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August 10, 2021

Regulatory Affairs Division
Office of the General Counsel
Pension Benefit Guaranty Corporation
1200 K Street NW
Washington, DC 20005-4026.

Submitted via electronic filing: https://www.regulations.gov/docket/PBGC-2021-0003

Re: Special Financial Assistance by PBGC, RIN 1212-AB53

BlackRock, Inc. (together with its affiliates, "BlackRock")[1] respectfully submits this comment letter to the Pension Benefit Guaranty Corporation ("PBGC") in response to the interim final rule and request for comments regarding the requirements for Special Finance Assistance ("SFA") applications and related restrictions and conditions pursuant to the American Rescue Plan Act of 2021 ("ARPA").

The SFA program included in the ARPA represents an important step in the process of addressing the finances of multiemployer pension plans and providing certainty and security to employers and their plan participants. While the aggregate funded status of multiemployer plans has continued to increase over the past decade, the SFA provides a lifeline for critical and declining plans, which were only 34% funded in aggregate as of the end of 2020[2]. BlackRock recognizes the challenging funded status faced by eligible multiemployer pension plans and believes it is critical to implement the SFA program as Congress intended – ultimately providing a long-term liability-aware investment solution that will help protect both participants' and retirees' hard-earned pension benefits.

Given our expertise as an investment manager, our comments are focused on answering the questions asked by the PBGC outlined in the permissible assets section of the interim final rule. These responses are detailed in the following pages and are supported by modeling and analysis included in our responses and exhibits.

We strongly support the aid that Congress has provided and the PBGC is implementing on behalf of eligible multiemployer plans. The SFA program will help the plan participants served by multiemployer plans across the country collectively experience better financial futures than would otherwise be possible. We believe those individuals would further benefit from modest changes to the guidelines and regulations that govern how the SFA assets can be managed while maintaining a prudent set of investing standards.

We thank the PBGC for the opportunity to comment, and we welcome the opportunity to further discuss any of the information or recommendations we have provided.

Sincerely,

Dalia Blass
Senior Managing Director
Head of External Affairs

Mark McCombe
Senior Managing Director
Chief Client Officer

1 *BlackRock is one of the world's leading asset management firms. We manage assets on behalf of institutional and individual clients worldwide, across equity, fixed income, liquidity, real estate, alternatives, and multi-asset strategies. Our client base includes pension plans, endowments, foundations, charities, official institutions, insurers, and other financial institutions, as well as individuals around the world. The assets we manage represent our clients' financial futures, and we seek to deliver investment outcomes that align with their objectives. Approximately two-thirds of the assets BlackRock manages are retirement-related assets, and helping people invest to build savings that serve them throughout their lives is core to our mission as a company.*

2 *Per Milliman's [December 2020 Multiemployer Pension Funding Study](#).*

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Responses to PBGC Questions

We understand and appreciate the PBGC's preference for the SFA assets to be invested in assets that have a risk profile that is similar to investment grade ("IG") fixed income. After conducting asset class and security modeling, provided in the exhibits following our responses, we believe that there are opportunities for the PBGC to consider expanding the scope of permissible investments for SFA assets. Our analysis indicates that doing so could help to maintain the solvency of impacted multiemployer plans for the intended 30-year period.

We believe that an expanded set of permissible investments could raise the chances of achieving a 5.5% return, which would match the roughly 5.5% interest rate limit (based on the rates specified in ERISA section 303(h)(2)(C)(iii) as of July 2021) used to determine the required amount of special financial assistance as described under ERISA section 4262(e)(3) – thus avoiding an interest rate mismatch while maintaining prudent, diversified risk levels.

In the following responses, we address the individual questions posed by the PBGC on permissible investments. We recognize that these are high-level comments and welcome a more detailed conversation on any highlighted topics or asset classes.

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.**

We would propose a more flexible investment toolkit in order to achieve the goals detailed in the SFA program for critical and declining multiemployer plans. Limiting the investment toolkit to only IG assets, as detailed in our analysis, could lead to the objectives of the program going unfulfilled. Our observations are driven by our understanding of capital markets – specifically, current market pricing and the available yield across currently permitted assets (as well as future projections) indicate a **low likelihood of maintaining plan solvency for 30 years**.

The SFA has a number of options to consider across vehicles with fixed income or fixed income-like characteristics while allowing for portfolio innovation and diversification. Additional vehicles could include equities, preferred stock, convertible debt, and private credit. A broader fixed income toolkit could also allocate to emerging market bonds, leveraged loans, investment grade collateralized loan obligations ("CLOs"), and high yield debt while allowing for the use of futures and swaps. However, we believe that additional vehicles should help to reduce portfolio correlations or offer some additional benefit compared to IG fixed income; therefore, insurance vehicles such as guaranteed investment contracts should be carefully considered from a cost and benefit perspective.

In each of the following responses, we detail our high-level views on the potential advantages and disadvantages of a range of vehicles and structures, including our assessment of the potential trade-offs.

a. **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?**

We believe that there are advantages to allowing SFA assets to be invested in several fixed income vehicles as well as vehicles with similar characteristics, either through cash coupon properties or through replication of the properties of fixed income. We further detail the potential advantages of each vehicle for consideration in the following table.

