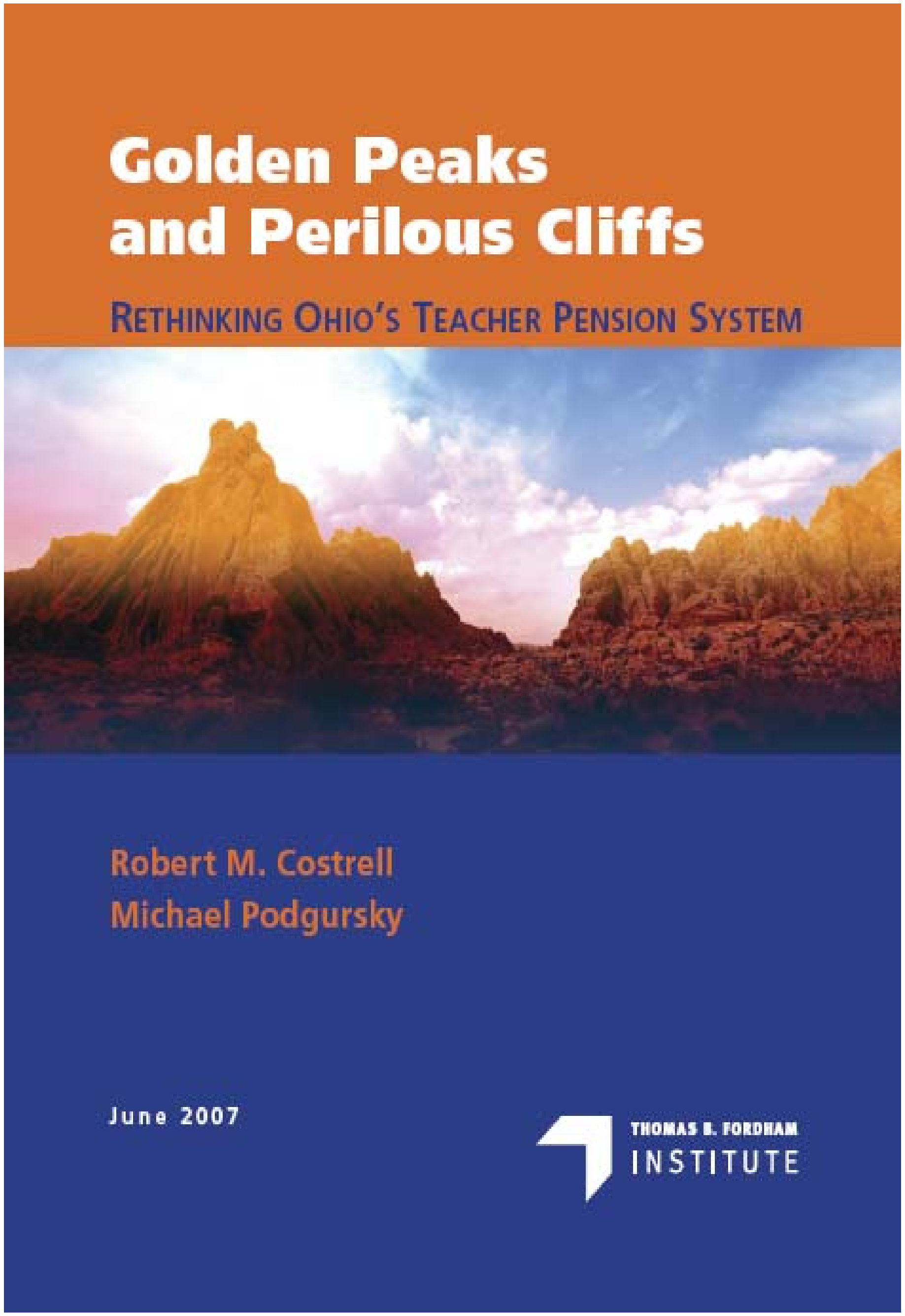

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Prepared for:
The Thomas B. Fordham Institute

Why Conduct this Study?

