Overview of Alternative Pension Plan Designs

IUPAT DC7 Labor Management Conference
September 15, 2022

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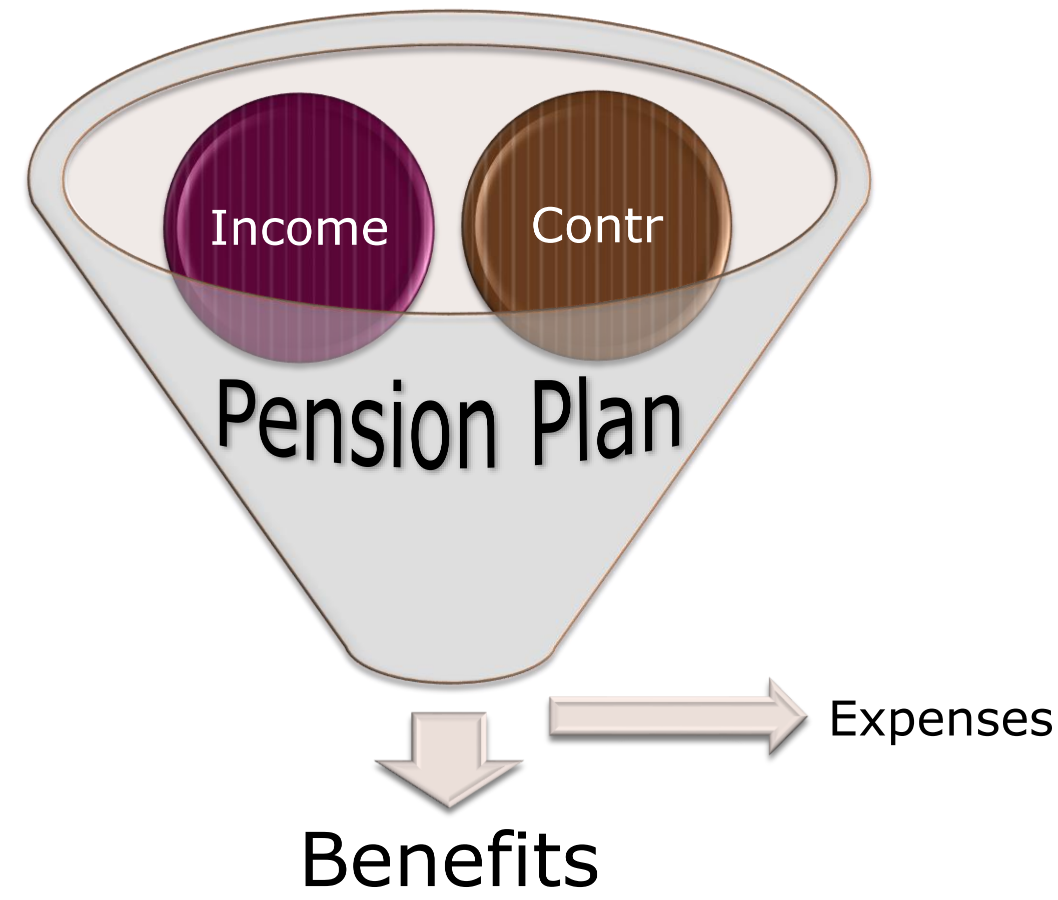
Overview of Alternative Designs

- Due to the changing landscape for Multiemployer Pension Plans, many plan sponsors are looking for alternatives to traditional Defined Benefit Plans
- How can we avoid getting "bitten" by:
  - Investment risk
  - Longevity risk
  - Contribution risk
  - Withdrawal liability
  - Communication/member appreciation

How All Types of Pension Plans Work



The Plan Design Gamut

- Traditional Defined Benefit (DB) Plan
- Defined Contribution (DC) Plan
- Variable Benefit Pension Plan (VBPP)
  - Basic vs Stabilized
  - Actual vs Smoothed Return
- Variable Accrual Plan
- 414(k) Plan
- Cash Balance Plan

Transition Issues

- Biggest flaw in alternative plan designs: Most do not address legacy benefits!
- Underfunded past benefits still remain
- In many plans, 30% or less of the total contribution rate goes to benefit accrual and expenses; remainder is needed to fund legacy plan
- EWL, PBGC premiums, contribution risk will continue to apply to legacy benefits for many years

Traditional Defined Benefit (DB) Plan

Features

- Fixed benefit formula
- Accrued benefits cannot be cut back (unless critical and declining)
- Subject to Employer Withdrawal Liability (EWL)

Traditional Defined Benefit (DB) Plan

Advantages

- Benefit certainty for participants
- Easier to understand than hybrid plans
- No transition issues
- Allows targeting of resources to benefit career members and those in need (disability, etc.)