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Category	Potential Advantages
High Yield	• BBs offer ~115bps spread pick-up vs. IG BBBs • Broad HY universe offers ~220bps spread pick-up vs. broad IG • Diversifies IG credit sectors
Leveraged Loans	• ~250bps yield pick-up vs. broad IG • Diversifies IG credit sectors • Diversifies interest rate risk
Investment Grade CLOs	• ~250bps yield pick-up in CLO BBBs vs. IG BBBs • ~110bps yield pickup in broad CLOs vs. broad IG • Diversifies IG credit sectors • Diversifies interest rate risk
Emerging Market Bonds	• ~120 bps spread pick-up vs. broad IG • Country diversification
Convertibles	• Enhance returns (3x compared to broad IG over trailing 5-year period) • Diversifies IG credit sectors • Equity upside
Preferred Stocks	• Enhance returns • Diversifies IG credit sectors • Equity upside
Private Credit	• Enhance returns (low double-digit total return targets, typically) • Diversifies IG credit sectors • Cashflow benefits
Derivatives	• Efficient risk and liquidity management (e.g., futures and swaps) • Enables implementation of tactical views

The data included in the chart above is as of 30 June 2021 and represents a point in time view on market pricing for each asset class.

At the aggregate level, the benefits of using the vehicles described above could entail stronger returns and lower overall portfolio risk due to diversification benefits (such as reduced business-cycle risk via greater sector diversification and lessened duration exposure, thus better preserving capital in a rising rate environment). Ultimately, we believe that utilization of the vehicles described above would result in potentially improved and more equitable outcomes for multiemployer plan beneficiaries, **particularly those relying on the long-term solvency of the plans**.

b. 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?

Each of these additional vehicles is generally traded in smaller and more nuanced markets with typically lower liquidity compared to broader IG securities. In the table below, we highlight some specific risks of each vehicle, noting that while they may help to increase the overall yield profile, they could introduce additional risks and potentially higher degrees of volatility around returns as compared to the trailing 5-year 6% volatility for the Bloomberg Barclays Aggregate Index as of 30 June 2021.

We believe that eligible plans should work together with their key stakeholders to determine the appropriate allocations to these asset classes given the specifics of each plan. Some exposures may be appropriate as a small allocation that can generate additional income and diversify risks, while not dramatically increasing the overall risk of the portfolio.

Category	Risks (Compared to IG Fixed Income)
High Yield	• Higher volatility (~7% over trailing 5-year period) • Less liquid
Leveraged Loans	• Higher volatility (~7% over trailing 5-year period) • Less liquid
Investment Grade CLOs	• Similar volatility (~6% over trailing 3-year period) • Less liquid • Higher complexity
Emerging Market Bonds	• Higher volatility (~10% over trailing 5-year period) • Less liquid
Convertibles	• Higher volatility (~10% over trailing 5-year period) • Less liquid • Limited market capacity
Preferred Stocks	• Higher volatility (~9% over trailing 5-year period) • Increases portfolio equity risk
Private Credit	• Higher volatility (~9% for 2007-2016 vintages) • Restricted liquidity • Higher complexity • Lower transparency
Derivatives	• May increase volatility • Higher complexity • Collateral management • Counterparty risk

The data included in the chart above is as of 30 June 2021 and represents a point in time view on trailing volatility for each specified asset class.

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

The implementation costs (e.g., accounting, operational, legal, contracting) may vary depending on how the additional vehicles are accessed. Recognizing that some of the additional vehicles are smaller markets and more nuanced in terms of liquidity and access, dedicated separately managed portfolios that are specific to each of these individual asset types may introduce higher costs. These costs could be contained by allowing allocations to vehicles that employ a broad multi-sector strategy, permitting managers the flexibility to rotate exposures based on where they see the best opportunity and relative value. In addition, assuming investor eligibility, commingled vehicles such as collective trusts could be used to keep administrative costs and other fees lower (as compared to other types of pooled funds that are publicly available for investment), while established mutual funds may provide scale benefits to minimize the liquidity costs of ramping up exposures in the smaller and more nuanced markets.

For additional consideration, exposure to additional vehicles may also be delivered via passive strategies where tracking error vs. benchmarks and implementation costs are minimized, or through actively managed strategies where the objective is to produce positive returns relative to benchmarks and net of fees. We believe that flexibility between both passive and active implementation is important to consider and can help to access various parts of the capital markets more efficiently and importantly, achieve the desired return profile. Skilled active managers thrive in markets with broader opportunity sets; including multi-sector mandates where the decision to over or underweight one sector vs. another is an available alpha source. Active managers can also provide value in less liquid opportunity sets and in credit markets where downside protection is important. Conversely, passive implementation can make sense in markets that offer lower breadth opportunity sets and higher liquidity. Passive strategies can also be a good fit for allocations that are intended to provide a more consistent source of liquidity (e.g., for benefit payments).

In all cases, it is our belief that using managers with proven, long-term track records of producing consistent alpha, net of fees, for strategies that most cost effectively access market exposure may further benefit plans by helping to achieve the desired return profile.

Implementation costs for all of these vehicles are evolving, which is why it is important to work with providers to minimize overall plan costs. Recognizing the changing nature of these markets, including active vs. passive implementation considerations, we have provided below a high-level summary based on the current market environment. As footnoted below, implementation costs represent fees associated with initial investment, whereas management costs represent ongoing management fees, in each case as compared to IG fixed income, which we would characterize as relatively low.

