds (Column B) produces a higher expected return and has lower expected volatility than the 100% investment grade bond portfolio. Due to the low correlation between equities and investment grade bonds (particularly Treasuries), the benefits of diversification from the addition of a small amount of equities allow a portfolio to be constructed with even lower volatility than the 100% bond portfolio. Note, however, that this portfolio would still not be expected to earn a long-term return of 5.5%, and therefore would not be expected to keep the Plan solvent through 2051. The addition of diversifying fixed income assets (Column D) provides more return at lower risk and therefore produces a better Sharpe Ratio (return to risk ratio) than the investment grade only portfolio. Ultimately, adding flexibility in fixed income assets AND other assets produces a more optimal portfolio and helps to mitigate the funding gap.

		(A)					
(B)	(C)	(D)	(E)	(F)			
		All Bond Portfolio	Low Risk Portfolio	Balanced Portfolio	High Yield Illustrative	IG Corp Only	IG Corp w/Equity
Bonds	Cash	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Core Fixed Income	100.0%	85.0%	50.0%	75.0%	0.0%	0.0%
	High Yield	0.0%	0.0%	0.0%	15.0%	0.0%	0.0%
	IG Corporate Only	0.0%	0.0%	0.0%	0.0%	100.0%	90.0%
Equity	US Equity	0.0%	15.0%	50.0%	10.0%	0.0%	10.0%
	Developed Equity (U)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Emerging Markets Equity	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Alternatives	MACS	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Private Credit	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Commodities	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Real Estate (UL)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sum		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Risk & Return	Average Return	2.5%	3.4%	5.5%	3.5%	2.8%	3.4%
	Compound Return	2.4%	3.3%	5.1%	3.4%	2.6%	3.2%
	Standard Deviation	5.0%	4.8%	9.1%	4.9%	5.5%	5.5%
	Sharpe Ratio	0.12	0.31	0.40	0.33	0.16	0.27
		All Bond Portfolio	Low Risk Portfolio	Balanced Portfolio	High Yield Illustrative	IG Corp Only	IG Corp w/Equity

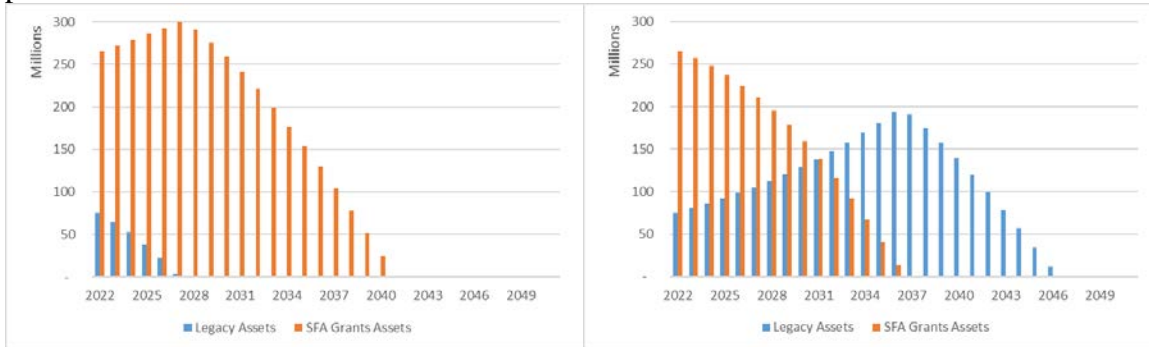
0.0%	Probability of Achieving At Least over 5 Years	66.9%	81.1%	82.6%	82.0%	69.5%	77.2%
5.5%	Probability of Achieving At Least over 5 Years	2.3%	4.8%	33.1%	5.6%	4.4%	7.0%
0.0%	Probability of Achieving At Least over 20 Years	98.4%	99.9%	99.5%	99.9%	98.5%	99.6%
5.5%	Probability of Achieving At Least over 20 Years	0.3%	2.2%	42.8%	2.9%	1.2%	3.5%

Another way to look at this issue is outlined in the table below. The table illustrates a hypothetical plan with current assets of \$75 million that is expected to go insolvent before 2028. The present value of the expected net shortfall (that is, projected obligations less projected resources) through 2051 is \$265.7 million using a discount rate of 5.5%. If those SFA grant funds were segregated and invested exclusively in investment grade bonds, they would be expected to earn approximately 2.5% annually over the long-term.

