August 2023

What a Long Strange Trip It's Been

Looking back at PBGC special financial assistance

In brief

- The combination of higher rates and final rule changes to the Pension Benefit Guaranty Corporation's (PBGC's) special financial assistance (SFA) program has dramatically improved prospects for SFA-eligible plans achieving long-term solvency.
- Recent allocations of SFA funds have generally been at the lower end of the risk spectrum, but a deterioration in market conditions could encourage trustees to expand their use of return-seeking assets (RSAs).
- When selecting an SFA investment provider, investors should consider the provider's ability to adapt to a changing legislative and market backdrop. A robust compliance and reporting function can be critical for passing a PBGC audit.
- Quantifying SFA portfolio statistics and translating them into tangible metrics like the expected and downside lifetime of funds can help trustees balance risk and return trade-offs.
- Our most common SFA implementation has been three to five years of cash flow matching, with an alpha component on top. However, each plan is unique, and there is not a one-size-fits-all solution.
- The ability to use securitized assets has been a game changer in our SFA implementation, particularly for longer-dated cash flow matching mandates.

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Nearly two years have passed since we published our initial analysis of and recommended modifications to the PBGC's interim final rule (IFR). We titled that piece "Multiemployer Pension Relief: 'Running on Empty'"[1] both to recognize the many trucking unions that would receive special financial assistance and to reflect the challenges of achieving longer-term solvency without sufficient assets or access to an appropriate investment opportunity set. In both the paper and our IFR comments submitted to the PBGC, we strongly advocated for an increase in SFA allocation sizing and an expansion of the investment toolkit available to trustees. Many labor advocates and pension experts expressed similar sentiments.

Much has changed since our initial publication, including a dramatic shift in the markets and the enactment of the final rule (FR), which addressed many of the public criticisms by providing for more substantial SFA allocations and more lenient investment restrictions. The SFA program may have gotten off to a rocky start, but as it stands today, it is on track to fulfill its mission of protecting the

[1] Michael Buchenholz, Alex Schneider and Thomas Villanova, "Multiemployer Pension Relief: 'Running on Empty,'" J.P. Morgan Asset Management, September 2021.

retirements of nearly 1 million American workers and their families. At the time of publication, more than $50 billion in SFA funds had been deployed to 56 plans covering more than 750,000 members. Instead of running out of money in 2026, as was forecasted prior to the passage of the American Rescue Plan Act (ARPA), the PBGC Multiemployer Insurance Program is now projected to remain solvent for more than 40 years.[2]

Below, we share our insights from partnering with trustees and consultants these past two years to design and implement SFA solutions. We also outline what, in our estimation, reflects best practices on a range of topics, including strategy design, portfolio construction, current market opportunities and compliance/audit.

How did we get here?

When ARPA was enacted in March 2021, investment grade corporate bonds yielded less than 2.0%, while legislatively prescribed SFA discount rates hovered around 5.5%.[3] This gap proved to be insurmountable within the prevailing investment limitations of the SFA program: Even a maximally risked portfolio would be unable to generate sufficient returns to carry a typical applicant to the program's 30-year goal line. Plan trustees found themselves in an impossible situation.

However, by the summer of 2022, circumstances had changed, and for the better (**Exhibits 1A** and **1B**):

- **Higher rates:** In an attempt to put a damper on persistent and rising inflation, the Federal Reserve embarked on a series of rate hikes, raising the fed funds rate from 0.25% in March 2022 to 5.00% by

[2] PBGC fiscal year 2022 annual report.

[3] The SFA interest rate is the lesser of the plan funding rate and the prescribed calculation, which under the IFR was the third Internal Revenue Service segment rate plus 200 basis points.