Category	Implementation Costs	Management Costs
High Yield	Low	Medium
Leveraged Loans	Low	Medium
Investment Grade CLOs	Low	High
Emerging Market Bonds	Low	Medium
Convertibles	Low	High
Preferred Stocks	Low	Medium
Private Credit	Medium	Very High
Derivatives	Medium	Low

Implementation costs represent fees associated with the initial investment of assets (e.g. accounting, operational, legal, contracting). Management costs represent the ongoing fees for management of the assets once invested on a scale of low, medium, high, and very high as compared to management costs for IG fixed income, which are relatively low.

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

Investment managers with multiemployer plan expertise, understanding of the guidelines and regulations that inform permissible investments, and a demonstrated track record of managing strategies that invest in such vehicles are well positioned to appropriately manage and advise. Management can be implemented through dedicated mandates or as part of diversified strategies that permit the flexibility to invest in a broader set of asset classes when opportunity and relative value warrant.

Managers should be able to deliver the expertise required to manage broad multi-sector strategies, including strategies that permit allocations into smaller, nuanced parts of the market where capabilities around sourcing and liquidity play an important role in both risk and performance.

e. 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?

Each vehicle or asset type we have referenced in this letter can be clearly defined and easily used, with the exception of Private Credit and Derivatives, which can be clearly defined but are typically more complex to utilize. Private Credit often requires extensive fund documentation, lock-up periods, and more complex fee structures. Derivatives are more complex in part due to the extra documentation required by counterparties as well as the ongoing need to maintain sufficient collateral in connection with derivative positions.

Depending upon the desired implementation of the SFA assets, we believe plan portfolios are best served using existing, well-understood investment structures – e.g. collective trusts, mutual funds, and exchange-traded funds ("ETFs") – that are utilized by other institutional investors. In our experience with multiemployer plans, implementation considerations are often driven by the expected holding period, asset class, and fee dynamics.

In terms of commingled investment structures, ETFs can provide liquidity advantages given the ability of those funds to access liquidity over the applicable exchange instead of being confined to the underlying bond markets in question. ETFs can also offer managers a nimbler tool for expressing tactical asset allocation views. Collective trusts may be better suited for long-term strategic asset allocations given their typically lower management fees and administrative costs as compared with other types of pooled funds that are publicly available for investment. Collective trusts may also offer the benefit of transaction cost savings via unit exchanges when cash contributions are netted against cash withdrawals on the same trade date.

Moreover, various commingled investment structures can be combined and blended to deliver customized exposures as permitted under applicable law, whereas separate accounts have the advantage of additional customization flexibility. However, separate accounts may require a larger initial investment compared to a pooled fund.

Additionally, dedicated, customized separately managed accounts may be used to build distinct portfolios depending on plans' needs and cost considerations. Similarly, limited partnership structures for investors willing to accommodate greater complexity and tolerate liquidity constraints can offer unique risk and return opportunities. Based on our experience, we believe both separately managed accounts and limited partnership structures can also be clearly defined and implemented within multiemployer plans.

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?**

Based on our assumption that SFA assets will constitute ~70% of total plan assets for the average eligible plan after the infusion, we believe that additional flexibility beyond IG fixed income would be required in order to meet the objectives of the program. Our view is based on IG-rated yields available in the marketplace today and incorporating forecasted returns over the next ten years. As an example, the current yield on the Bloomberg Barclays US Aggregate Index, a broad index consisting of IG-rated US fixed income securities, was 1.49% as of June 30, 2021. Considering the lowest-rated IG tranches of the corporate bond market as demonstrated by the Bloomberg Barclays Corporate BBB-only Index, the yield as of June 30, 2021 was 2.26%, still well below the approximate 5.5% target.

Beyond non-IG fixed income, certain non-fixed income asset classes, such as preferred stocks, should be considered for inclusion as permissible investments. Preferred stocks are an equity asset class that may have an investment profile that is not materially riskier than IG fixed income securities. This asset class could be accessed through several different commingled structures, including collective trusts, ETFs, or mutual funds.

In this context, we believe that vehicles beyond US IG fixed income securities should be considered as permitted investments for SFA assets and that commingled investment structures such as collective trusts, ETFs, and mutual funds as the means to implement exposures to those vehicles are also important to consider.

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

The amount of SFA assets permitted to be invested in non-investment grade securities would depend on the types of eligible investments and their corresponding return and risk profiles. Our analysis indicates that some inclusion of non-investment grade securities could help to improve the resilience of SFA assets, including contributing overall diversification benefits. We believe that appropriateness should be assessed in the overall context of a plan's objectives, most importantly the long-term health and solvency of plan assets to provide for beneficiaries.

As illustrated in greater detail in our subsequent exhibits, assuming the SFA assets are primarily invested in investment grade fixed income securities with an expected rate of return of 2%, a typical plan's legacy asset pool would need to return 12% to achieve a 5.5% return overall, given the sizeable allocation that the SFA assets would represent in relation to the legacy assets. If higher-returning investments (e.g., non-IG fixed income securities, equities, private markets) are eligible investments for the SFA assets, the required return from the legacy assets would decrease.

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

Both the SFA assets and the legacy assets affect the return and risk profile of the entire portfolio viewed across all plan assets. Moreover, restricting the investments eligible for SFA assets will affect a plan's ability to achieve its return targets and may influence a plan to take more risk with its legacy assets. Furthermore, we believe that any investment restrictions on SFA assets should not restrict the investment guidelines for any other plan assets. The SFA assets and other plan assets should be viewed in concert to enable more efficient portfolios to better help achieve the plan's goals and objectives.