- Study emerged out of a conversation Fordham had with a journalist inquiring about a teachers strike
- Little public knowledge about how the State Teachers Retirement System (STRS) works or the impact it has on teacher recruitment and retention
- Fordham sought help from the best—Podgursky and Costrell—to examine Ohio's teacher pension system, in light of its increasing expenses and Ohio's educational needs

Key Takeaways

- **The system is obsolete and in need of a serious overhaul**
- **The system is too expensive to be sustainable**
- **The system is out of step with Ohio's current teacher needs, labor markets and career patterns**
- **The system is not likely to fix itself**

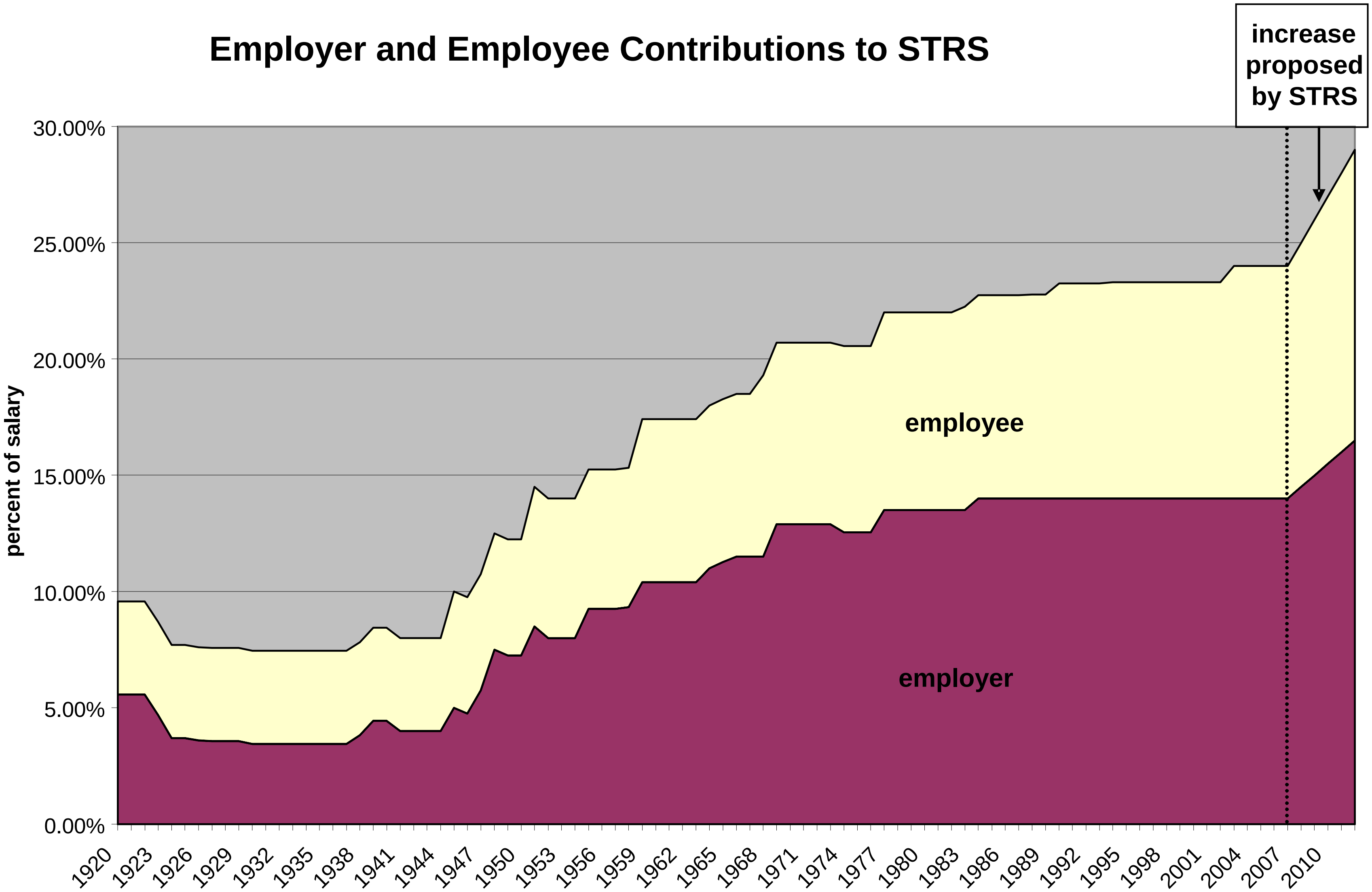
Methodology

- **Examined the structure of incentives for work and retirement in the system**
- **Modeled pension wealth accrual patterns over the life cycle based on statutory formula using standard economic analyses**
- **Reviewed 40 years of Ohio pension formula legislation to model the system's evolution**

Overview of Study

- **Context: Growing fiscal costs & teacher quality issues**
- **Basic features of teacher pension systems**
- **Pension wealth accrual patterns**
- **Perverse incentives for retirement**
- **Evolution of Ohio's teacher pension system**
- **"Double Dipping": Patching a broken system**
- **Potential reform for a modern teaching workforce**
    - Cash-Balance & Defined-Contribution Systems