The rules and market backdrop have evolved dramatically since the special financial assistance program's inception

EXHIBIT 1A: SFA RATE LIMIT VERSUS INVESTMENT YIELDS

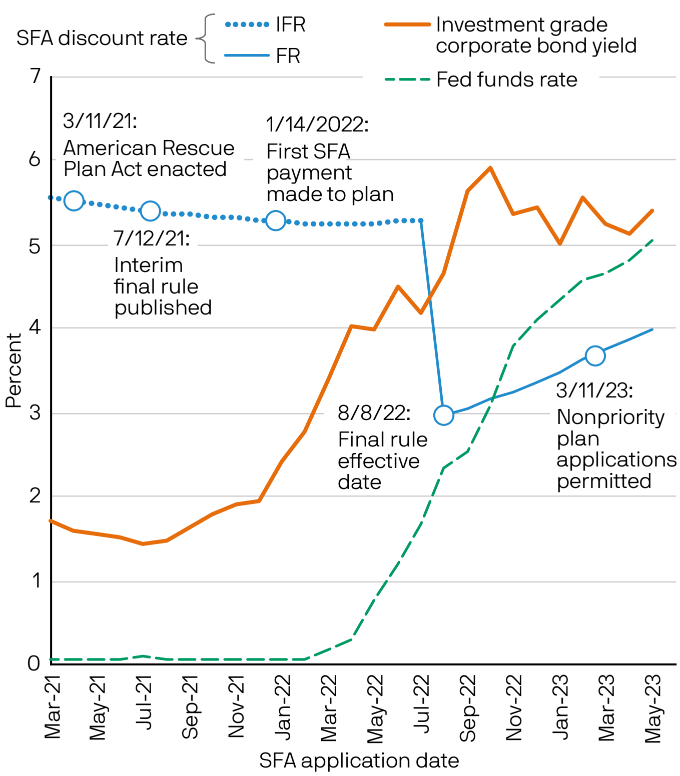


EXHIBIT 1B: SPECIAL FINANCIAL ASSISTANCE TIMELINE

Date	Event
11-Mar-2021	American Rescue Plan Act enacted
9-Jul-2021	Priority group 1 open
12-Jul-2021	Interim final rule published
11-Aug-2021	End of 30-day comment period
30-Sep-2021	JPMAM publishes "Running on Empty" – analysis of IFR
21-Dec-2021	First SFA application approval under IFR
27-Dec-2021	Priority group 2 open
14-Jan-2022	First SFA payment made to plan
1-Apr-2022	Priority group 3 open
1-Jul-2022	Priority group 4 open
8-Jul-2022	Final rule published
8-Aug-2022	Final rule effective date
15-Nov-2022	Priority group 5 open
25-Jan-2023	Exception process for certain withdrawal liability conditions included in FR
11-Feb-2023	Priority group 6 open
11-Mar-2023	Nonpriority plan applications permitted
19-Jul-2023	PBGC publishes Q&A on permissible investments
31-Dec-2026	Deadline for all applications

Source: CE, IRS, Federal Reserve, PBGC, J.P. Morgan Asset Management; data as of June 30, 2023. Investment grade corporate bond yields modeled as ICE BofA 1–10 Year US Corporate Index.

May 2023 and pushing yields higher across the fixed income landscape.

- **Favorable equity entry points:** During 2022, U.S. equities experienced a drawdown exceeding 20%. Though portfolio losses can rarely be considered a good thing, SFA applicants got a silver lining: Lower legacy asset portfolio values meant higher SFA awards, offsetting portfolio declines, at least for the plans that had not yet locked in their SFA measurement date—the snapshot date used to determine eligibility and the SFA amount, including interest rate assumptions. The equity drawdown also created favorable entry points. J.P. Morgan Asset Management's 2023 Long-Term Capital Market Assumptions would reflect a 380 basis point (bps) uplift in U.S. equity returns,[4] from 4.1% to 7.9%.
- **SFA discount rate:** The final rule, which took effect in August 2022, changed the formulation of assistance sizing by bifurcating the discount rates for SFA and legacy assets. The net impact was an instantaneous reduction in the SFA hurdle rate of roughly 230bps. Against the backdrop of higher market yields, this update meant that instead of being unable to reach 30 years even with the risk throttle wide open, many plans would be able to get beyond 30 years with only a portfolio of U.S. Treasury bonds. Furthermore, plans that had already applied under the less favorable interim final rule were permitted to submit supplemental applications that would effectively "true up" their SFA sizing to conform to the final rule guidelines.
- **Permissible investments:** The final rule also modified the universe of permissible investments, allowing up to 33% in return-seeking assets, including U.S. public equities and Rule 144A private placement fixed income.[5] As we discuss later in the paper, although this RSA budget is generally not needed in today's market environment, in the future it could play an important role in helping trustees achieve solvency for their plan members. However, the RSA budget comes with its own compliance and operational challenges, which should not be overlooked.