Traditional Defined Benefit (DB) Plan

Disadvantages

- EWL makes organizing difficult
- Risks disproportionately borne by employers
- Future contributions or benefits must be adjusted to correct for poor experience (generational shifting)
- Contribution requirements may exceed bargained rates (post-PPA)
- Adverse investment experience or declining market share may make plan financing difficult
- Subject to PBGC premiums

Defined Contribution (DC) Plan

Features

- Portion of new money allocated to separate account in new (or existing) DC plan
- Contributions fixed by bargaining agreement
- Benefits vary with investment experience
- Benefits generally available as a lump sum at retirement

Defined Contribution (DC) Plan

Advantages

- Cost certainty for employers
- Generally easy to understand
- No Employer Withdrawal Liability
- No PBGC premiums

Disadvantages

- Risks disproportionately borne by participants
- No benefit certainty for participants
- Design favors young, short service participants
- Lump sum option is elected by nearly all retirees

Variable Benefit Pension Plan

Features

- Benefits earned like traditional pension plan
- Once benefits earned, they change based on the Plan’s actual returns
- Benefits increase if the return is above the “hurdle” rate and decrease if the return is below it
- Benefit fluctuation continues after retirement
- Optionally locks in benefits at retirement using immunization or annuitization

Variable Benefit Pension Plan

- The “hurdle rate” determines whether benefits increase or decrease each year
  - Actual ROR > Hurdle ➡ Increase
  - Actual ROR < Hurdle ➡ Decrease
- The hurdle rate is typically 5%
  - Under 5% requires use of hybrid plan rules including 3-year vesting
  - Over 5% means higher risk of benefit decrease
- The benefit at the end of a year =
  - Benefit at start of year x [(1 + actual return) / (1 + hurdle rate)]

    + benefit accrual during the year

Variable Benefit Pension Plan Example Calculation

All benefits earned after VBPP adopted; 5% hurdle

	(1)	(2)	(3)	(4)	[(1)x(3)]+(4)=
	Benefit @	Actual			Benefit @
Year	Start of Yr	ROR	Adjustment	Accrual	End of Yr
1	$ 1,500.00	10%	1.10/1.05	$ 50.00	$ 1,621.43
2	$ 1,621.43	1%	1.01/1.05	$ 50.00	$ 1,609.66

Variable Benefit Pension Plan

Advantages

- More equitable risk sharing:
  - Participants bear most of the investment risk
  - Plan bears longevity risk
- EWL minimized **<u>on new variable benefits</u>** because assets and liabilities move together
- Post-retirement, favorable asset returns provide quasi-COLAs
- Once a benefit is funded, it's likely to stay funded!

Variable Benefit Pension Plan

Disadvantages

- Lower accrual rate than comparable non-variable benefit (typically a 40% decrease is needed for cost neutrality)
- Possible decreases in accrued benefits
- Stabilization effect can take decades to “kick in”
- Communication can be problematic
- Subject to PBGC premiums

Modifications to Basic VBPP

- With the basic VBPP, some challenges remain:
  - ☹ Retirees' benefits are volatile and may decrease in some years
- The answer:
  - ☺ Minimize risk of benefit decreases in retirement by adding a stabilization reserve OR by smoothing returns over 5 years

Stabilized Variable Benefit Pension Plan ("Cap and Floor")

Features

- Returns above a "cap" (e.g., 10%-15%) do not increase benefits but, instead, fund a stabilization reserve
- After retirement, if sufficient funds exist in stabilization reserve, benefit paid will not be decreased in years where return < hurdle rate
- "Floor" typically only applies to post-retirement benefits but could also apply to all accrued benefits
- Plan-level or individual-level reserve