Exhibits

In addition to our responses above to the individual questions posed by the PBGC on permissible investments, we have included our full analysis of the SFA program which incorporates our proprietary capital market assumptions and portfolio modeling exhibits.

August 2021

Client Insight Unit

BlackRock.

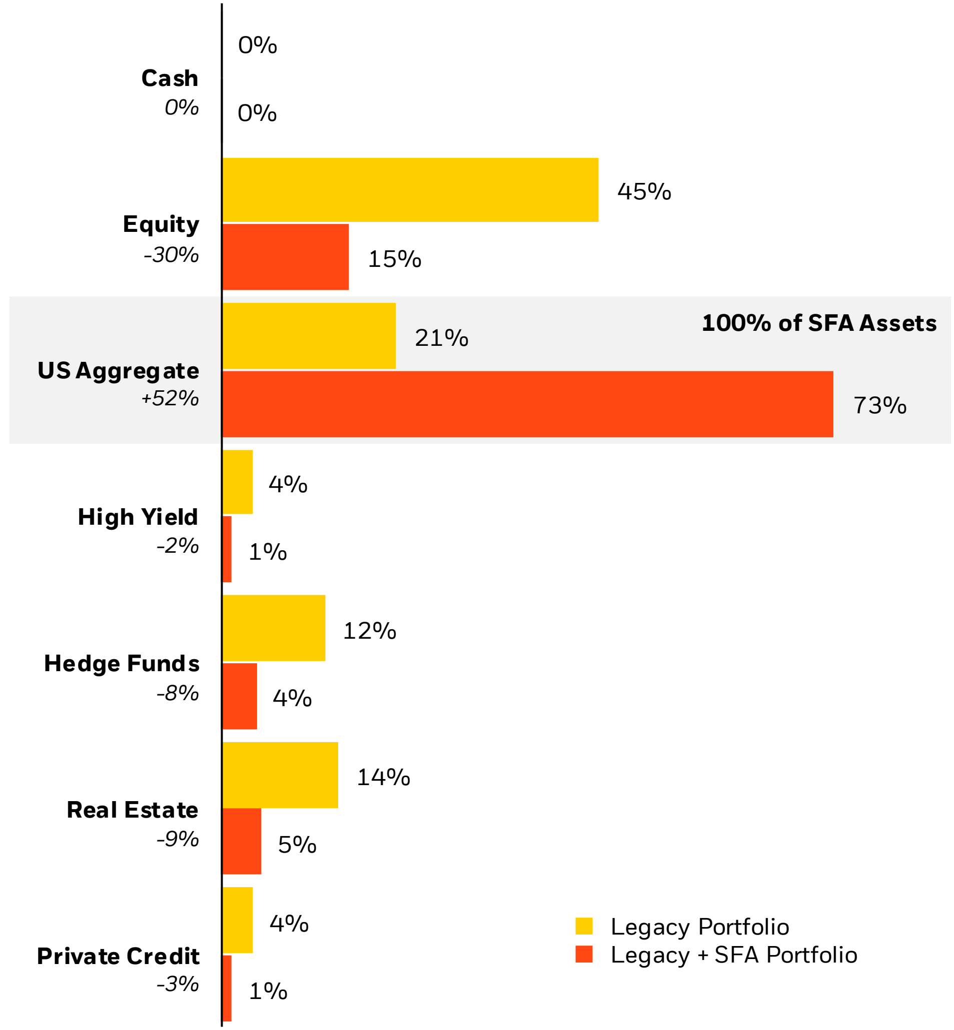
Multiemployer Plans

Special Finance Assistance (SFA) Analysis

Making a Splash

The $94B special finance assistance on average will comprise two-thirds of the overall asset pool for the eligible multiemployer cohort

Portfolio allocation before and after SFA



Portfolio allocation is based on a representative critical and declining plan and is for illustrative purposes only. The US Aggregate Index was used to proxy the SFA portfolio of investment grade fixed income exposure. It is not possible to invest directly in an index. Pleas e see the 'Allocation and Benchmarks' slide in the appendix for more information.

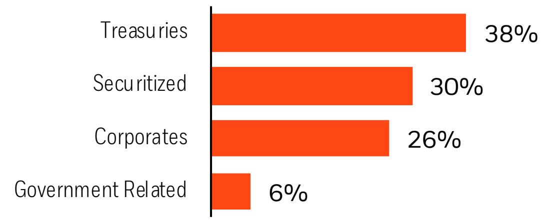
Benchmarking the Implications

The low for longer yield environment may present challenges to achieving a 5.5% bogey