As a consequence of these changes, most trustees have been able to redefine their mission. Instead of increasing risk exposure to try to get as close as possible to year 30 before their tanks run dry, they can now focus on long-term solvency.

Holistic approach to SFA portfolio construction

Although the fortune of SFA participants has shifted dramatically since the program's inception, one thing that has not changed is the framework we apply to designing SFA solutions. Implementation trends emerge and evolve but, in our view, the program has never been and never will be suited to a one-size-fits-all approach. Applying a consistent framework facilitates the adaptation of SFA programs as circumstances change, whether from legislation or market conditions (**Exhibit 2**).

[4] Reflecting returns for U.S. all cap equities.

[5] A debt security that has been sold in an offering pursuant to Rule 144A under the Securities Act of 1933.

Partnership to design and implement SFA investment solutions that achieve trustee objectives

EXHIBIT 2: J.P. MORGAN ASSET MANAGEMENT FRAMEWORK FOR SFA SOLUTION DESIGN

Analyze

Understand the problem and model cash flows used to determine SFA funding

Stress test

Determine outcomes and depletion dates under varying return scenarios

Build

Partner with stakeholders to build cash flow match + yield targeting SFA-compliant portfolio solution

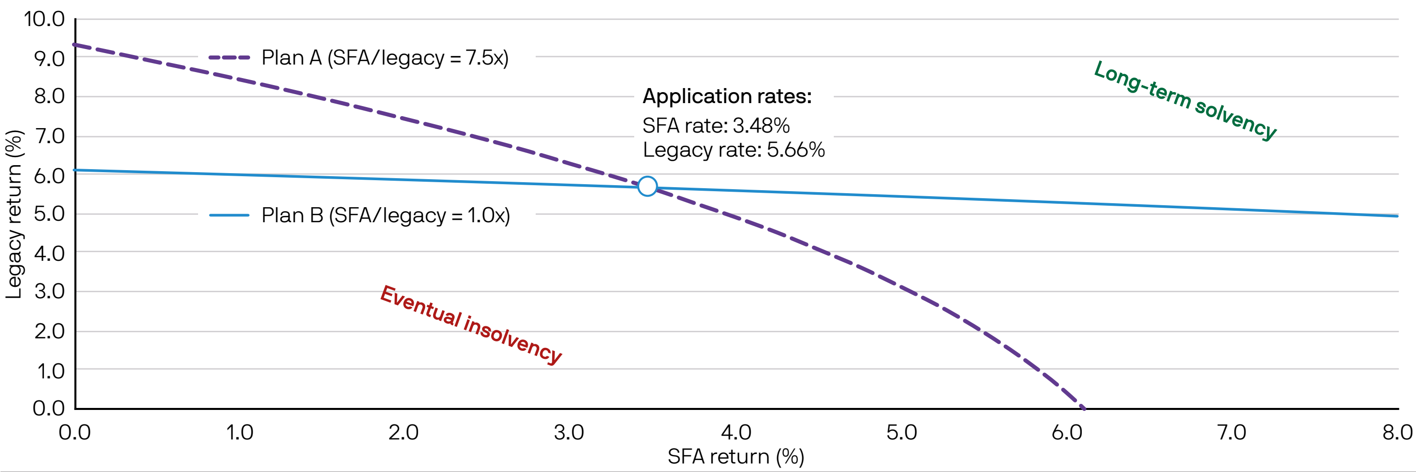
Monitor/adapt

Monitor progress toward objectives, and adapt portfolio as markets and regulatory guidance evolve

Source: J.P. Morgan Asset Management. For illustrative purposes only.

The return needs of legacy and SFA asset pools are unique, even for plans using the same discount rates

EXHIBIT 3: SFA AND LEGACY ASSET RETURNS NEEDED TO REACH YEAR 30



Source: PBGC SFA application website, J.P. Morgan Asset Management; data as of June 30, 2023.