Stabilized Variable Benefit Pension Plan Example

- $1,000/mo. benefit, 5% hurdle rate, 14% cap
  - Plan experiences -3% return
    - New "Underlying benefit" is $923.81 = 1,000 x (1-.03)/(1+0.05)
    - Retiree receives $923.81 "Underlying benefit" plus $76.19 "Shore-up" benefit from the Stabilization Reserve, so the "High Water Mark" benefit of $1,000 is preserved.
  - In the next year, the Plan experiences 18% return (capped at 14%)
    - Adjustment is applied to "Underlying benefit" of $923.81
    - New "Underlying benefit" is $1,002.99 = 923.81 x (1+0.14)/(1+0.05)
    - No benefit is paid from the Stabilization Reserve because $1,002.99 is higher than the previous "High Water Mark" benefit
    - $1,002.99 becomes the new "High Water Mark" benefit

Stabilized Variable Benefit Pension Plan

Advantages vs. Regular VBPP

- Decreased chance of downward adjustment in accrued benefits or retirement income levels

Disadvantages vs. Regular VBPP

- Reduced benefit level due to funding of stabilization reserve
- More complicated communication

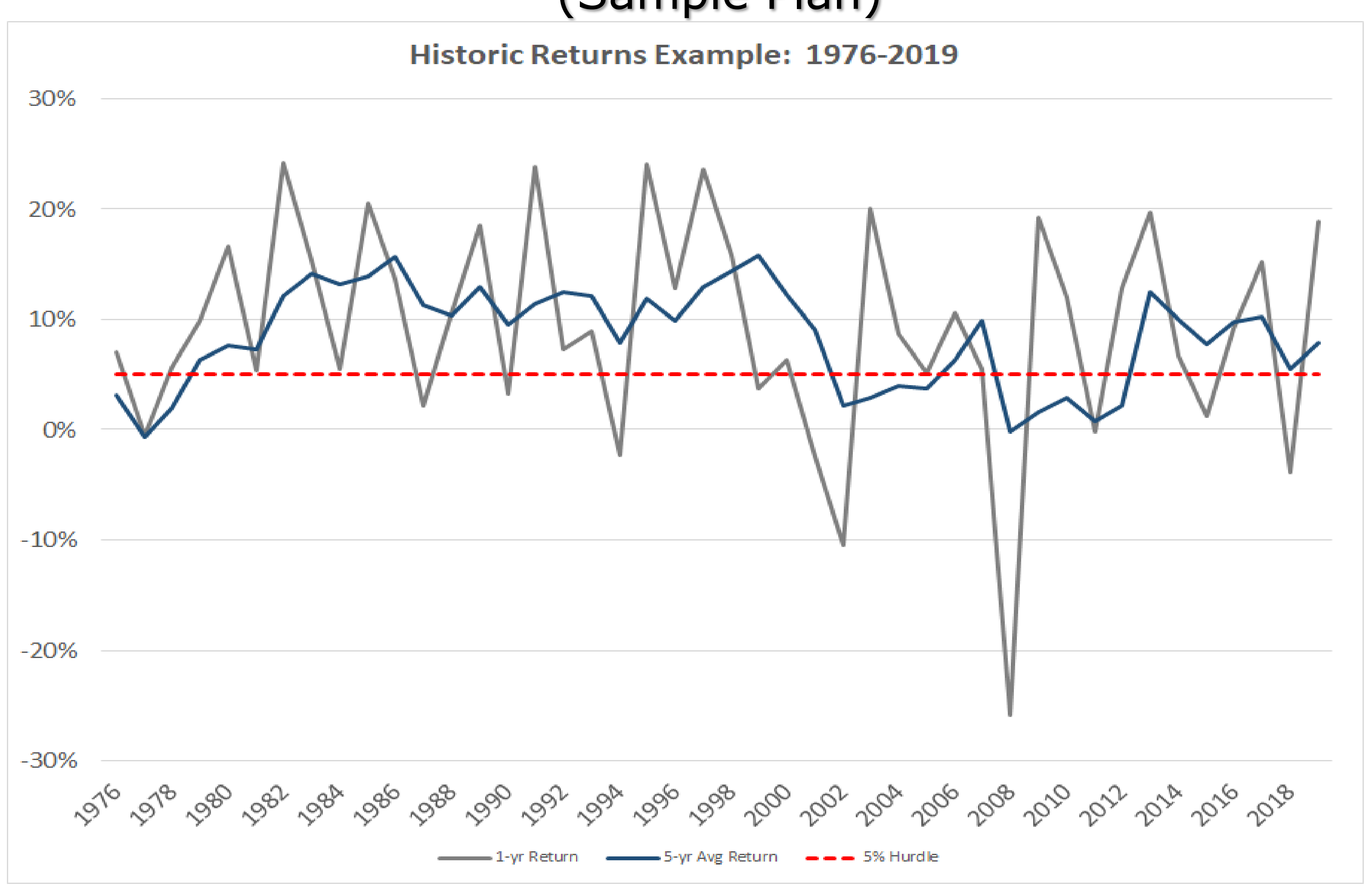
Smoothed Return VBPP

- Same as basic VBPP design but adjusts benefits using 5-year smoothing of asset returns
  - Benefit changes are not as volatile
  - Eliminates the most severe benefit decreases

- Hurdle rate must be at least 5% in order to avoid legal issues

Compare Historical Market and Smoothed Returns

(Sample Plan)



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Stabilized VBPP vs. Smoothed Return VBPP

Stabilized VBPP

Pros
- Very low chance of benefit decrease in retirement

Cons
- Complicated plan design to understand and sell
- Considerable benefits on the "sidelines" in reserve

Smoothed Return VBPP

Pros
- Design is much simpler and easy to understand
- No benefits held in reserve and potentially not paid out

Cons
- Benefit decreases are possible

Variable Accrual Plan

Features

- Accrual rate each year depends on rate of return on assets (averaged over a 1 to 5-year period)
- Example (Sheet Metal National Pension Plan):
  - % of contributions type with variable accrual percentage ranging from 0% (with a negative return) to 1.25% (with a 10%+ rate of return)
  - Based on a 3-year average return

Variable Accrual Plan

Advantages

- Participants share some of the investment risk

