

Crossroads

Executive Summary

The US corporate defined benefit (DB) pension system remains in its strongest financial position in years. Our work indicates the aggregate funded status of the system ended 2024 at around 104%, the third consecutive year the DB pension system has been in a fully funded position, and the highest year-end level since 2007. For the first time in over two decades, the DB pension system has maintained full funding at year-end for three consecutive years.

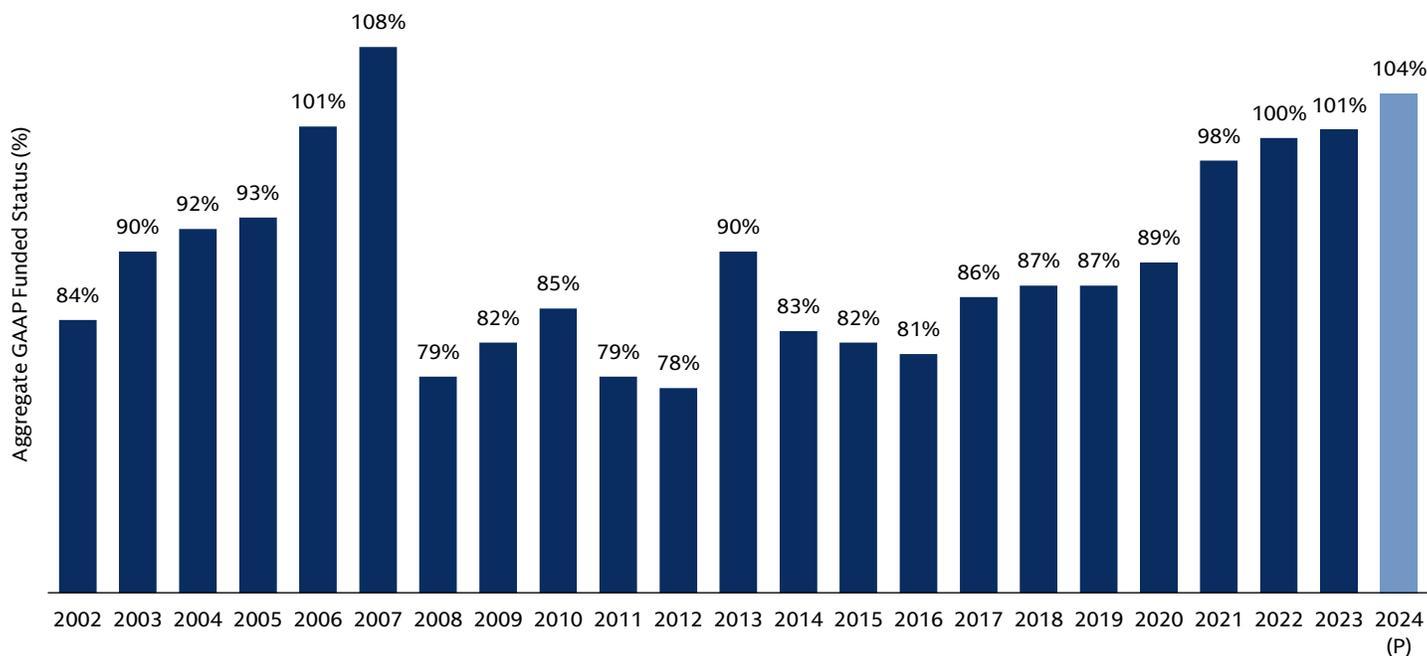
Some plans are also significantly overfunded, with some that we analyzed as part of this annual study sitting at GAAP funded levels of 125% or more. Contribution activity across the system may be muted partially due to these strong funded levels, as many organizations have no contribution requirements, thereby potentially freeing up corporate cash for other purposes such as capital expenditures, dividend increases, and stock buybacks. Further, about half of the companies in our sample reported pension income last year.

Nonetheless, in some ways the system may be at a crossroads. Given strong funded levels, many plan sponsors are reconsidering their priorities in regards to their DB plans. We observe multiple actions being taken by plan sponsors, with some enacting long-planned de-risking actions, while others explore the potential use of surplus options.

More broadly, the US retirement system as a whole may be at a crossroads. The combination of the increased prevalence of pension risk transfers, growing outflows for monthly benefit payments given the maturation of many plans, minimal contribution activity from plan sponsors, and, in some cases, marginal cumulative asset returns the past few years has resulted in a DB system that is shrinking...rapidly. The median plan in our sample has seen its total plan asset size decline by 25% compared to three years ago. Several have seen even more dramatic declines. With many current workers unprepared for retirement, and many retirees looking to generate a steady stream of income, DB plans would seem to be well-positioned to play a role in some way, shape or form in the future retirement landscape.

In the pages that follow, we review the findings from our 2024 pension annual review "First Take."

1. Corporate DB system fully-funded in aggregate for the third consecutive year



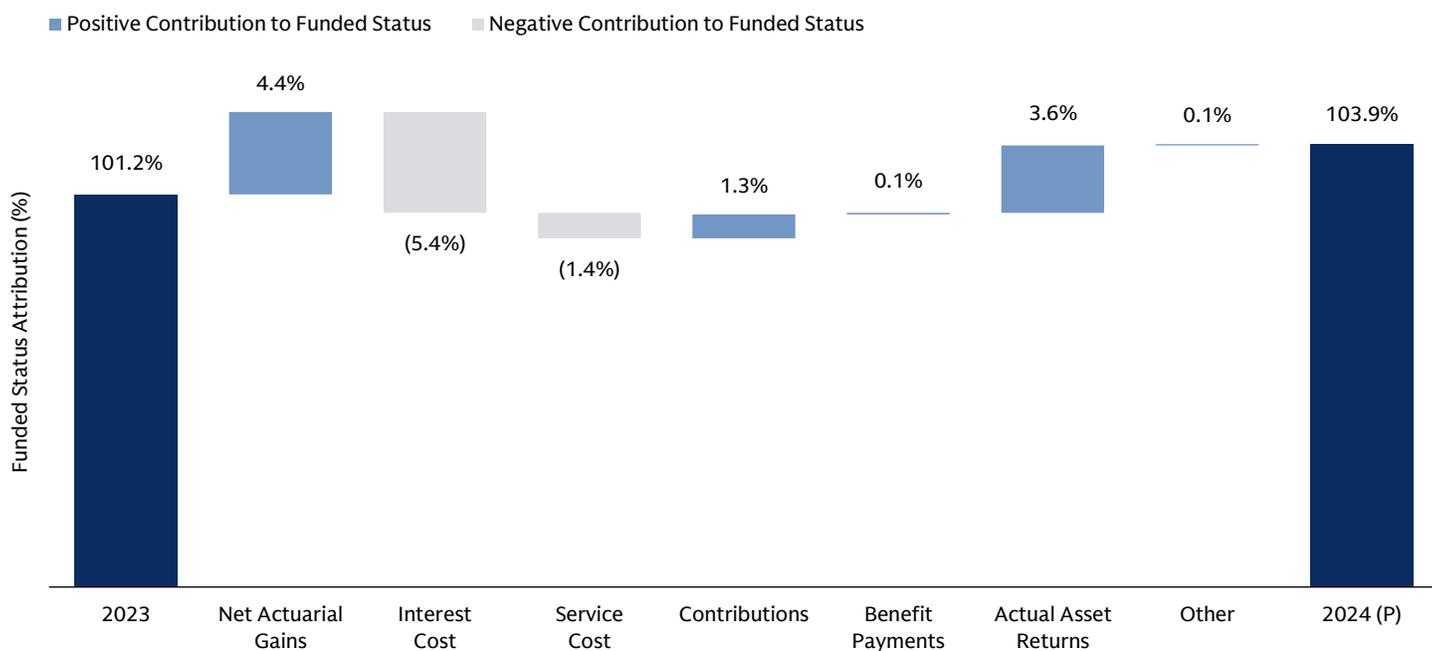
Source: Goldman Sachs Asset Management and company reports. Based upon the US (when specified) defined benefit plans of S&P 500 companies. For illustrative purposes only. The 2024 (P) figure is preliminary and is derived from the “First Take” population. **Past performance does not guarantee future results, which may vary.**

We are pleased to present the results of our 23rd annual US corporate pension review. Each year, we perform a comprehensive review of the DB pension plans of every company in the S&P 500 based on information filed in their 10-K reports with the Securities and Exchange Commission. As in previous years, we have focused our initial “First Take” analysis on the 50 companies in the S&P 500 with the largest US DB plans by reported asset values.