In our experience, the first step must be a deep understanding of the plan's cash flows. The projected inflows and outflows that serve as the foundation of the SFA application are simply that—projections. They are best estimates around which a potentially large band of uncertainty exists. Whether inflows and outflows are due to demographic experience or a change in the mix of contributing employers, cash flows should be stress-tested to understand the investment implications of potential portfolio solutions across a range of asset and liability scenarios.

The most significant difference between the SFA application's net cash flow projection and the actual trajectory of the various asset pools is the investment return assumption. The prescribed application discount rates for SFA and legacy assets can vary greatly from prevailing market yields and expected returns when those funds are ultimately put to work. Furthermore, the impact of changes in market levels on expected SFA outcomes can vary greatly across plans, depending on their unique characteristics. **Exhibit 3** plots the combination of SFA and legacy asset returns that will achieve depletion in year 30—the express purpose of the SFA program—for two hypothetical plans. Each plan submitted an application using the same measurement date and discount rates, but each plan carries different proportions of SFA funds to legacy assets.

From Exhibit 3, we can extract a few intuitive and generally applicable principles:

- Legacy vs. SFA returns: If a plan can outperform its SFA discount rate, it can underperform its legacy discount rate while still expecting to reach the same 30-year objective.
- Long-term solvency: To reach long-term solvency rather than depletion in year 30 or sooner, the plan will need to outperform its SFA discount rate or its legacy discount rate—or both.
- SFA sizing impacts sensitivity: When the SFA assets represent a larger proportion of total assets, the plan outcomes are more sensitive to realized SFA returns.

Crucially, this exercise allows us to consider the plan in totality rather than as an amalgamation of two unrelated asset pools. By comparing these return combinations with prevailing expected returns across both the legacy and the SFA opportunity sets, consultants and trustees can balance portfolio trade-offs and quantify how they translate into realworld outcomes. Increasing risk and return in the SFA portfolio will extend the expected lifetime, but this approach carries additional risk and—if the plan experiences large asset drawdowns early on—may result in the funds having a much shorter lifetime.

Exhibit 4 shows three hypothetical portfolios of increasing risk and return. The minimum risk SFA portfolio is constructed entirely with Treasury bonds that are duration matched to the plan's expected liability cash flows. In this case, the SFA funds are expected to last roughly 13.2 years, with very little risk to the downside. When the SFA funds are combined with the plan's legacy assets, which are invested largely in equities, the 1-in-20 worst case scenario is total asset depletion in 17.0 years.

Translating investment portfolios into tangible plan trade-offs

EXHIBIT 4: PORTFOLIO STATISTICS FOR HYPOTHETICAL SFA PORTFOLIO OPTIONS

	SFA portfolios		
	Min risk	Balanced	Max return
Treasuries	100%	60%	40%
Investment grade credit	–	20%	14%
Agency securitized	–	20%	14%
U.S. all cap equity	–	–	33%
SFA PORTFOLIO STATISTICS			
Expected SFA lifetime (years)	13.2	14.2	17.1
Downside SFA lifetime (years)	13.1	12.1	7.9
Duration coverage (%)	100%	100%	100%
3-year cash flow coverage (%)	100%	100%	100%
Fixed income rating	AAA	AA+	AA
TOTAL PORTFOLIO STATISTICS (LEGACY AND SFA)			
Downside plan lifetime (years)	17.0	15.1	10.1

Source: J.P. Morgan Asset Management. Downside SFA lifetime and downside plan lifetime reflect a 95% VaR, which measures the worst expected 5% of outcomes.

In contrast, the maximum return SFA portfolio allocates the entire 33% RSA budget to public equities. This increases the SFA funds' expected lifetime to 17.1 years but significantly worsens the downside risk. In a 1-in-20 worst case scenario, the SFA funds would last only 7.9 years and, due to the combined equity risk across both asset pools, the total plan assets could deplete in 10.1 years. This outcome is considerably worse than just buying Treasuries. There is no single correct answer, but this type of analysis can help trustees dial in on how much downside they're willing to tolerate to try and extend the benefits paid out to plan members.

Construction: Building and monitoring an SFA portfolio

For most of our SFA mandates, trustees want some level of active management but aren't looking to hit home runs. In many ways, we are building portfolios with the same characteristics that union labor offers employers: high quality and safety, paired with performance. In **Exhibit 5**, we summarize the various sets of implementation decisions facing trustees and dive into some of the most significant considerations.