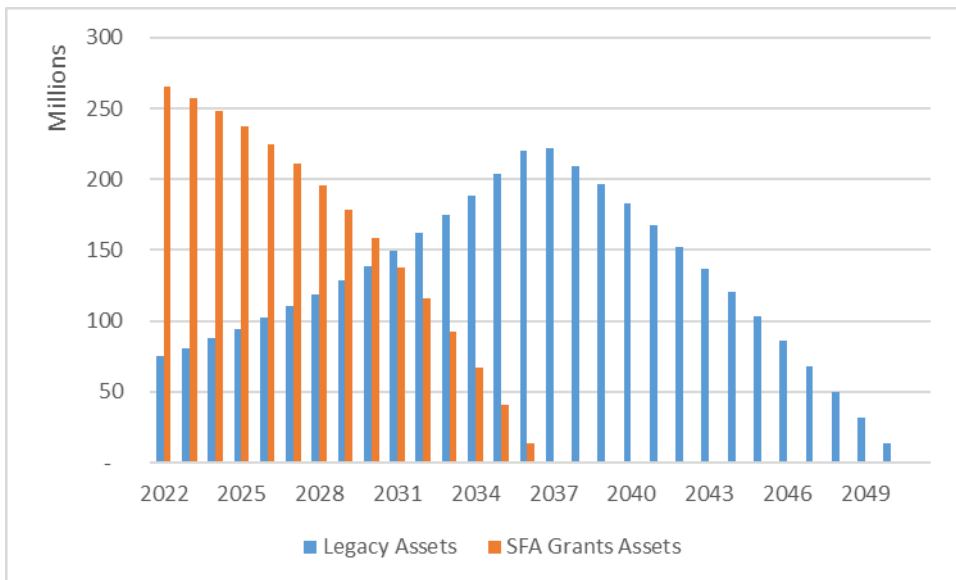
Year	Obligations	Resources	Net Shortfall
2022	14,601,926	75,000,000	-
2023	15,516,047	63,719,968	-
2024	16,571,759	50,855,137	-
2025	17,693,309	36,168,964	-
2026	19,028,869	19,491,816	-
2027	20,360,519	488,409	19,872,110
2028	21,729,427	-	21,729,427
2029	23,032,615	-	23,032,615
2030	24,144,919	-	24,144,919
2031	25,156,386	-	25,156,386
2032	26,010,574	-	26,010,574
2033	26,917,823	-	26,917,823
2034	27,244,492	-	27,244,492
2035	27,666,660	-	27,666,660
2036	27,852,233	-	27,852,233
2037	27,867,266	-	27,867,266
2038	27,774,916	-	27,774,916
2039	27,391,951	-	27,391,951
2040	27,152,726	-	27,152,726
2041	26,664,479	-	26,664,479
2042	26,061,263	-	26,061,263
2043	25,361,829	-	25,361,829
2044	24,611,447	-	24,611,447
2045	23,708,557	-	23,708,557
2046	22,730,899	-	22,730,899
2047	21,622,401	-	21,622,401
2048	20,500,441	-	20,500,441
2049	19,368,569	-	19,368,569
2050	18,190,571	-	18,190,571
2051	16,881,165	-	16,881,165

The charts below show how the combined assets may be spent down. The first chart presumes the legacy assets (which are expected to earn 7.0% annually) are spent first, while the second chart presumes the SFA grant assets (which are expected to earn 2.5% annually) are spent first. Two observations are worth noting. First, in neither case are the assets projected to remain solvent

through 2051. Second, spending SFA grant assets first has the advantage of being expected to remain solvent longer. This seems likely to create an incentive for plan sponsors to increase the risk profile of legacy assets in an effort to prolong the horizon of expected solvency of the total pool of assets.



Outlined in the next chart is a spending example to illustrate what needs to be attained in order to reach the 2051 timeframe. In this case the legacy assets would need to earn 8% while the SFA grants assets are being spent down.



It seems more prudent to seek to optimize both the legacy and SFA portfolios through additional diversification of investments, rather than relying solely on additional risk taking in the legacy portfolio to reach the goal of prolonging the asset pool available for benefits.

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

Based on exhibits above, a minimum of 15-25% is reasonable, as the diversification away from investment grade fixed income decreases the expected volatility of the portfolio of SFA assets. Introducing publicly traded equities and high yield bonds seems sensible as a first step as these are


transparent, highly liquid, exhibit a low degree of correlation and can be accessed via low fee structures.

However, note that limiting SFA assets to only 15-25% allocations to asset classes with more return potential than investment grade bonds would still not prolong the expected solvency date to 2051 in most cases, but would extend it beyond where it otherwise be if only investment grade bonds were available, and at a minimum, would create a path to potential longevity. This is a key concept, in that, it is possible that “creating” more time could provide a scenario where future interest rates might provide incremental opportunity for investment at higher yields, thus mitigating the funding gap.

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

Segal Marco Advisors believes it would be most prudent to consider the totality of assets between current assets and the new SFA assets. Each pool of assets can have their unique/particular asset allocation but the total investable assets should remain the primary consideration in order to achieve the goal of meeting benefit payments and extending the corpus to meet payments into perpetuity.

Consider two plans for illustrative purposes: Plan A, which is currently insolvent and will receive \$100 million in SFA grants and Plan B, which is currently 50% funded (discounted at 7%), has \$50 million in legacy assets and will receive \$50 million in SFA grants. Under the current guidelines, both Plan A and Plan B’s SFA assets are to be segregated and invested only in investment grade fixed income. This means that 100% of Plan A’s assets are expected to earn around 2.5% over the long term with a discount rate of 5.5% (assuming that is the lower of the two rates). Plan B, however, has an asset allocation of 50% investment grade fixed income, and 50% of return-seeking assets (such as equities, high yield bonds, real estate, private equity, etc.). Plan B has an aggregated (SFA plus legacy) of \$100 million of assets with a blended discount rate of 6.25%. However, because Plan B has legacy assets which are not subject to the permissible investment constraints imposed by the guidance, Plan B has a much higher probability of achieving its discount rate and maintaining solvency, at least through 2051, than Plan A. In this example, it would seem as though the permissible investment guidelines create inequitable outcomes for Plans of differing circumstances. With the obvious disadvantage to the current insolvent Plan.



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