As this is the 23rd year of our annual review, we have developed a robust and consistent data set of information that enables us to provide detailed analysis on a broad range of pension-related topics. Most of the preliminary FY 2024 information in this report is derived from the results of this “First Take” review. The company-specific data underlying this analysis, including information on funded levels, asset allocation and actuarial assumptions, are included in Appendix A to this report.

The combination of a rise in equity values and interest rates helped to push the aggregate funded level for the system to 104%, a roughly 3 percentage point increase from the end of 2023. According to our data, this marks the first time since the turn of the century that the US corporate DB system has maintained a fully funded level for three consecutive years. It also marks the highest year-end funded level observed since 2007, just before the global financial crisis took hold.

2. For many DB plans, positive asset returns and lower liability values from higher discount rates led to gains in funded status



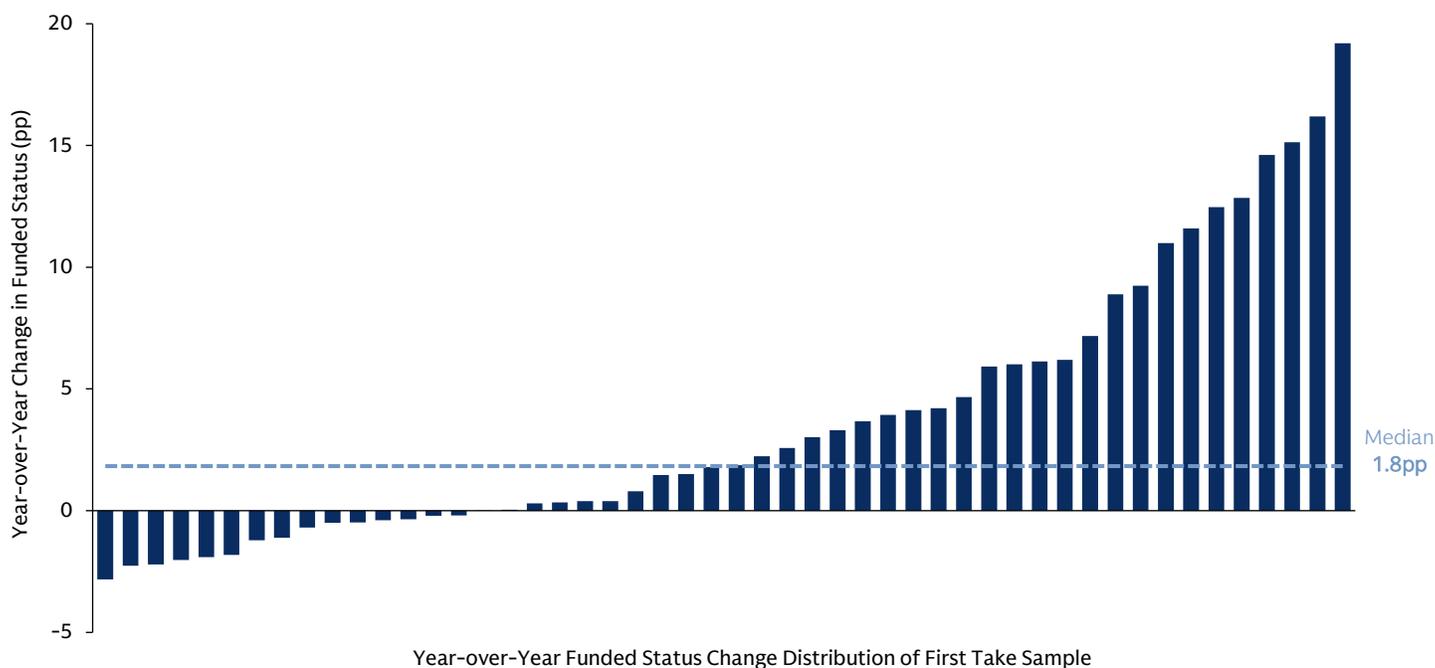
Source: Goldman Sachs Asset Management and company reports. As of February 2025. For illustrative purposes only. The 2024 (P) figure is preliminary and is derived from the “First Take” population. Actual returns may vary significantly from the performance information presented above. The chart shows the percentage impact of the factor on the change in funded status between starting and ending periods. “Other” includes amendments, divestitures, foreign exchange and settlements, including pension risk transfer when explicitly disclosed. Exhibit may not sum due to rounding. **Past performance does not guarantee future results, which may vary.**

The chart above depicts the factors that cumulatively contributed to the system-wide increase in funded levels in 2024. Many plans enjoyed the dual dynamic last year of positive asset returns and lower liability values, the net impact of which more than offset increases to the liability from service cost and interest cost.

Higher bond yields allowed plan sponsors to increase their GAAP accounting discount rates at the end of 2024, resulting in “actuarial gains” that lowered the value of pension obligations for some plans. Asset returns, while for most plans below their strategic long-term expected return assumption, were still generally positive.

In previous years, contribution activity had been a key factor in improvements to funded levels. This was generally not the case in 2024. Our work would suggest that 2024 saw the lowest cumulative amount of contributions by US corporate DB sponsors in the over 23 years we have been conducting this study. One potential factor in this development is that many plans in our research do not face required contributions today, given that many are fully funded or overfunded.

3. Majority of plans saw a year-over-year increase in funded status, but the distribution was quite wide



Source: Goldman Sachs Asset Management and company reports. As of FY 2024. The data is preliminary and is derived from the “First Take” population. “pp” refers to percentage points. For illustrative purposes only. **Past performance does not guarantee future results, which may vary.**

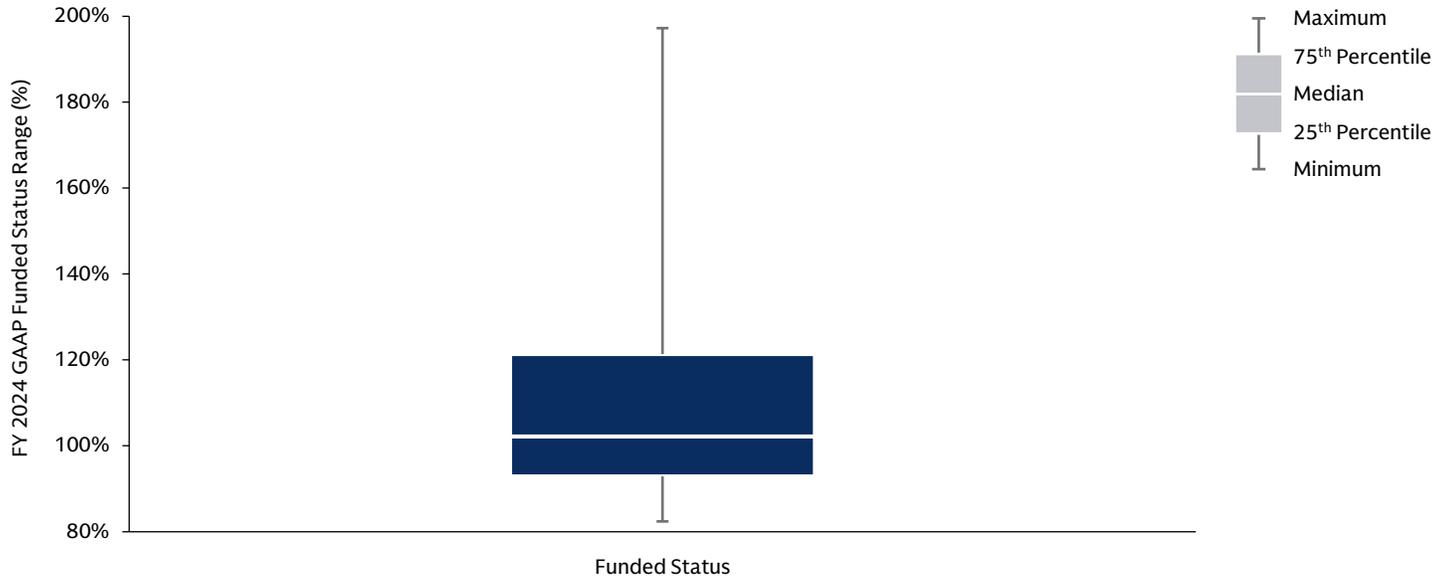
Many plans saw a marginal year-over-year change in funded status in 2024. As indicated above, the median year-over-year change in funded status in our sample was an increase of 1.8 percentage points, with many plans hovering around a roughly flat change.