Cash flow matching is an industry standard

The most common structure we manage today is built with three to five years of cash flow matching, with an actively managed component on top. Though we don't believe cash flow matching is strictly necessary, it has emerged as an industry standard and makes good sense: If liquidity drops off a cliff or the market experiences a shock, the plan can avoid selling bonds into an unfavorable set of circumstances and incurring rebalancing costs to keep assets and liabilities aligned. Where the SFA assets have a sufficiently prolonged expected lifetime, an actively managed component can sit on top of the cash flow matching strategy. The objectives of the actively managed assets are to extend the SFA lifetime by outperforming liabilities and to opportunistically refill the cash flow matching portfolio as

Implementation should be tailored to a plan's unique constraints and objectives

EXHIBIT 5: SFA MANDATE FEATURES AND CONSIDERATIONS

Feature	Options	Considerations
Number of managers	Single vs. multiple manager	• Consolidation into a single manager can reduce effective fees and create a single point of contact and coordination • Multimanager structure offers risk diversification at the cost of increased complexity
Manager structure	Parallel vs. stacked and full outsourcing	• Running identical mandates in parallel makes manager performance comparisons easier • Stacking managers across different parts of the yield curve creates a separation of duties but can unnecessarily increase turnover as the portfolio matures
Cash flow matching	Number of years	• Mitigates impact of selling into a liquidity crunch or volatile market to fund benefits • Three to five years is a good rule of thumb for most plans, while those that are risk averse can match longer
Active vs. passive	Buy-and-maintain vs. alpha generation focus	• Active management creates potential for alpha but comes with higher fees and tracking error • Plans with short expected SFA lifetimes may want to avoid an active component altogether
Investment grade opportunity set	Treasuries, credit, securitized	• Treasuries are the lowest risk/lowest return SFA asset • Credit boosts returns but introduces downgrade and default risk. A robust credit research capability is essential • Securitized assets boost yields while diversifying credit. Agency-backed bonds are default-remote but introduce uncertainty around cash flow timing. Manager should have deep securitized sourcing and analytical capabilities
RSA budgeting	RSA allowance and budgeting across managers	• RSAs can enhance diversification (e.g., 144A bonds) and boost returns (e.g., public equity) • The closer the RSA allocation is to the 33% limit, the more difficult compliance and monitoring will be, particularly in a multimanager structure
Account type	Separate account, commingled funds or combination	• Funds provide diversification but limited customization for smaller asset pools and are the most likely vehicle for RSA allocations to equity • Funds must comply with the PBGC's July 19 FAQ publication defining "predominately"[6] • Separate account allows maximum flexibility and customization

Source: J.P. Morgan Asset Management; data as of May 31, 2023.

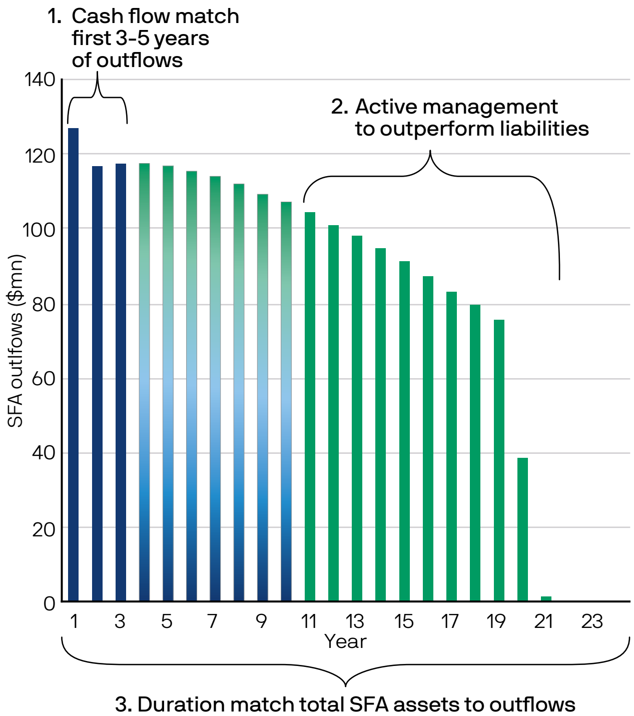
[6]The PBGC posted two new sets of SFA questions and answers that provide guidance for multiemployer plans that receive SFA. One of the sets covers permissible investments and provides examples of permissible investment grade fixed income (IGFI) securities) and return seeking assets (RSA).