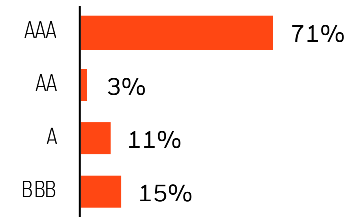
Source: BlackRock, Yield as of 6/30/2021, Risk as of 2/28/2021.
Ex-ante risk is defined as annual expected volatility and is calculated using data derived from existing portfolio holdings, using the Aladdin portfolio risk model. This proprietary multi-factor model can be applied across multiple asset classes to analyze the impact of different characteristics of securities on their behaviors in the market place. In analyzing risk factors, the Aladdin portfolio risk model attempts to capture and monitor these attributes that can influence the risk/return behavior of a particular security/asset. Risk: Monthly Constant Weighted (MTC model) with 246 monthly observations; 1 standard deviation; 1yr horizon. For additional details see the Risk Factor Glossary in the Appendix. The following indexes were used to represent each asset class: Euro IG- BBG Barc Pan-European Aggregate Corporate in USD | Long Gov - BBG Barc Treasury 10+ Yr Index | ABS - BBG Barc ABS Index | Short Gov - BBG Barc Government 1-3 Yr Index | Euro HY - BBG Barc Pan-European High Yield (2% Issuer Constraint) in USD | CMBS - BBG Barc Pan-European High Yield Index | Global Agg - BBG Barc CMBS, Eligible for U.S. Aggregate | Int Gov - BBG Barc Global Aggregate Index | US IG - BBG Barc Intermediate Government Index | US Agg - BBG Barc Corporate Index | Int Agg - BBG Barc U.S. Aggregate Index | EM - Barclays Intermediate Aggregate Bond Index | US HY - JP Morgan EMBI Global Diversified Index | CLO - BBG Barc U.S. Corporate High Yield | EMD - JP Morgan CLOIE Investment Grade Index | Securitized - 50% JP Morgan Emerging Markets Bond Index Global Diversified and 50% JP Morgan Government Bond Index Emerging Markets Global Diversified | MBS - BBG Barc Securitized Index | EM Corps - BBG Barc MBS Index | Asian Credit - JP Morgan CEMBI Broad Diversified Index | US Loans - JP Morgan Asia Credit Index. It is not possible to invest directly in an index. **Past performance is not indicative of future results.**