For some plans that are well-funded, the goal and objective may no longer be to generate sizable returns, but rather to preserve funded status. In that regard, for many plan sponsors, the program they put in place achieved its goals in 2024.

Nonetheless, the chart does demonstrate that a number of companies posted a significant year-over-year increase in funded status. In many cases, these were plans that had substantial allocations to equities, benefiting from the roughly 25% return from US equities in 2024, and plans with long liability durations, benefiting from a reduction in their liabilities due to higher discount rates. Some open plans, which tend to have more of a return seeking asset allocation and longer liability durations, therefore saw notable increases in funded levels last year.

We would also add that some plans that are significantly overfunded see their funded percentages benefit simply from paying out monthly benefit payments (holding all else constant). While the dollar amount of surplus does not change, mathematically the funded percentage rises.

4. The distribution of funded levels skews to the upside

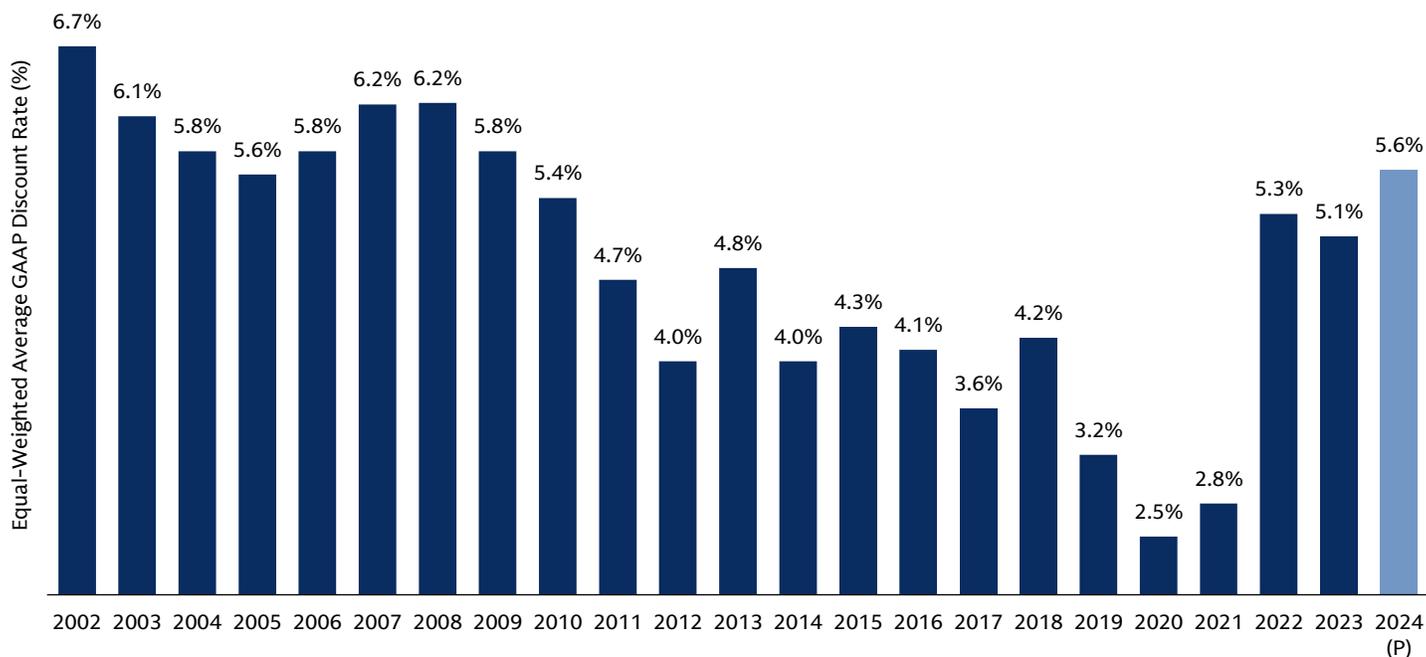


Source: Goldman Sachs Asset Management and company reports. As of FY 2024. The data is preliminary and is derived from the “First Take” population. For illustrative purposes only. **Past performance does not guarantee future results, which may vary.**

Building on the previous chart, we can see above the distribution of funded levels is not symmetrical. While most plans are clustered within a range of 90 – 120% funded, the top end of the distribution rises to almost 200%.

This distribution could be explained by the differing motivations of plan sponsors, whether driven by regulatory considerations or otherwise. For instance, some plan sponsors may maintain a certain “floor” for funded levels whereas the ceiling is theoretically unlimited. Nonetheless, the magnitude of some of the levels of overfunding is quite striking and raises the question of what plan sponsors may consider if they are interested in monetizing any surplus, a topic we have explored in previous years.

5. Average discount rate hits highest level since 2009 – for some plans, a potentially attractive entry point for de-risking actions



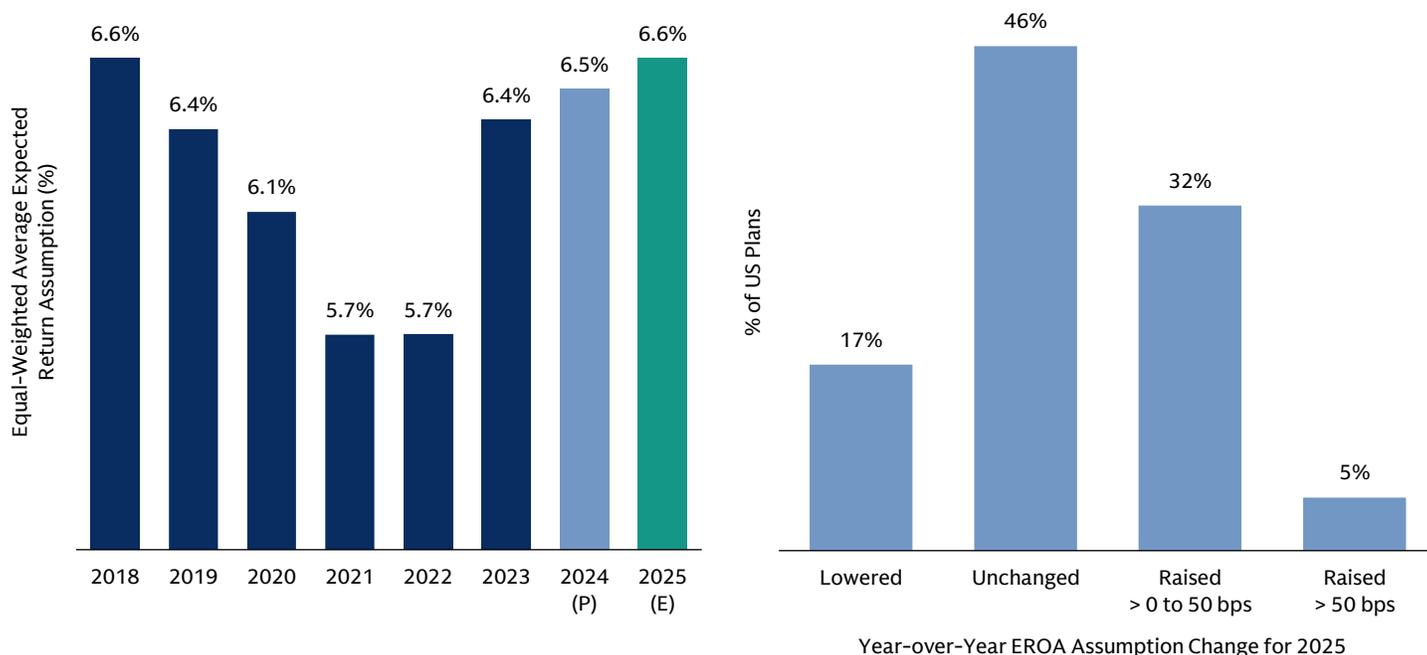
Source: Goldman Sachs Asset Management and company reports. As of FY 2024. For illustrative purposes only. The 2024 (P) figure is preliminary and unaudited as of February 2025 and is subject to potentially significant revisions over time. Based upon the arithmetic average of US plan discount rates (when specified) of S&P 500 companies with December fiscal year-ends. The 2024 (P) figure is preliminary and derived from the "First Take" population.