it matures. In our experience, matching three to five years of outflows is a good rule of thumb (**Exhibit 6**). If trustees are more risk averse, a matching strategy could be implemented across the entire set of expected liabilities. Likewise, if the expected SFA lifetime is less than three to five years, an active component may not be justified and a total portfolio matching strategy will likely represent the best SFA implementation. In a typical environment, the shortest-maturity bonds offer the lowest yields. In today's market, however, the case for cash flow matching is further strengthened by the inversion of the yield curve, whereby shorter-maturity bonds offer the highest yields and most attractive pricing.

Whether or not they are cash flow matched, we believe that aligning the duration of SFA assets with that of the outflows they are expected to fund is a critical risk management tool. This helps avoid the uncertainty associated with reinvestment risk. For example, if the asset duration is too long, the manager will be forced to liquidate bonds in an uncertain interest rate environment. On the other hand, if the asset duration is too short, the manager will need to reinvest proceeds from maturing bonds in an uncertain environment. In this context, cash flow matching can be thought of as a constrained form of duration matching.

Three to five years of cash flow matching is a good rule of thumb

EXHIBIT 6: SFA CASH FLOW MATCHING PRINCIPLES



1. Cash flow match

At least the first three years of outflows should be cash flow matched to avoid forced sales in the remainder of the portfolio. The years of matching could be increased or decreased depending on market environment/plan needs and based on client preference.

2. Active management

Actively manage remaining fixed income allocation to outperform overall SFA asset yield or return objectives and push out depletion date. The cash flow match can support higher risk-taking in this bucket.

3. Duration match

Although liabilities aren't mark-to-market, a rough duration match helps to avoid reinvestment risk (if asset duration < liability duration) and crystallizing interest rate volatility (if asset duration > liability duration).

Source: J.P. Morgan Asset Management; data as of May 31, 2023.

Securitized assets are a game changer

We've found that access to high quality securitized assets has greatly enhanced our ability to build better SFA portfolios. In contrast to corporate credit, which relies on the ability and willingness of the borrowing company to repay a loan, securitized investments are backed by collateralized cash flow-generating assets like auto loans and commercial mortgages. Asset classes like agency commercial mortgage-backed securities (CMBS) are guaranteed by the federal government and therefore default-remote.

These assets have been crucial in some of our longer-dated cash flow matching mandates. In 2001, the U.S. Treasury decided to discontinue its 30-year bond, with the first reopening auction not taking place until March 2009. Now, 20 years after that decision, the market is left with a large gap in the Treasury curve, posing a potential pitfall for cash flow matchers. We have been able to fill these issuance gaps with agency CMBS, avoiding long-term unsecured credit risk while picking up a yield advantage to the Treasury curve (**Exhibit 7**).