Disaggregating the US Aggregate

Sector Breakdown



Ratings Breakdown



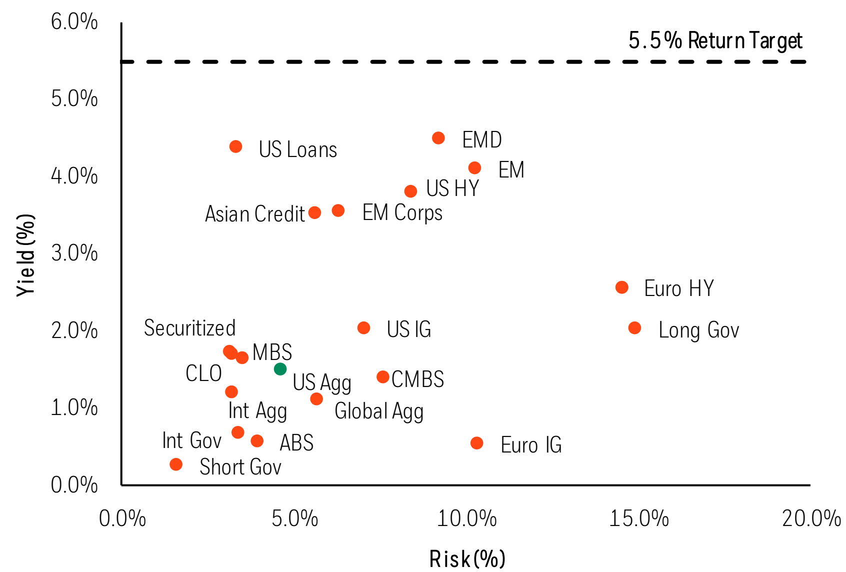
Other Statistics

Duration
6.69 years

Volatility
4.64 %

Predominant Risk Factor
Rates

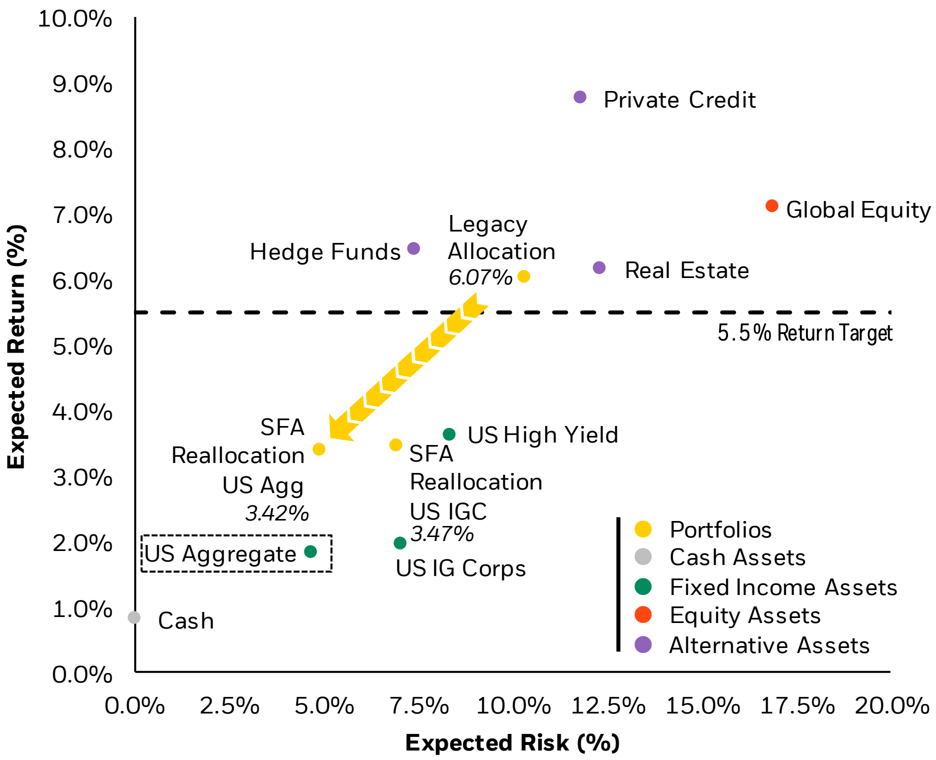
Off target



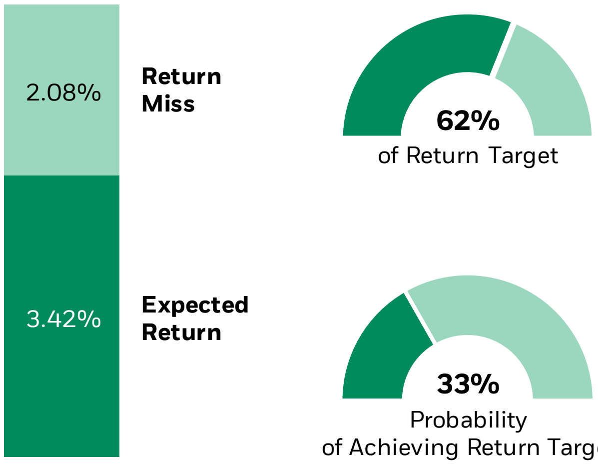
Managing Expectations

Looking forward, portfolios with significant investment grade fixed income exposures should expect tempered returns

BlackRock's Long Term Capital Market Assumptions



SFA Reallocation
US Aggregate

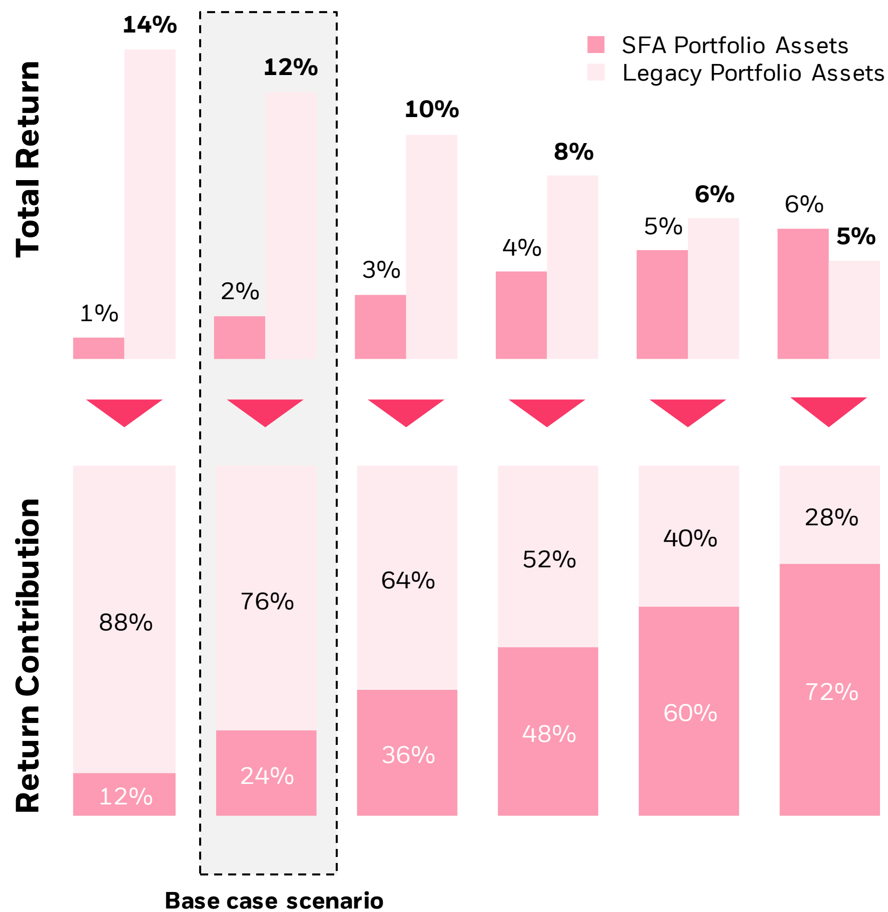


Source: BlackRock as of May 2021, based on BlackRock's capital market assumptions. Expected risk is calculated using the expected volatility assumptions. See slide titled "Capital Market and Modeling Assumptions" in the Appendix for additional details, including the indexes used to represent each asset class. This asset class mapping is also used for the ex-ante risk contribution. Risk: Monthly Constant Weighted (MTC model) with 246 monthly observations; 1 standard deviation. The probability of achieving return target is based on the expected risk and return and a normalized distribution. There is no guarantee that the capital market assumptions will be achieved, and actual risk and returns could be significantly higher or lower than shown.

A High Hurdle

Our expected return for the US Aggregate is less than 2%; assuming the SFA assets return 2%, the legacy asset pool would need to return 12% to achieve a 5.5% return, based on our Capital Market Assumptions

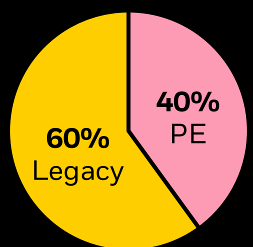
Required return of legacy asset pool to achieve a 5.5% return



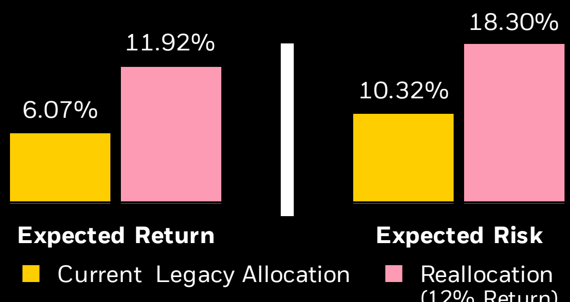
For illustrative purposes only. The return requirement of the legacy portfolio assets is based on the ratio of legacy to SFA assets (66% SFA, 34% Legacy), a hypothetical return of the SFA portfolio assets, and a 5.5% total portfolio return. The base case scenario of a 2% return for the SFA assets is based on the expected returns of the investment grade assets shown on the prior slide.