The average GAAP accounting discount rate used by calendar year-end companies reached about 5.6% at the end of 2024, the highest level since the tail end of the global financial crisis in 2009. Just as low bond yields and discount rates were headwinds for funded levels for much of the period from 2011 – 2021, higher measures of that important actuarial assumption have provided a tailwind for funded status in recent years.

We note that while every December year-end company raised its discount rate at the end of the year, and consequently generated "net actuarial gains," the range of those gains as a percentage of the projected benefit obligation varied widely. Some of this variation may be driven by differences in the duration of plan liabilities. In other cases, we would note in some qualitative disclosures adjustments to other actuarial assumptions, such as mortality, which offset some of the gains. These factors may also have contributed to, at times, the dispersion in the year-over-year changes in funded levels reviewed earlier.

The end of 2024 marked an important pairing of the highest system-wide funded status since 2007 and the highest average discount rate since 2009. This may have provided an attractive entry point for plans that had been looking to de-risk in recent years but had been concerned about the level of yields available in the market.

6. EROA assumptions edged higher in 2024 – future path is more uncertain



Source: Goldman Sachs Asset Management and company reports. As of February 2025. Based upon all the US (when specified) defined benefit plans of S&P 500 companies. For illustrative purposes only. Left: The 2024 (P) and 2025 (E) figures are preliminary / estimated and unaudited as of February 2025 and subject to potentially significant revisions over time. Right: Based upon all the US (when specified) defined benefit plans of S&P 500 companies where we observed a disclosure of the EROA assumption to be used in 2025. Exhibit may not sum to 100% due to rounding.

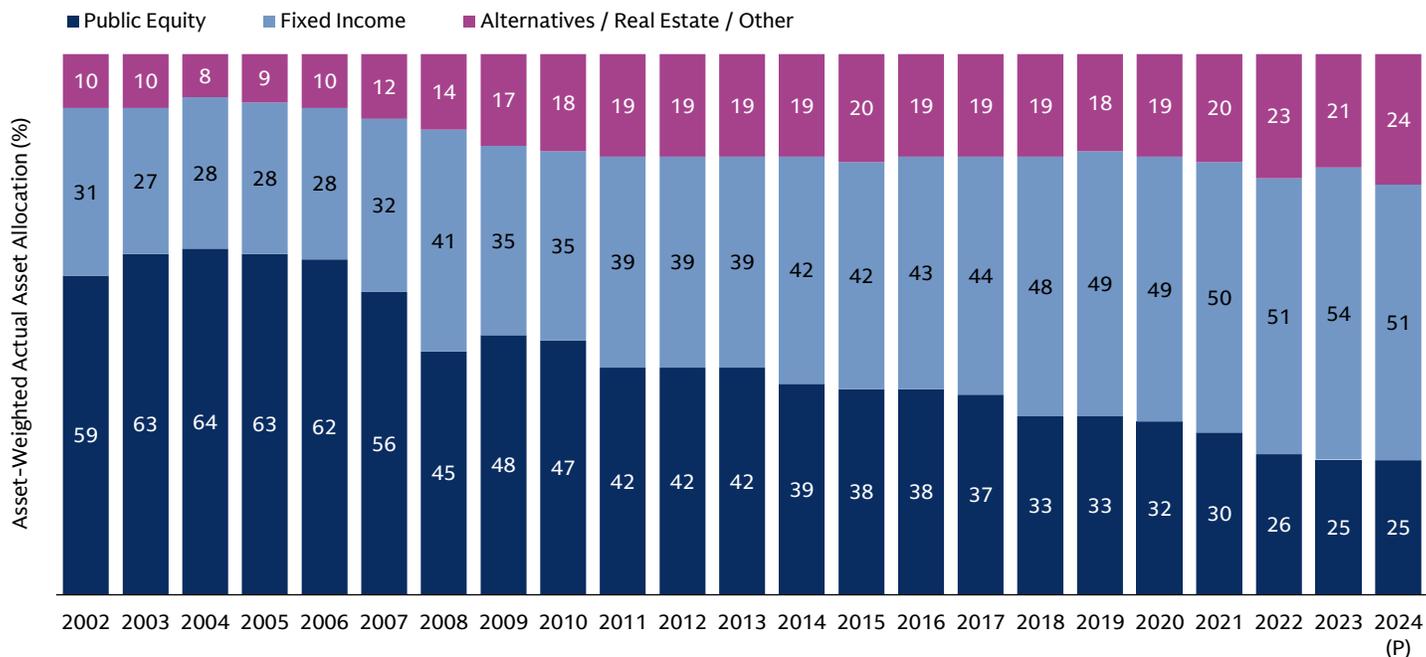
While de-risking asset allocation shifts may place downward pressure on expected return on asset (EROA) assumptions, higher return expectations for certain asset classes, in particular fixed income given the rise in yields in recent years, has provided some offset. 2023 marked the first rise in the average corporate DB EROA assumption in the over 20+ years we have conducted this study.

Our preliminary results for 2024 would indicate the average EROA assumption may have crept up again. Appendix A to this report details that the average 2024 EROA used by plans in our First Take sample was almost 6.9%, higher than what is indicated above. We note that large plans, such as those in this sample, have historically used higher EROA assumptions than smaller plans. The plans in this year’s sample increased their 2024 EROA, on average, by about 10 basis points when compared to 2023. We have applied that average change to the 2023 average EROA to project what is likely the average EROA for the broader system in the chart above.

Although plan sponsors are not required to disclose the EROA assumption they intend to use in the upcoming year, 2025 in this case, we have observed that some organizations do voluntarily provide this information. We noted about 40 companies that disclosed the EROA they would be using in 2025, a population which goes beyond the companies included in the First Take sample. The list of these companies is included in Appendix B.

As noted on the right side in the chart above, the most popular action amongst these approximately 40 companies was to leave the EROA unchanged for 2025. Nonetheless, more than a third did indicate an increase for 2025, and consequently we forecast a slight rise for the average EROA assumption to be used this year.

7. Crossroads in action – in some cases, asset allocation moving in different directions



Source: Goldman Sachs Asset Management and company reports. As of FY 2024. The data is preliminary and is derived from the “First Take” population. Based upon all the US (when specified) defined benefit plans of S&P 500 companies. For illustrative purposes only. The 2024 (P) figures are preliminary and unaudited and are subject to potentially significant revisions over time.

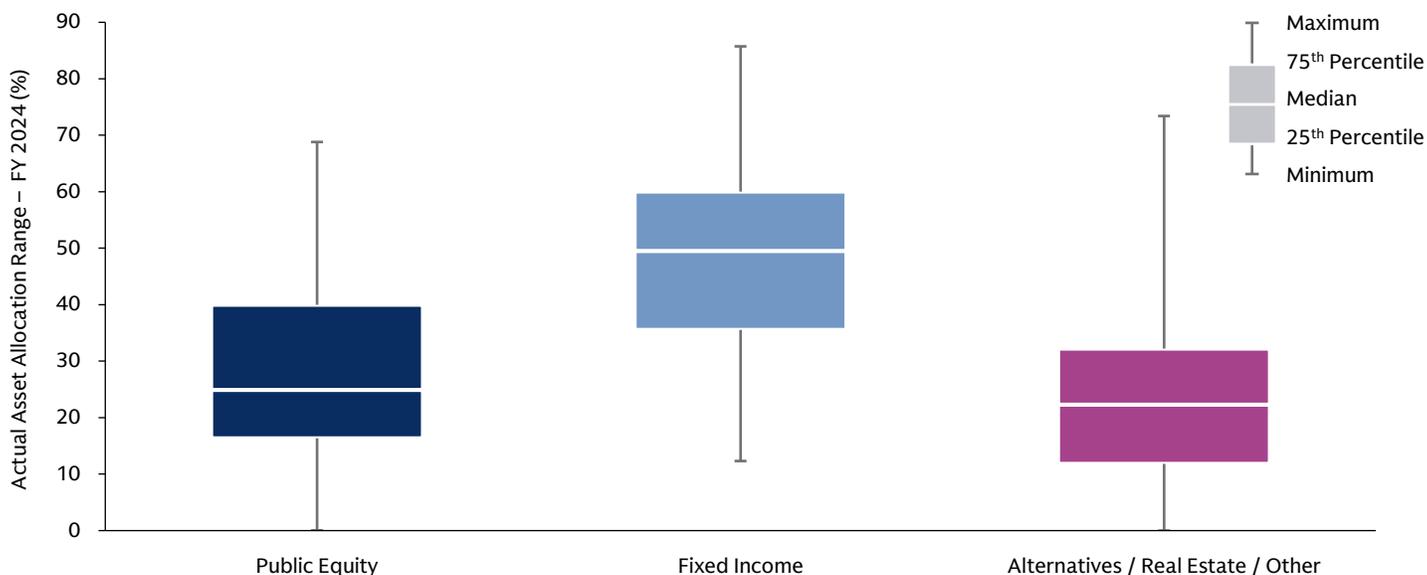
For the first time since 2009, the aggregate allocation to fixed income by US corporate DB plans declined. In some ways this is surprising, as funded levels rose last year, and many plans continue to move down their glide paths.