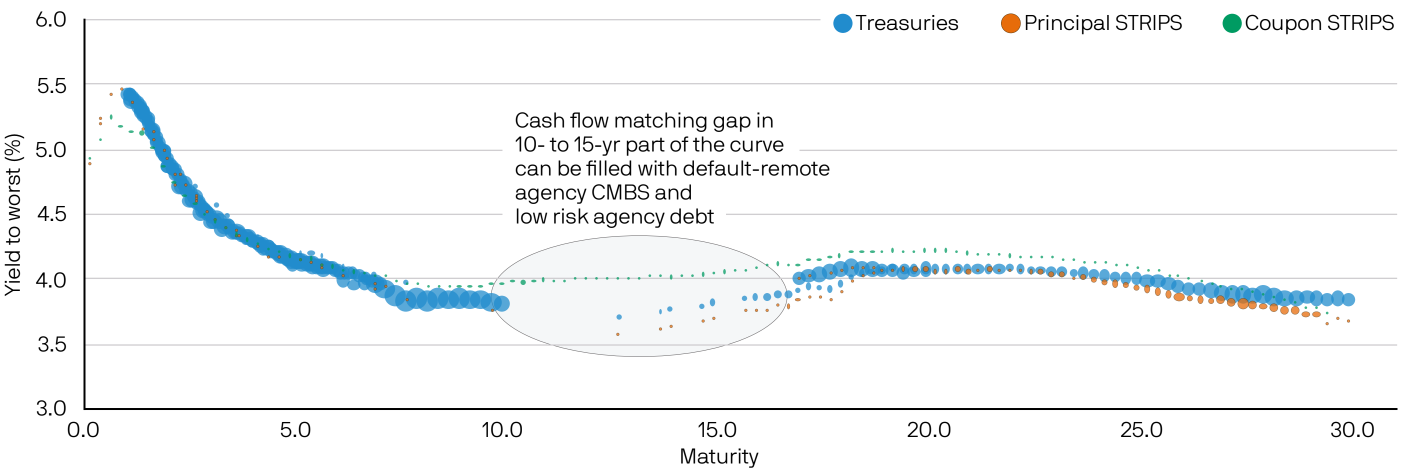
Future-proof your SFA mandate

Most of the mandates we've implemented have been able to reap the benefits of a higher interest rate environment, leading to generally low allocations to RSAs within SFA portfolios. And where RSA allocations exist, they tend to be focused on high quality 144A fixed income issues rather than riskier public equity allocations. However, interest rates could drop just as fast as they rose, greatly reducing the expected lifetime of SFA funds. Likewise, a drawdown in equity markets could shift more of the burden for asset growth onto SFA funds.

Up until the temporary closure of the PBGC's e-Filing portal on March 11, 2023, the typical time frame from application submission to SFA payment was 150 days: 120 days for approval and an additional 30 days for payment. This means that trustees and their managers

Agency CMBS help fill a maturity gap in years 10–15

EXHIBIT 7: TREASURY BOND AND STRIPS CASH FLOWS



Source: Bloomberg, J.P. Morgan Asset Management; data as of June 30, 2023. Bubble size indicates relative amount outstanding of each individual issue. STRIPS: Separate Trading of Registered Interest and Principal of Securities.

could potentially put funds to work in a completely different market environment from what they anticipated when they made their application. On top of that, the interim performance of the legacy assets could meaningfully shift the plan's funded position and return needs to achieve long-term solvency. Of the waiting list plans that have elected to lock in the SFA measurement date, the overwhelming majority chose December 31, 2022, so the gap between the assumption setting and investment deployment will almost certainly be longer than 150 days (**Exhibits 8A** and **8B**).

And drastic changes can occur even after the initial implementation. We build cash flow matching portfolios with the best assets we can find right from inception. However, these mandates are not "set it and forget it." When there are opportunities to rotate credit exposure as bonds mature or to take advantage of large spread movements, we pivot to a more active approach within the defined limits of existing guidelines. For all these reasons, we believe trustees can benefit by partnering with managers that have the following characteristics:

- **Both active and buy-and-maintain capability:** The ability to dial up alpha or dial down risk relative to liabilities in reaction to a change in regulations, markets or trustee preferences
- **Broad opportunity set:** Research, trading and portfolio management expertise across the full spectrum of SFA-permissible investments
- **Technology and fundamental research:** Optimization tools to build, monitor and maintain cash flow matched portfolios, paired with fundamental, bottom-up research and cash flow projections, particularly in securitized assets
- **Multi-asset capability:** The ability to hold public equity in an SFA portfolio while monitoring risk and SFA compliance at the total portfolio level
- **SFA expertise:** A deep understanding of the actuarial and regulatory backdrop of the SFA program, and the ability to rapidly interpret and adapt to future changes

Although it's difficult to predict where markets may be headed, we do have high conviction that circumstances will change dramatically between now and the end of the SFA program. Market conditions and SFA regulations have already evolved and been reshaped, respectively, since the inception of the program. A dynamic approach and a broad set of capabilities are critical to navigating and capitalizing on those opportunities when—not if—they arise.