A Barbell Strategy

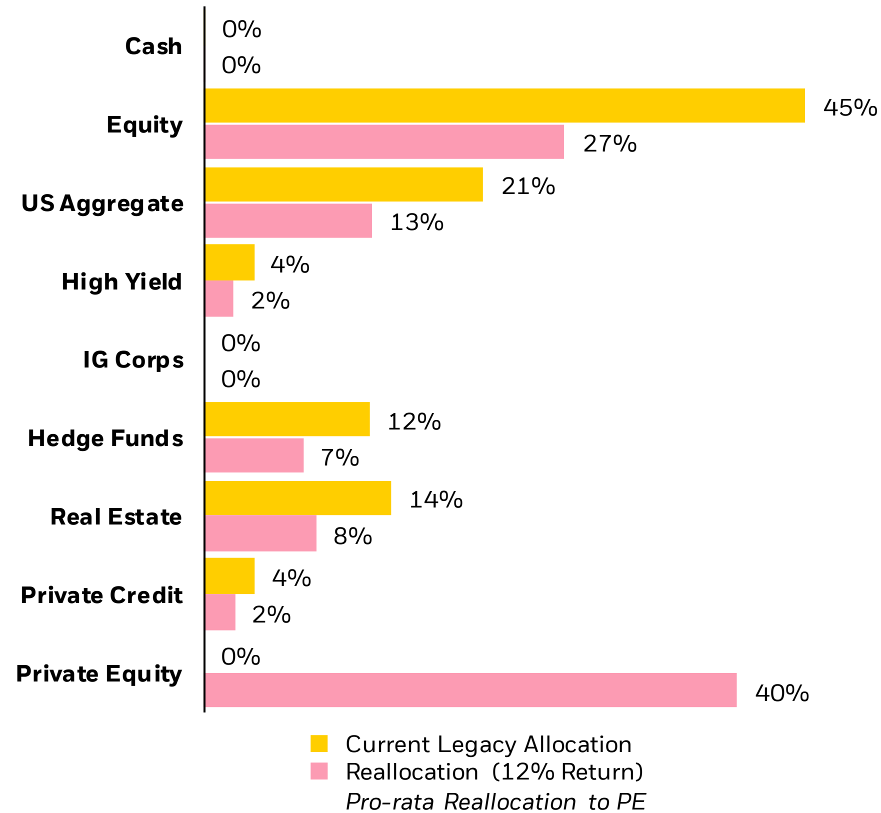
To hit a 12% return, the legacy asset pool may need to invest 35-40% of its assets in private equity-like assets



Allocation



Portfolio allocation before and after PE reallocation



Source: BlackRock as of May 2021, based on BlackRock's capital market assumptions. Expected risk is calculated using the expected volatility assumptions. See slide titled "Capital Market and Modeling Assumptions" in the Appendix for additional details, including the indexes used to represent each asset class. This asset class mapping is also used for the ex-ante risk contribution. There is no guarantee that the capital market assumptions will be achieved, and actual risk and returns could be significantly higher or lower than shown. Risk: Monthly Constant Weighted (MTC model) with 246 monthly observations; 1 standard deviation.

The focus of the reallocation and associated metrics are solely of the legacy assets (without the SFA infusion). While the risk of the standalone reallocated legacy assets increases significantly (~8%), the combination of the total portfolio – the reallocated legacy pool combined with the low risk SFA assets - decreases risk to 6.84% (-3.5%). The reallocation is a pro-rata movement of exposures to Private Equity to illustrate a portfolio that may achieve a 12% return based on our capital market assumptions. The represented reallocation may be sub-optimal and difficult to implement. It is not an investment recommendation and is for illustrative purposes only.

Appendix

Allocations and Benchmarks

Description	**Benchmark**	**Legacy Portfolio** *Current*	**Legacy Portfolio** *Reallocation (PE)*	**SFA Infusion** *Reallocation US Agg*	**SFA Infusion** *Reallocation US IGC*
Cash	USD Cash Benchmark	0%	0%	0%	0%
Global Equity	MSCI All Country World Index	45%	27%	15%	15%
US Aggregate	BBG Barc US Aggregate Index	21%	13%	73%	7%
US High Yield	BBG Barc US High Yield Index (2% Issuer Cap)	4%	2%	1%	1%
US IG Corps	BBG Barc US Corporates Index	0%	0%	0%	66%
Hedge Funds	BlackRock Proxy: Hedge Fund (Global Fund Weighted)	12%	7%	4%	4%
Real Estate	BlackRock Proxy: Real Estate US Core	14%	8%	5%	5%
Private Credit	BlackRock Proxy: Direct Lending	4%	2%	1%	1%
Private Equity	BlackRock Proxy: Private Equity US Buyout	0%	40%	0%	0%

Based on a representative critical and declining plan portfolio allocation

Capital Market and Modeling Assumptions

Capital market assumptions for the portfolio components referenced throughout the presentation are provided below