However, significant outperformance of equities over fixed income in 2024 likely contributed to an increase to the former and a decrease to the latter in actual allocations. Limited year-over-year changes in the strategic target allocations of these plans would seem to indicate that some plans likely intended to rebalance to prior levels in early 2025.

A complicating factor we encounter when aggregating asset allocation is the inability to determine the level and extent of the use of derivatives to gain certain market exposures. One of the most common questions we are asked each year about our study is “what is the average interest rate hedge ratio used by DB plans?” However, the disclosure rules do not provide us with enough information to properly calculate that percentage.

Nonetheless, derivatives are increasingly used as part of liability hedging programs. Many plans are supplementing the physical fixed income allocations with futures and swaps and therefore are hedging more of their interest rate risk than may be indicated above.

8. Asset allocation varying based on individual plan goals and objectives



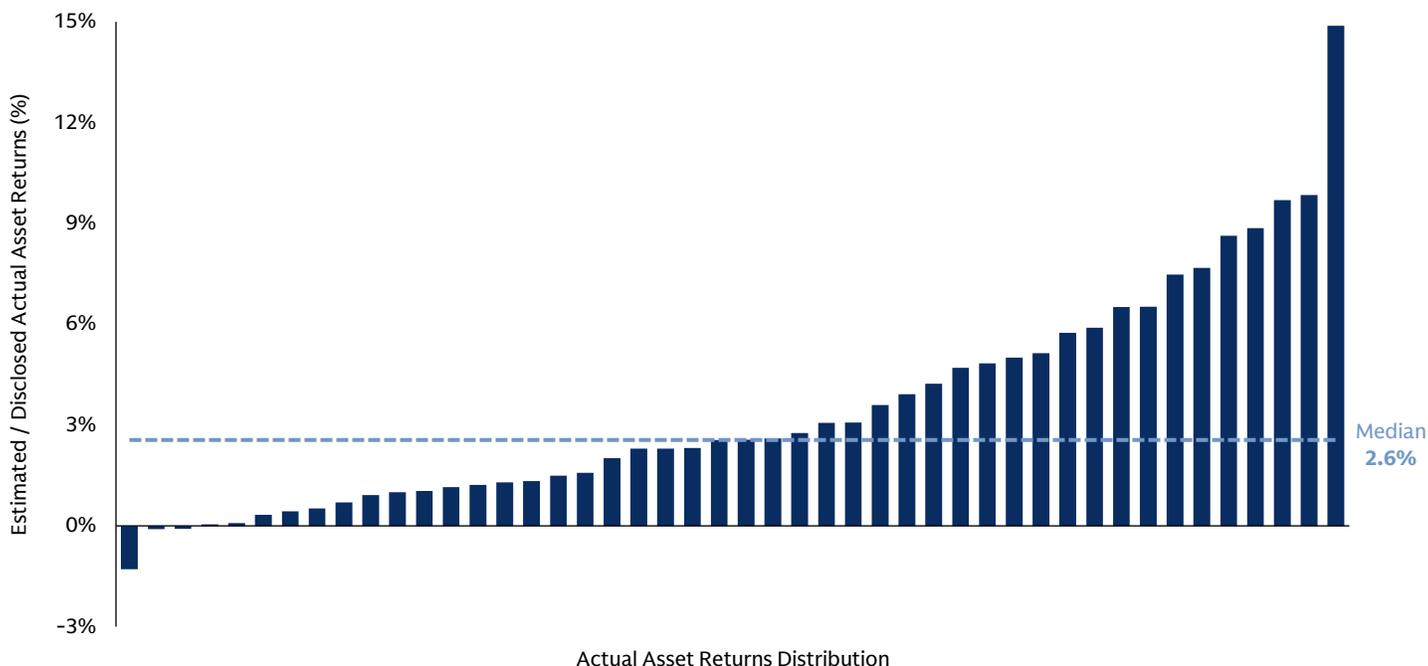
Source: Goldman Sachs Asset Management and company reports. As of FY 2024. The data is preliminary and is derived from the “First Take” population. For illustrative purposes only. **De-risking strategies should not be construed as providing any assurance or guarantee that as a result of applying the strategy an investor will reduce and/or eliminate risk, as there are many factors that may impact end results such as interest rates, credit risk and other market risks.**

While the US corporate DB universe is often viewed as “de-risking,” and certainly many continue to move down that path, it would be incorrect to paint every plan with the same brush. Work we conducted last year on the entire population of plans in the S&P 500 universe concluded that companies within that population could generally be divided up as one third being categorized as open, one third closed, and one third frozen.

Some companies with a unionized population may be maintaining open plans due to being part of a collective bargaining agreement. Others may see additional value in maintaining a DB benefit for their population.

As such, and as demonstrated above, what we observe with respect to asset allocation and investment strategy is quite varied. This relates to the goals and objectives for each organization. Those plans that were looking to reduce deficits and / or are still accruing new benefits and were very “risk on” last year may have higher performance given the rally in equities, but those that had a goal and objective of minimizing funded status volatility and were “de-risked” also likely achieved their own objectives.

9. Wide distribution in actual asset returns, which contributed to the distribution in funded status changes



Source: Goldman Sachs Asset Management and company reports. As of FY 2024. The data is preliminary and is derived from the “First Take” population with fiscal year-end in December. Uses disclosed pension plan asset return percentages when available. Estimated asset return uses disclosed dollar actual return on assets as a percent of average pension assets for the year. For illustrative purposes only. **Past performance does not guarantee future results, which may vary.**

The variation in actual asset allocation contributed to a relatively wide distribution in plan asset actual returns in 2024. The median return was 2.6%, with the results for a majority of plans clustered between zero and 6%. Plans with higher-than-average equity allocations posted higher returns as the asset class notably outperformed fixed income.

As more plans use interest rate futures and swaps as part of liability hedging programs, that can, at times, have a notable impact on actual asset returns. Those plans that used interest rate swaps and futures as part of a liability hedging program in 2024 likely saw a lower actual asset return than may have been implied by simply their physical asset allocations given the rise in yields last year. Given yield movements to date in 2025, that dynamic may reverse this year.