Fiscal Context: Increasingly Expensive



note: employer contribution includes a contribution to retiree health care fund

Fiscal Context: Underfunded

- **Unfunded liability is $19.4 billion**
  – Over $4300 per Ohio household
- **Debt payoff will take 47.2 years at current rate**
  – Exceeds 30 year requirement in state law
- **Retiree health insurance program seriously underfunded**

Causes of Pension Problems

Same issues as Social Security…

– Baby bulge

– Longer life spans

… and additional ones:

– Early retirement

– Benefit enhancements

Context: Teacher Quality

- **Recruitment of high-quality teachers**
  - Change in potential teacher pool
    - Current pension systems originated in a different era
    - Today's young workforce is more mobile
    - Need for math/science teachers, with attractive alternatives
    - Competing careers offer 401(k)'s
  - High teacher contribution for distant, uncertain benefit
- **Retention of high-quality teachers**
  - Pension system pushes many teachers out in 50s

Conclusions

- **The Ohio teacher pension system encourages early retirement**
- **The Ohio system hinders mobility**
- **The system lacks transparency**
- **The system is rife with ad hoc fixes**

Basic Features of Pension Benefit Formula

Annual Benefit = (years of service) x (factor) x (final average salary)

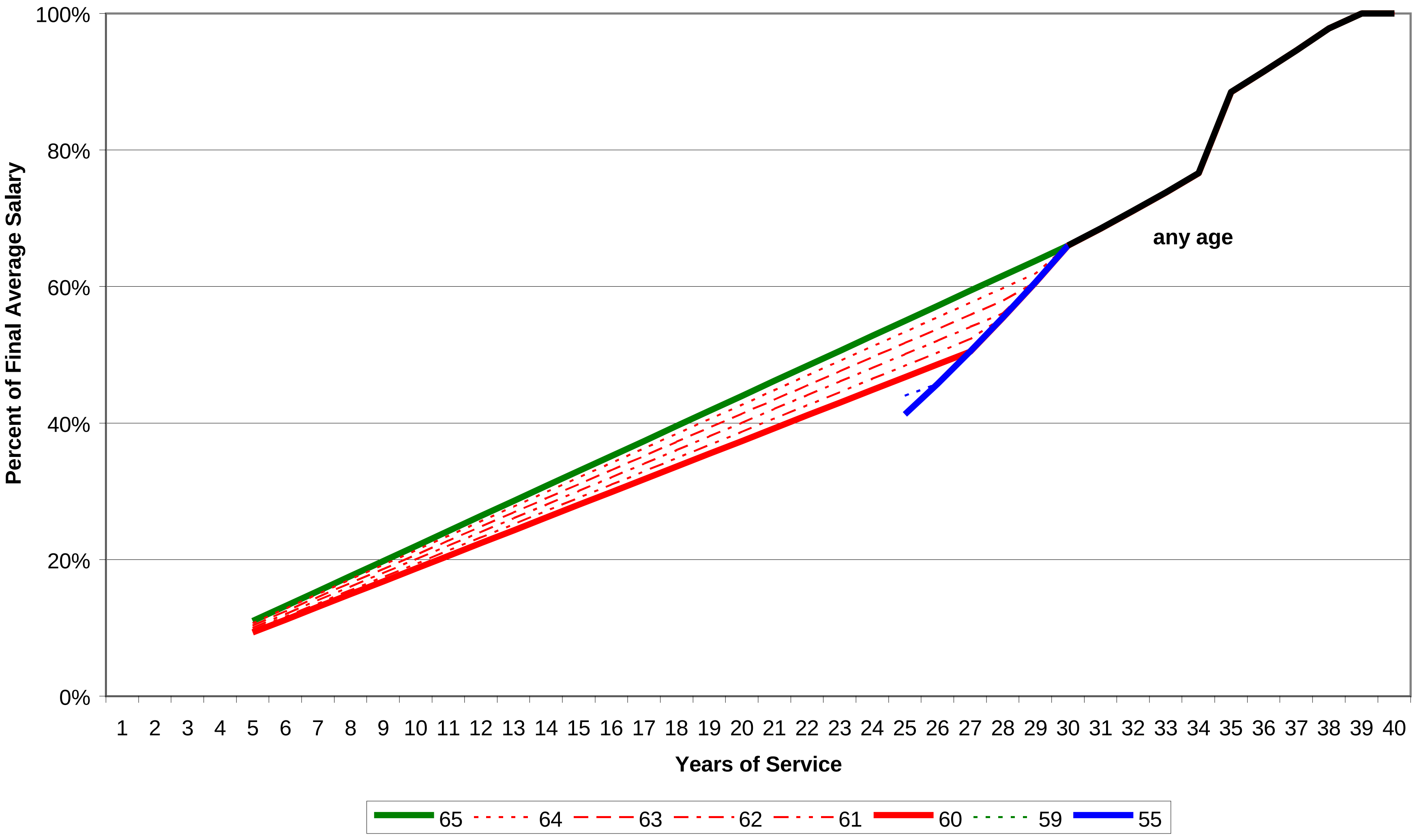
States vary in:

