Defined Benefit versus Defined Contribution

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Choosing between
Defined Benefit Plans &
Defined Contribution Plans

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Overview

• Types of Plans
• Comparisons between Defined Benefit and Defined Contribution Plans
Three Basic Types of Plans

- Defined benefit plans
- Defined contribution plans
- Also, hybrid plans
What is a Defined Benefit Plan?

• Employer promises employees a specific benefit at retirement
• To provide that benefit, the employer makes payments into a trust fund and makes withdrawals from the trust fund
• Employer contributions are based on actuarial valuations
Defined Benefit Plan

• Employer bears all of the investment risks and responsibilities
• Typical plan provides each worker with a specific annual retirement benefit that is tied to the worker’s final average pay and number of years of service
Defined Benefit Plan

• For example, a plan might provide that a worker’s annual retirement benefit is equal to 2% times years of service, times final average pay
• $B = 2\% \times \text{yos} \times \text{fap}$
• Final-average-pay formula
Defined Benefit Plan

- Worker with 30 years of service would receive 60 percent of her pre-retirement earnings

- Worker earning $50,000 would get $30,000-a-year pension
  \[ B = 30,000 = 60\% \times 50,000 = 60\% \times \text{fap} = 2\,\text{percent} \times 30\,\text{yos} \times 50,000\,\text{fap} \]
## Defined Benefit Plan

**Effect of inflation on real value of retirement income**

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Defined Benefit Plan

• Benefits are “backloaded”
• Disproportionately favor older workers
Only 3 ways to fix an underfunded Defined Benefit Plan

• Raise Contributions
• Cut Benefits
• Increase Investment Returns
What is a Defined Contribution Plan?

• Individual account plan
• Employer typically contributes a specified percentage of the worker’s pay to an individual investment account for the worker
• Owned by employee
• Benefits based on contributions and investment earnings
Defined Contribution Plan

• For example, employer might contribute 10% of annual pay

• Under such a plan, a worker who earned $30,000 in a given year would have $3,000 contributed to her account
  – $3,000 = 10% \times $30,000

• Benefit at retirement based on contributions, plus investment earnings
Defined Contribution Plan

• Money purchase pension plans
• 401(k) and 403(b) plans
  – allow workers to choose between receiving cash currently or deferring taxation by placing the money in a retirement account
• Profit-sharing plans & stock bonus plans
What is a Hybrid Plan?

• “Hybrid” plans mix features of defined benefit and defined contribution plans
  – For example, a cash balance plan is a defined benefit plan that looks like a defined contribution plan
  – Cash balance plans accumulate, with interest, a *hypothetical* account balance for each participant
Hybrid Plan

• For example, a simple cash balance plan might
  – allocate 10% of salary to each worker’s account each year
  – and credit the account with 7% interest on the balance in the account

• Under such a plan, a worker who earned $30,000 in a given year would get an annual cash balance credit of $3,000
  – $3,000 = 10% × $30,000

• Plus an interest credit of 7% of the balance in her hypothetical account as of the beginning of the year
Hybrid Plan

• Another common approach is to offer a combination of defined benefit and defined contribution plans

• For example, many companies with traditional defined benefit plans have recently added 401(k) plans
Comparisons

• Defined Benefit Plans
  – Benefits determined by set formula (e.g., 2% × years of service × final average pay)
  – Funding flexibility

• Defined Contribution Plans
  – Benefits determined by contributions and investment earnings (e.g., 10% × annual pay)
  – Possible discretion in funding
Comparisons, cont.

- Defined Benefit Plans
  - Reward older and long service employees (backloaded)
  - Financial penalties for working past normal retirement age

- Defined Contribution Plans
  - Significant accruals at younger ages
  - No disincentives for working past normal retirement age
Comparisons, cont.

Annual Contribution Rates

Based on Ron Gebhardt, testimony before the Senate Committee on Health, Education, Labor, and Pensions (September 21, 1999)
Comparisons, cont.

• Defined Benefit Plans
  – Long vesting period (e.g., 5 years)
  – Employer bears the investment risk
  – Employee has no investment discretion
  – High rates of return

• Defined Contribution Plans
  – Often a short vesting period (e.g., 1 year)
  – Employee bears the investment risk
  – Employee has investment discretion
  – Lower rates of return
Comparisons, cont.

- Defined Benefit Plans
  - Often not portable
  - Require actuarial valuation
  - Relatively low employee understanding and appreciation

- Defined Contribution Plans
  - Portable
  - Does not require actuarial valuation
  - Relatively high employee understanding and appreciation
Comparisons, cont.

- Defined Benefit Plans
  - Unfunded liability exposure
  - Provide benefits targeted to income replacement level

- Defined Contribution Plans
  - No unfunded liability exposure
  - Do not provide benefits targeted to income replacement level
Comparisons, cont.

- **Defined Benefit Plans**
  - Usual form of benefit payment is monthly income (annuity)
  - Employees cannot borrow

- **Defined Contribution Plans**
  - Usual form of benefit payment is lump-sum distribution
  - Employees may be able to borrow
Possible Transitions from a Defined Benefit Plan to a New Plan

• Keep the traditional DB plan and add a supplemental DC or hybrid plan
• Offer both a DB plan and a new plan
• Close entry to the DB plan and add a new plan
Possible Transitions, cont.

- Close entry to the DB Plan, add a new plan, and shift unvested employees to the new plan
- Freeze the DB Plan at current salary levels and add a new plan
- Terminate the current DB plan and replace it with a new plan
Goals for a Pension Plan

• First, ensure that every employee earns a meaningful retirement benefit
  – and that long-time employees are guaranteed an adequate income throughout their retirement years
• Second, have a minimum of work disincentives for employees coming in and out of service
• Third, be affordable and well-financed
Selected Sources


  – Both at http://www.law.ou.edu/profs/forman.shtml