10. We observe plan sponsors engaging in a wide variety of actions

Action	Plan Sponsor	Description
Continuing to Chip Away at Liability Through Pension Risk Transfer		Purchased a buy-out annuity contract from two insurers in October 2024 for \$673 million covering 16,000 retirees and beneficiaries
Planning for Termination		Entered into a buy-in contract with two third-party insurance companies in the 3rd quarter of 2024 for the DB plan for US salaried employees. The agreement includes an option to convert to a buy-out, which it intends to execute in 2025, terminating the plan
		Board approved the termination of the frozen US qualified DB pension plan. Purchased annuities using existing plans assets. Plans on settling the pension plan and transferring the management and delivery of continuing benefits associated with the plan to a third-party insurance company by the end of 2025 or early 2026
Shifting Target Asset Allocation	Multiple	Some plans continue to go down a de-risking path while others have lowered fixed income in favor of more return seeking assets
Providing New Benefits – Use of Surplus		Established a cash balance pension plan effective as of January 1, 2025. Certain employer contributions made to the 401k plan will be replaced by credits into the cash balance pension plan. This new benefit will be funded through the existing assets of the DB pension plan

Source: Goldman Sachs Asset Management. As of March 2025. For illustrative purposes only. Goldman Sachs is not providing legal, tax, or actuarial services in connection with providing the information contained therein. There is no guarantee that objectives will be met. Any reference to a specific company or security does not constitute a recommendation to buy, sell, hold or directly invest in the company or its securities. Company names and logos, excluding those of Goldman Sachs and any of its affiliates, are trademarks™ or registered® trademarks of their respective holders. Use by Goldman Sachs does not imply or suggest a sponsorship, endorsement or affiliation.

We observe plan sponsors taking a wide range of actions. The above are simply examples of some of the disclosures we noted in 2024 10-K filings. Many plans appear to be using the current favorable environment to take actions with their plans, although the actions are moving in all different directions.

As noted, many plans are at a crossroads. The next few years may be critical in determining what role DB plans may play in that system going forward.

Appendix A

50 Largest US DB Plans in S&P 500 as reported on 10-K filing data. Sorted by reported 2024 plan assets.

All obligations, assets and dollar funded statuses are specified in \$MM. US plans only (when specified). NA - Data not available / disclosed

Ticker	Company Name	Month of Fiscal Year End	US Plans - 2023				US Plans - 2024				YoY Funded Status		PBO as % Market Cap (12/31/2024)	Industry
			Obligation	Assets	GAAP Funded Status	GAAP Funded %	Obligation	Assets	GAAP Funded Status	GAAP Funded %	\$ Change	% Change	%	
RTX	RTX Corp	Dec	49,592	48,945	(647)	99	46,322	46,414	92	100	739	2	30	Aerospace & Defense
BA	Boeing Co/The	Dec	54,325	48,891	(5,434)	90	50,421	45,574	(4,847)	90	587	0	38	Aerospace & Defense
UPS	United Parcel Service Inc	Dec	47,712	43,491	(4,221)	91	46,559	41,499	(5,060)	89	(839)	(2)	43	Air Freight & Logistics
GM	General Motors Co	Dec	44,481	42,287	(2,194)	95	40,142	38,298	(1,844)	95	350	0	69	Automobiles
NOC	Northrop Grumman Corp	Dec	30,443	30,251	(192)	99	28,992	29,769	777	103	969	3	42	Aerospace & Defense
F	Ford Motor Co	Dec	32,676	31,423	(1,253)	96	30,555	29,502	(1,053)	97	200	0	78	Automobiles
T	AT&T Inc	Dec	33,227	30,098	(3,129)	91	30,944	27,919	(3,025)	90	104	(0)	19	Diversified Telecommunication
FDX	FedEx Corp	May	26,269	24,826	(1,443)	95	26,152	25,797	(355)	99	1,088	4	39	Air Freight & Logistics
LMT	Lockheed Martin Corp	Dec	28,959	22,800	(6,159)	79	27,199	22,414	(4,785)	82	1,374	4	24	Aerospace & Defense
UNJ	Johnson & Johnson	Dec	19,152	22,298	3,146	116	18,146	22,250	4,104	123	958	6	5	Pharmaceuticals
JPM	JPMorgan Chase & Co	Dec	14,740	22,013	7,273	149	14,459	22,201	7,742	154	469	4	2	Banks
GE	General Electric Co	Dec	32,676	29,744	(2,932)	91	21,010	19,020	(1,990)	91	942	(0)	12	Aerospace & Defense
BAC	Bank of America Corp	Dec	11,769	17,632	5,863	150	11,105	17,624	6,519	159	656	9	3	Banks
IBM	International Business Machine	Dec	19,854	24,437	4,583	123	12,941	17,591	4,650	136	67	13	6	IT Services
DIS	Walt Disney Co/The	Sep	14,690	15,442	752	105	16,734	17,557	823	105	71	(0)	8	Entertainment
PCG	PG&E Corp	Dec	17,697	17,211	(486)	97	17,585	16,767	(818)	95	(332)	(2)	40	Electric Utilities
HON	Honeywell International Inc	Dec	12,792	16,594	3,802	130	11,772	16,565	4,793	141	991	11	8	Industrial Conglomerates
DAL	Delta Air Lines Inc	Dec	15,911	15,766	(145)	99	14,967	15,905	938	106	1,083	7	38	Passenger Airlines
ED	Consolidated Edison Inc	Dec	12,712	15,404	2,692	121	12,141	15,278	3,137	126	445	5	39	Multi-Utilities
TFC	Truist Financial Corp	Dec	7,994	14,558	6,564	182	7,443	14,681	7,238	197	674	15	13	Banks
SO	Southern Co/The	Dec	12,540	14,618	2,078	117	11,886	14,559	2,673	122	595	6	13	Electric Utilities
GEHC	GE HealthCare Technologies Inc	Dec	17,477	15,485	(1,992)	89	16,355	14,378	(1,977)	88	15	(1)	46	Health Care Equipment & Supplies
BRK/B	Berkshire Hathaway Inc	Dec	12,767	13,379	612	105	11,720	14,180	2,460	121	1,848	16	1	Financial Services
ABT	Abbott Laboratories	Dec	10,030	13,085	3,055	130	9,450	14,143	4,693	150	1,638	19	5	Health Care Equipment & Supplies
DOW	Dow Inc	Dec	15,727	14,136	(1,590)	90	14,707	13,263	(1,444)	90	147	0	52	Chemicals
DE	Deere & Co	Oct	9,928	12,004	2,076	121	11,077	13,080	2,003	118	(73)	(3)	10	Machinery
PRU	Prudential Financial Inc	Dec	9,052	12,270	3,218	136	8,654	11,924	3,270	138	52	2	21	Insurance
CAT	Caterpillar Inc	Dec	13,137	12,738	(399)	97	12,171	11,898	(273)	98	126	1	7	Machinery
LLY	Eli Lilly & Co	Dec	11,406	11,652	246	102	10,732	11,610	877	108	631	6	1	Pharmaceuticals
XOM	Exxon Mobil Corp	Dec	11,638	11,367	(271)	98	11,511	11,244	(267)	98	4	0	2	Oil, Gas & Consumable Fuels
CTVA	Corteva Inc	Dec	13,440	11,755	(1,685)	87	12,222	10,630	(1,592)	87	93	(0)	31	Chemicals
PEP	PepsiCo Inc	Dec	12,035	11,541	(494)	96	11,324	10,609	(715)	94	(221)	(2)	5	Beverages
ABBV	AbbVie Inc	Dec	9,544	9,839	295	103	8,964	10,551	1,587	118	1,292	15	3	Biotechnology
GD	General Dynamics Corp	Dec	13,736	11,886	(1,850)	87	12,189	10,500	(1,689)	86	161	(0)	17	Aerospace & Defense
PFE	Pfizer Inc	Dec	10,756	10,935	179	102	9,781	9,948	167	102	(12)	0	7	Pharmaceuticals
MRK	Merck & Co Inc	Dec	10,446	9,804	(642)	94	10,151	9,717	(434)	96	208	2	4	Pharmaceuticals
C	Citigroup Inc	Dec	9,103	10,210	1,107	112	8,466	9,647	1,181	114	74	2	6	Banks
CVX	Chevron Corp	Dec	10,392	9,137	(1,255)	88	10,140	9,537	(603)	94	652	6	4	Oil, Gas & Consumable Fuels
GEV	GE Vernova Inc	Dec	10,780	9,491	(1,289)	88	10,274	8,920	(1,354)	87	(65)	(1)	11	Electrical Equipment
EXC	Exelon Corp	Dec	10,988	9,402	(1,586)	86	10,545	8,785	(1,760)	83	(174)	(2)	28	Electric Utilities
TXT	Textron Inc	Dec	7,205	8,413	1,208	117	6,788	8,772	1,984	129	776	12	48	Aerospace & Defense
D	Dominion Energy Inc	Dec	8,431	9,087	656	108	7,652	8,478	826	111	170	3	17	Multi-Utilities
LHX	L3Harris Technologies Inc	Dec	8,563	8,595	32	100	7,595	8,325	730	110	698	9	19	Aerospace & Defense
IP	International Paper Co	Dec	8,718	8,836	118	101	8,096	8,189	93	101	(25)	(0)	43	Containers & Packaging
WFC	Wells Fargo & Co	Dec	8,126	8,634	508	106	7,476	8,136	660	109	152	3	3	Banks
USB	US Bancorp	Dec	7,278	7,779	501	107	7,069	7,834	765	111	264	4	9	Banks
MMM	3M Co	Dec	13,498	12,348	(1,150)	91	8,362	7,498	(864)	90	286	(2)	12	Industrial Conglomerates
MET	MetLife Inc	Dec	7,649	7,786	137	102	7,320	7,370	50	101	(87)	(1)	13	Insurance
HII	Huntington Ingalls Industries	Dec	6,040	6,873	833	114	5,602	7,024	1,422	125	589	12	76	Aerospace & Defense
DUK	Duke Energy Corp	Dec	6,299	7,162	863	114	5,980	6,887	907	115	44	1	7	Electric Utilities
Totals			\$844,400	\$854,358	\$9,958	101.2	\$779,848	\$810,261	\$30,413	103.9	\$20,454	2.7	9	