-Eligibility rules for first pension draw

-Role of age & service in replacement factor

Features of Ohio Pension Benefit Formula

Replacement Rate: Starting Pension, as Percent of Final Average Salary
by age & years of service



Accrual of Pension Wealth

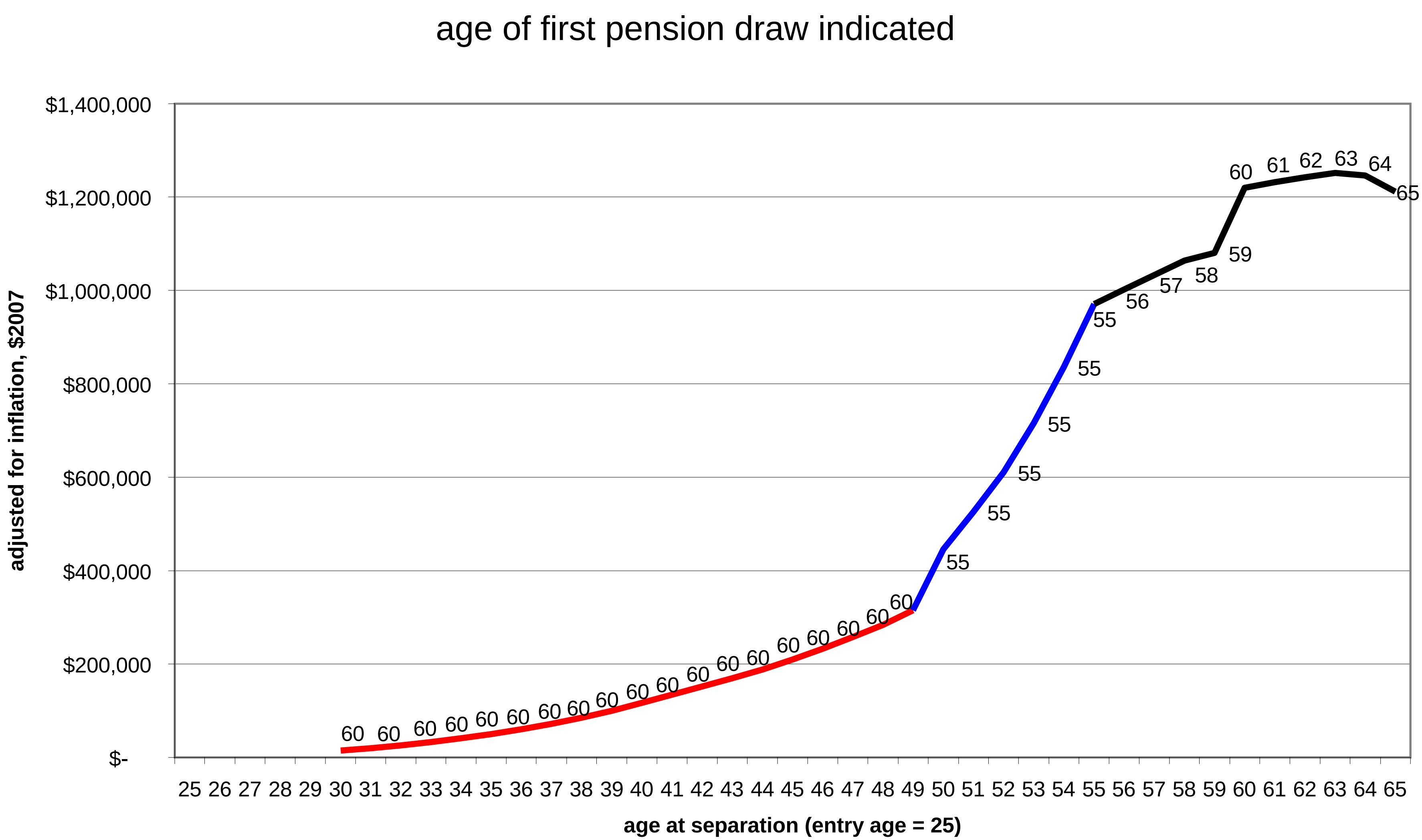
- **Individual incentives to work or retire depend on time pattern of pension benefit accrual**