Asset Class	Description	Benchmark	(10yr) Expected Return	Expected Risk
Cash	Cash	USD Cash Benchmark	0.84%	0.00%
Equity	Global Equity	MSCI All Country World Index	7.10%	16.89%
Fixed Income	US Aggregate	BBG Barc US Aggregate Index	1.84%	4.64%
Fixed Income	US High Yield	BBG Barc US High Yield Index (2% Issuer Cap)	3.65%	8.35%
Fixed Income	US IG Corps	BBG Barc US Corporates Index	1.97%	7.01%
Alternatives	Hedge Funds	BlackRock Proxy: Hedge Fund (Global Fund Weighted)	6.47%	7.41%
Alternatives	Real Estate	BlackRock Proxy: Real Estate (US Core)	6.18%	12.30%
Alternatives	Private Credit	BlackRock Proxy: Direct Lending	8.78%	11.79%
Alternatives	Private Equity	BlackRock Proxy: Private Equity (US Buyout)	19.13%	32.03%

The representative indices listed above may differ from those that are publicly available, but the underlying methodology and assumptions are consistent. BlackRock expected market return information is based on BlackRock's long-term capital market assumptions as of May 2021 which are subject to change. Capital market assumptions contain forward-looking information that is not purely historical in nature. They should not be construed as guarantees of future returns. The projections in the chart above are based on BlackRock's proprietary long-term capital markets assumptions (10+ years) for risk and geometric return (above) and correlations between major asset classes. These asset class assumptions are passive only and do not consider the impact of active management. The assumptions are presented for illustrative purposes only and should not be used, or relied upon, to make investment decisions. The assumptions are not meant to be a representation of, nor should they be interpreted as BlackRock's investment recommendations. Allocations, assumptions, and expected returns are not meant to represent BlackRock performance. Long-term capital markets assumptions are subject to high levels of uncertainty regarding future economic and market factors that may affect actual future performance. Ultimately, the value of these assumptions is not in their accuracy as estimates of future returns, but in their ability to capture relevant relationships and changes in those relationships as a function of economic and market influences. Please note all information shown is based on assumptions, therefore, exclusive reliance on these assumptions is incomplete and not advised. The individual asset class assumptions are not a promise of future performance. Indexes are unmanaged and used for illustrative purposes only and are not intended to be indicative of any fund's performance. It is not possible to invest directly in an index.

Risk Factor Glossary

Risk Factors	Description
Alternatives	Contribution to portfolio risk arising from a portfolio's exposure to alternative assets and strategies.
Commodities	Contribution to portfolio risk arising from a portfolios exposure to commodity prices.
Emerging Market Spread	Contribution to portfolio risk arising from a portfolio's exposure to emerging market bond credit spreads over benchmark interest rates.
Equity – Country	Contribution to portfolio risk arising from a portfolio's exposure to returns of country specific equities adjusting for market, sector and style effects.
Equity – Dividend Yield	Contribution to portfolio risk arising from a portfolio's exposure to companies with different dividend yield levels.
Equity – Growth	Contribution to portfolio risk arising from a portfolio's exposure to companies with different historical growth.
Equity – Idiosyncratic	Contribution to portfolio risk arising from a portfolio's exposure to stock specific idiosyncratic risk not captured by the common risk factors.
Equity -- Market	Contribution to portfolio risk arising from a portfolio's exposure to returns across the equity market. This factor captures the risk associate with general equity market movements.
Equity – Momentum	Contribution to portfolio risk arising from a portfolio's exposure to companies with recent price momentum.
Equity – Sector	Contribution to portfolio risk arising from a portfolio's exposure to the returns of sector specific equities adjusting for market, country, and style effects.
Equity – Size	Contribution to portfolio risk arising from a portfolio's exposure to companies of different market capitalization.
Equity – Style	Contribution to portfolio risk arising from a portfolio's exposure to the returns of factors such as value, growth, size and momentum. Style factors are constructed from company fundamentals, analyst estimate data and historical market data.
Equity – Value	Contribution to Portfolio Risk arising from a portfolio's exposure to companies of different valuations.
Equity -- Volatility	Contribution to portfolio risk arising from a portfolio's exposure to companies with different historical volatility.
Foreign Currency (FX)	Contribution to portfolio risk arising from a portfolio's exposure to risk associated with changes in foreign exchange rates.
Interest Rates	Contribution to portfolio risk arising from a portfolio's exposure to risk associated with changes in yield curves.
Inflation	Contribution to portfolio risk arising from a portfolio's exposure to risk associated with changes in inflation.
Other	Contribution to portfolio risk arising from a portfolio's exposure to remaining risk factors not shown.
Spreads – Credit	Contribution to portfolio risk arising from a portfolio's exposure to credit spreads. Credit spreads capture risk associated with investment grade, high yield, and distressed debt credit spreads over benchmark interest rates.
Spread -- High Yield	Contribution to portfolio risk arising from a portfolio's exposure to high yield credit spreads over benchmark interest rates.
Spread -- Investment Grade	Contribution to portfolio risk arising from a portfolio's exposure to investment grade credit spreads over benchmark interest rates.
Spreads -- Muni	Contribution to portfolio risk arising from a portfolio's exposure to municipal bond credit spreads over benchmark interest rates.
Spreads -- Securitized	Contribution to portfolio risk arising from a portfolio's exposure to securitized credit spreads over benchmark interest rates.

Source: BlackRock

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