Source: Company reports, Goldman Sachs Asset Management, and FactSet Data. Data as of 2024 fiscal year end. Any reference to a specific company or security does not constitute a recommendation to buy, sell, hold or directly invest in the company or its securities. **Past performance does not predict future returns and does not guarantee future results, which may vary.**

50 Largest US DB Plans in S&P 500 as reported on 10-K filing data. Sorted by reported 2024 plan assets.

All data for FY 2024. Sorted by 2024 plan assets. All asset allocations and assumptions expressed in %. US plans only (when specified). NA – Data not available or not disclosed

Ticker	Company Name	Month of Fiscal Year End	Target Asset Allocation				Actual Asset Allocation					2024 Expected Return on Plan Assets (%)	Discount Rate as of Year-End 2024 (%)	Industry
			Equity	Debt	Real Estate	Other	Equity	Debt	Real Estate	Other	Total			
RTX	RTX Corp	Dec	26 - 46	54 - 74	0	0	20	60	7	13	100	7.10	5.60	Aerospace & Defense
BA	Boeing Co/The	Dec	20	59	7	14	19	59	7	15	100	6.00	5.60	Aerospace & Defense
UPS	United Parcel Service Inc	Dec	15 - 45	30 - 73	3 - 15	9 - 49	17	47	6	30	100	7.17	5.88	Air Freight & Logistics
GM	General Motors Co	Dec	11	60	0 - 29	0 - 29	0	70	7	23	100	6.27	5.56	Automobiles
NOC	Northrop Grumman Corp	Dec	18 - 38	35 - 55	0	10 - 57	29	41	6	25	100	7.50	5.73	Aerospace & Defense
F	Ford Motor Co	Dec	NA	NA	NA	NA	5	82	4	8	100	5.93	5.65	Automobiles
T	AT&T Inc	Dec	11 - 31	39 - 49	14 - 24	11 - 24	21	44	15	20	100	7.75	5.70	Diversified Telecommunication
FDX	FedEx Corp	May	25 - 40	40 - 60	0	15 - 30	32	47	0	21	100	6.50	5.58	Air Freight & Logistics
LMT	Lockheed Martin Corp	Dec	10 - 65	10 - 60	0 - 20	5 - 80	23	35	13	29	100	6.50	5.63	Aerospace & Defense
JNJ	Johnson & Johnson	Dec	54	46	0	0	55	45	0	0	100	7.25	4.95	Pharmaceuticals
JPM	JPMorgan Chase & Co	Dec	0 - 40	41 - 100	0 - 1	0 - 8	33	51	0	16	100	6.15	5.49	Banks
GE	General Electric Co	Dec	10 - 30	19 - 87.5	1 - 10	12 - 40	15	46	7	32	100	7.00	5.67	Aerospace & Defense
BAC	Bank of America Corp	Dec	10 - 40	50 - 85	0 - 10	0 - 10	24	67	1	8	100	6.50	5.67	Banks
IBM	International Business Machine	Dec	11	70	3	16	8	83	1	8	100	5.08	5.50	IT Services
DIS	Walt Disney Co/The	Sep	25 - 60	20 - 45	0	10 - 40	28	41	0	31	100	7.00	5.06	Entertainment
PCG	PG&E Corp	Dec	26	65	8	1	18	75	6	1	100	6.40	5.76	Electric Utilities
HON	Honeywell International Inc	Dec	25 - 40	45 - 65	5 - 10	10 - 20	25	53	6	16	100	7.00	5.57	Industrial Conglomerates
DAL	Delta Air Lines Inc	Dec	20 - 40	25 - 35	0	35 - 45	10	17	6	67	100	6.97	5.71	Passenger Airlines
ED	Consolidated Edison Inc	Dec	26 - 30	42 - 60	14 - 30	14 - 30	27	51	11	11	100	6.75	5.70	Multi-Utilities
TFC	Truist Financial Corp	Dec	25 - 45	50 - 60	0	0	41	58	0	1	100	6.80	5.82	Banks
SO	Southern Co/The	Dec	41	30	14	15	41	31	13	15	100	8.30	5.76	Electric Utilities
GEHC	GE HealthCare Technologies Inc	Dec	22	61	6	11	23	60	6	11	100	7.00	5.70	Health Care Equipment & Supplies
BRK/B	Berkshire Hathaway Inc	Dec	NA	NA	NA	NA	69	12	0	19	100	5.90	5.50	Financial Services
ABT	Abbott Laboratories	Dec	53	25	0	23	53	25	0	23	100	7.60	5.40	Health Care Equipment & Supplies
DOW	Dow Inc	Dec	20	49	0	31	17	39	8	36	100	7.07	5.74	Chemicals
DE	Deere & Co	Oct	7	70	3	20	8	61	3	28	100	7.00	5.10	Machinery
PRU	Prudential Financial Inc	Dec	0 - 14	52 - 71	3 - 18	8 - 51	2	54	10	34	100	7.50	5.85	Insurance
CAT	Caterpillar Inc	Dec	15	85	0	0	18	79	0	3	100	5.70	5.60	Machinery
LAT	Eli Lilly & Co	Dec	0 - 80	20	0 - 80	0 - 80	25	15	3	57	100	8.10	5.50	Pharmaceuticals
XOM	Exxon Mobil Corp	Dec	15 - 40	60 - 85	0	10	31	64	0	5	100	6.80	5.70	Oil, Gas & Consumable Fuels
CTVA	Corteva Inc	Dec	14	67	7	12	14	55	7	25	100	4.50	5.59	Chemicals
PEP	PepsiCo Inc	Dec	40	56	4	0	40	52	5	3	100	7.40	5.70	Beverages
ABBV	AbbVie Inc	Dec	63	23	0	15	57	28	0	15	100	7.50	5.40	Biotechnology
GD	General Dynamics Corp	Dec	40 - 70	30 - 60	0	0	35	58	4	4	100	6.35	5.40	Aerospace & Defense
PFE	Pfizer Inc	Dec	10 - 40	45 - 80	0	5 - 45	14	50	0	36	100	8.00	5.70	Pharmaceuticals
MRK	Merck & Co Inc	Dec	40 - 70	40 - 50	0 - 8	0 - 8	62	35	2	1	100	7.75	5.70	Pharmaceuticals
C	Citigroup Inc	Dec	0 - 22	55 - 100	0 - 13	0 - 19	7	71	5	17	100	5.70	5.55	Banks
CVX	Chevron Corp	Dec	30 - 60	30 - 50	5 - 25	0 - 20	45	37	15	4	100	7.00	5.70	Oil, Gas & Consumable Fuels
GEV	GE Vernova Inc	Dec	41	40	2	17	28	49	7	16	100	7.00	5.67	Electrical Equipment
EXC	Exelon Corp	Dec	28	44	0 - 28	0 - 28	26	40	8	26	100	7.00	5.68	Electric Utilities
TXT	Textron Inc	Dec	28 - 67	27 - 38	7 - 13	7 - 13	57	20	10	13	100	7.25	5.73	Aerospace & Defense
D	Dominion Energy Inc	Dec	30	27	0	0 - 43	32	34	1	33	100	7.68	5.86	Multi-Utilities
LHX	L3Harris Technologies Inc	Dec	30 - 45	30 - 50	0	10 - 40	42	31	4	23	100	7.45	5.46	Aerospace & Defense
IP	International Paper Co	Dec	28 - 39	61 - 72	0	28 - 39	19	52	8	21	100	7.00	5.68	Containers & Packaging
WFC	Wells Fargo & Co	Dec	10 - 20	75 - 85	0 - 10	0 - 10	12	86	0	2	100	5.71	5.62	Banks
USB	US Bancorp	Dec	40	35	10	15	41	25	12	22	100	7.00	5.77	Banks
MMM	3M Co	Dec	11	63	0	26	18	53	0	29	100	7.63	5.64	Industrial Conglomerates
MET	MetLife Inc	Dec	7	85	0 - 8	0 - 8	7	83	0	10	100	6.00	5.70	Insurance
HII	Huntington Ingalls Industries	Dec	30 - 55	25 - 45	0	10 - 35	38	36	7	19	100	8.00	5.98	Aerospace & Defense
DUK	Duke Energy Corp	Dec	45	42	7	6	44	40	10	6	100	7.75	5.70	Electric Utilities
Equal-Weighted Average			30	49	5	16	27	49	5	19	100	6.89	5.62	
Asset-Weighted Average			28	50	6	16	25	51	5	19	100			