Disadvantages

- Participant uncertainty
- For a mature plan, freezing accruals for one year may only "offset" a 1% - 3% return shortfall
- Participant pain from cutting accruals not justified by small boost to plan funding
- EWL is not eliminated
- Subject to PBGC premiums

414(k) Plan

Features

- Prior DB benefits frozen
- A portion of new money is allocated to separate accounts <u>within</u> the DB plan
- Before the participant retires, account balance varies with investment experience (like a DC plan)
- At retirement, account balance is converted to monthly benefit amount paid by the DB portion of the plan

414(k) Plan

Advantages

- Cost certainty for employers (like a DC plan)
- Can be added to an existing pension fund
- Once a participant retires, benefit will not decrease from poor asset returns

Disadvantages

- EWL still possible
- Participant investment risk prior to retirement
- Benefits will not increase after retirement
- Limited ability to target resources
- Subject to PBGC premiums
- Communication of benefit accrual can be deceiving

Cash Balance (CB) Plan

Features

- Defined Benefit Plan that looks like a Defined Contribution Plan
- Theoretical account balance for each participant credited annually with:
  - Contributions according to plan provisions
  - Interest based on external index or market return
- Lump sums typically available at retirement
- Can transition to CB by converting existing benefits to "opening balances" (but opening balance must fund old legacy benefits)

Cash Balance Plan

Advantages

- Cost certainty for employers (like a DC plan)
- Annuity conversions at favorable rates
- Less volatility than DC plan

Disadvantages

- EWL still possible
- Limited benefit certainty for participants
- Conversion can hurt certain mid-career members
- Subject to PBGC premiums
- Communication of benefit accrual can be deceiving

Summary

- Creative ideas are available to address some of the short-comings of traditional DB plans such as:
  - EWL barrier to recruiting/retaining contributing employers
  - Non-credited contributions and intergenerational benefit differences due to poor investment returns

- Unfortunately, with an existing "legacy plan," solutions may take decades to yield desired results

QUESTIONS???