I don't wanna wait in vain for your funds

EXHIBIT 8A: AVERAGE PAYMENT WAITING TIME

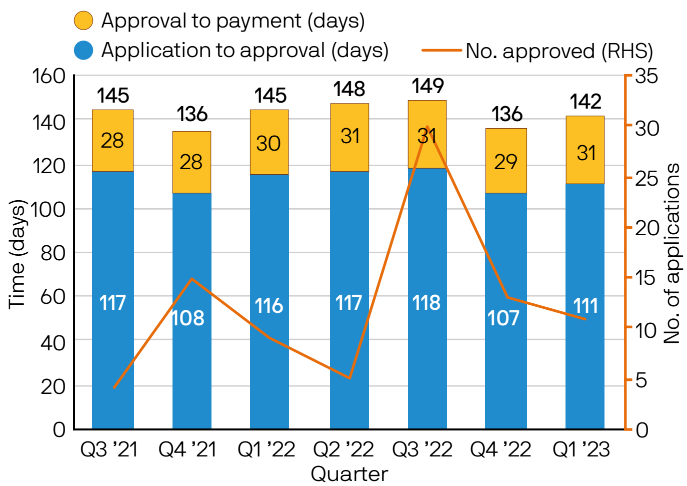
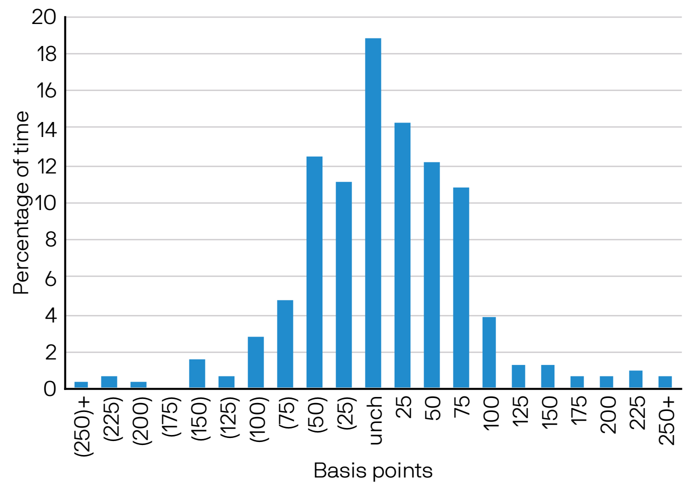


EXHIBIT 8B: HISTORICAL 150-DAY CHANGE IN CORPORATE BOND YIELDS



Source: PBGC SFA website, ICE BofA, J.P. Morgan Asset Management. Investment grade yields based on ICE BofA 1-10 Year US Corporate Index from December 1996 through June 2023.

Workplace safety: Compliance and systems

While we are proud of our team's ability to generate fixed income alpha across market cycles, in many cases we've found that trustees are more interested in working with a seasoned partner. Each SFA ruling and subsequent clarification from the PBGC are analyzed and interpreted by our working group of lawyers, portfolio managers, actuaries and compliance professionals. Where ambiguity exists regarding the permissibility of a certain financial instrument, we err on the side of caution. So seriously do we take risk management, we've spent hours in multiple meetings whose sole purpose is to interpret the PBGC term "predominately." Furthermore, each investment management agreement and corresponding guidelines are specifically tailored to the PBGC rules, in addition to client-specific preferences and restrictions.

Systems and technology have also aided us in supporting SFA clients through PBGC audits or simply ad hoc portfolio requests. For each SFA account, we track detailed information regarding each and every return-seeking asset purchase, and we have the ability to access and share that information with trustees and consultants in a timely manner. Where we are the sole investment manager for a pool of SFA assets, we are able to ensure compliance with any RSA limitation level—either directed by the client or limited by the PBGC final rule—prior to each purchase.

Conclusion

The SFA program has been hugely beneficial to the Taft-Hartley community and in many cases has rescued plans and their members' retirements from the jaws of insolvency. However, the cost of this program is the eternal vigilance required of trustees to ensure their plans maintain a trajectory toward long-term solvency. When market returns materialize, there will be opportunities to adjust the composition and risk posture of SFA funds. As these assets pay down, portfolios may quickly change shape, and the legacy assets over time will demand more attention from trustees. When a plan finally gets its application approval and puts its SFA funds to work, it may feel like the end of a long journey, but it is just the beginning.

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