Source: Company reports, Goldman Sachs Asset Management, and FactSet Data. Data as of 2024 fiscal year end. Figures may not sum to 100 due to rounding. Any reference to a specific company or security does not constitute a recommendation to buy, sell, hold or directly invest in the company or its securities. **Past performance does not predict future returns and does not guarantee future results, which may vary.**

¹“Other” includes alternatives, derivatives, cash, etc.

Appendix B

Select Corporate Pension Expected EROA Change for FY 2025 (Sorted by magnitude of EROA assumption change for FY 2025)

EROA expressed in percent \$ amounts in millions		Month of Fiscal Year End	Plan Assets at 2024 YE	EROA Used in Applicable FY			Change for FY 2025
Ticker	Company Name			2023	2024	2025	
CTVA	Corteva Inc	Dec	10,630	4.55	4.50	6.00	1.50
TMUS	T-Mobile US Inc	Dec	626	7.00	7.00	8.00	1.00
PRU	Prudential Financial Inc	Dec	11,924	7.50	7.50	8.00	0.50
F	Ford Motor Co	Dec	29,502	6.25	5.93	6.37	0.44
IBM	International Business Machine	Dec	17,591	5.50	5.08	5.50	0.42
MMM	3M Co	Dec	7,498	7.50	7.63	8.00	0.37
C	Citigroup Inc	Dec	9,647	5.70	5.70	6.00	0.30
HON	Honeywell International Inc	Dec	16,565	6.75	7.00	7.25	0.25
ALL	Allstate Corp/The	Dec	4,368	7.35	7.34	7.58	0.24
GM	General Motors Co	Dec	38,298	6.30	6.27	6.50	0.23
PNW	Pinnacle West Capital Corp	Dec	2,640	6.70	6.90	7.05	0.15
PEP	PepsiCo Inc	Dec	10,609	7.40	7.40	7.50	0.10
SWK	Stanley Black & Decker Inc	Dec	923	6.70	6.47	6.57	0.10
DE	Deere & Co	Oct	13,080	6.30	7.00	7.10	0.10
LHX	L3Harris Technologies Inc	Dec	8,325	7.46	7.45	7.50	0.05
BAX	Baxter International Inc	Dec	1,763	6.43	6.65	6.65	0.00
CL	Colgate-Palmolive Co	Dec	1,295	6.25	6.50	6.50	0.00
EMN	Eastman Chemical Co	Dec	1,266	6.62	7.50	7.50	0.00
GEV	GE Vernova Inc	Dec	8,920	7.00	7.00	7.00	0.00
NSC	Norfolk Southern Corp	Dec	2,551	8.00	8.00	8.00	0.00
RF	Regions Financial Corp	Dec	1,874	6.37	6.61	6.61	0.00
SNA	Snap-on Inc	Dec	1,126	7.40	7.50	7.50	0.00
VRSK	Verisk Analytics Inc	Dec	410	6.25	6.50	6.50	0.00
MO	Altria Group Inc	Dec	6,545	6.10	6.10	6.10	0.00
T	AT&T Inc	Dec	27,919	7.50	7.75	7.75	0.00
ED	Consolidated Edison Inc	Dec	15,278	6.75	6.75	6.75	0.00
CEG	Constellation Energy Corp	Dec	6,317	6.50	6.50	6.50	0.00
EXC	Exelon Corp	Dec	8,785	7.00	7.00	7.00	0.00
GE	General Electric Co	Dec	19,020	7.00	7.00	7.00	0.00
IP	International Paper Co	Dec	8,189	6.50	7.00	7.00	0.00
LMT	Lockheed Martin Corp	Dec	22,414	6.50	6.50	6.50	0.00
MET	MetLife Inc	Dec	7,370	6.25	6.00	6.00	0.00
NOC	Northrop Grumman Corp	Dec	29,769	7.50	7.50	7.50	0.00
BA	Boeing Co/The	Dec	45,574	6.00	6.00	6.00	0.00
DOW	Dow Inc	Dec	13,263	7.46	7.07	7.04	-0.03
MRK	Merck & Co Inc	Dec	9,717	7.00	7.75	7.70	-0.05
TFC	Truist Financial Corp	Dec	14,681	6.70	6.80	6.70	-0.10
PFE	Pfizer Inc	Dec	9,948	7.50	8.00	7.70	-0.30
D	Dominion Energy Inc	Dec	8,478	7.68	7.68	7.35	-0.33
PNC	PNC Financial Services Group I	Dec	5,506	6.20	6.60	6.10	-0.50
GPC	Genuine Parts Co	Dec	2,000	7.09	7.60	5.33	-2.27

Source: Company reports, Goldman Sachs Asset Management, and FactSet Data. Data as of 2024 fiscal year end. Any reference to a specific company or security does not constitute a recommendation to buy, sell, hold or directly invest in the company or its securities.

Risk Considerations & General Disclosures

GLOSSARY

Basis point (bp) refers to one hundredth of one percent.

Expected Return on Assets (EROA) assumption refers to the expected long-term annual return on plan assets. The assumption is influenced by plan asset allocation, future expected asset class returns, and potentially, historical returns.

Generally Accepted Accounting Principles (GAAP) refers to accounting rules and standards for financial reporting, and is the standard adopted by the U.S. Securities and Exchange Commission (SEC).

GAAP Discount Rate refers to the discount rate used to value pension liabilities per GAAP accounting rules and standards. It is based upon yields available on high quality corporate bonds at the end of a company's fiscal year (i.e., not a smoothed or averaged rate).

Pension Buy-Out refers to a transaction whereby a pension plan sponsor transfers some or all of its pension obligations to an insurer.

Percentage point (pp) refers to the arithmetic difference between two percentages.

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Investments in fixed income securities are subject to the risks associated with debt securities generally, including credit, liquidity, interest rate, prepayment and extension risk. Bond prices fluctuate inversely to changes in interest rates. Therefore, a general rise in interest rates can result in the decline in the bond's price. The value of securities with variable and floating interest rates are generally less sensitive to interest rate changes than securities with fixed interest rates. Variable and floating rate securities may decline in value if interest rates do not move as expected. Conversely, variable and floating rate securities will not generally rise in value if market interest rates decline. Credit risk is the risk that an issuer will default on payments of interest and principal. Credit risk is higher when investing in high yield bonds, also known as junk bonds. Prepayment risk is the risk that the issuer of a security may pay off principal more quickly than originally anticipated. Extension risk is the risk that the issuer of a security may pay off principal more slowly than originally anticipated. All fixed income investments may be worth less than their original cost upon redemption or maturity.

Bonds are subject to interest rate, price and credit risks. Prices tend to be inversely affected by changes in interest rates.

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