- **Best measure is pension wealth:**
  - Present value of stream of pension payments
  - Market value of equivalent annuity

Key Features of Ohio Defined-Benefit (DB) Pension Incentives

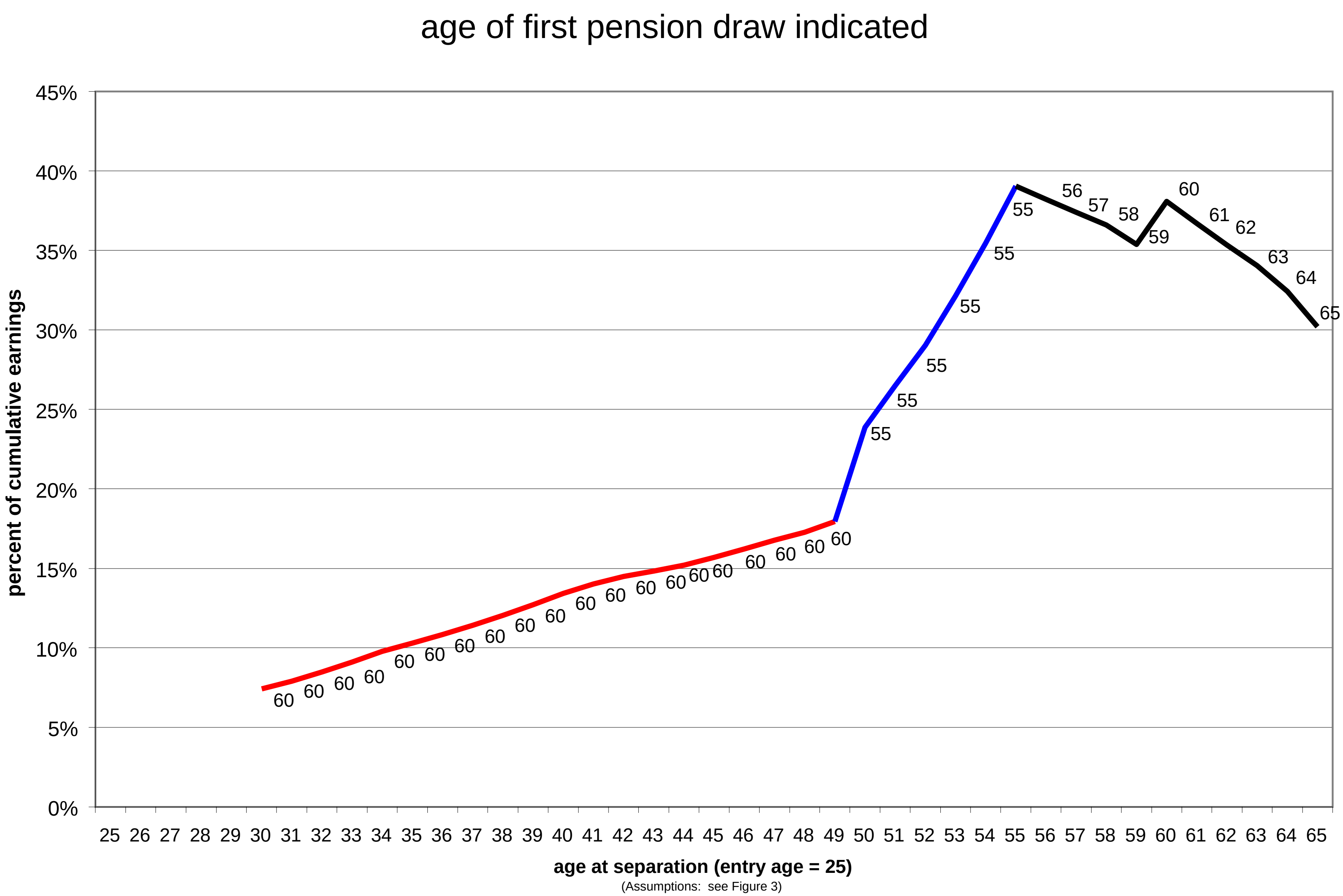
- **Pension “peaks” induce teachers to stay on the job into their 50s, even if unsuited to it**
  - An incentive to “put in your time”
- **Pension “valley” (or “cliff”) punishes teachers who stay beyond their mid-50s, even if they excel**

Pension Wealth, in Dollars

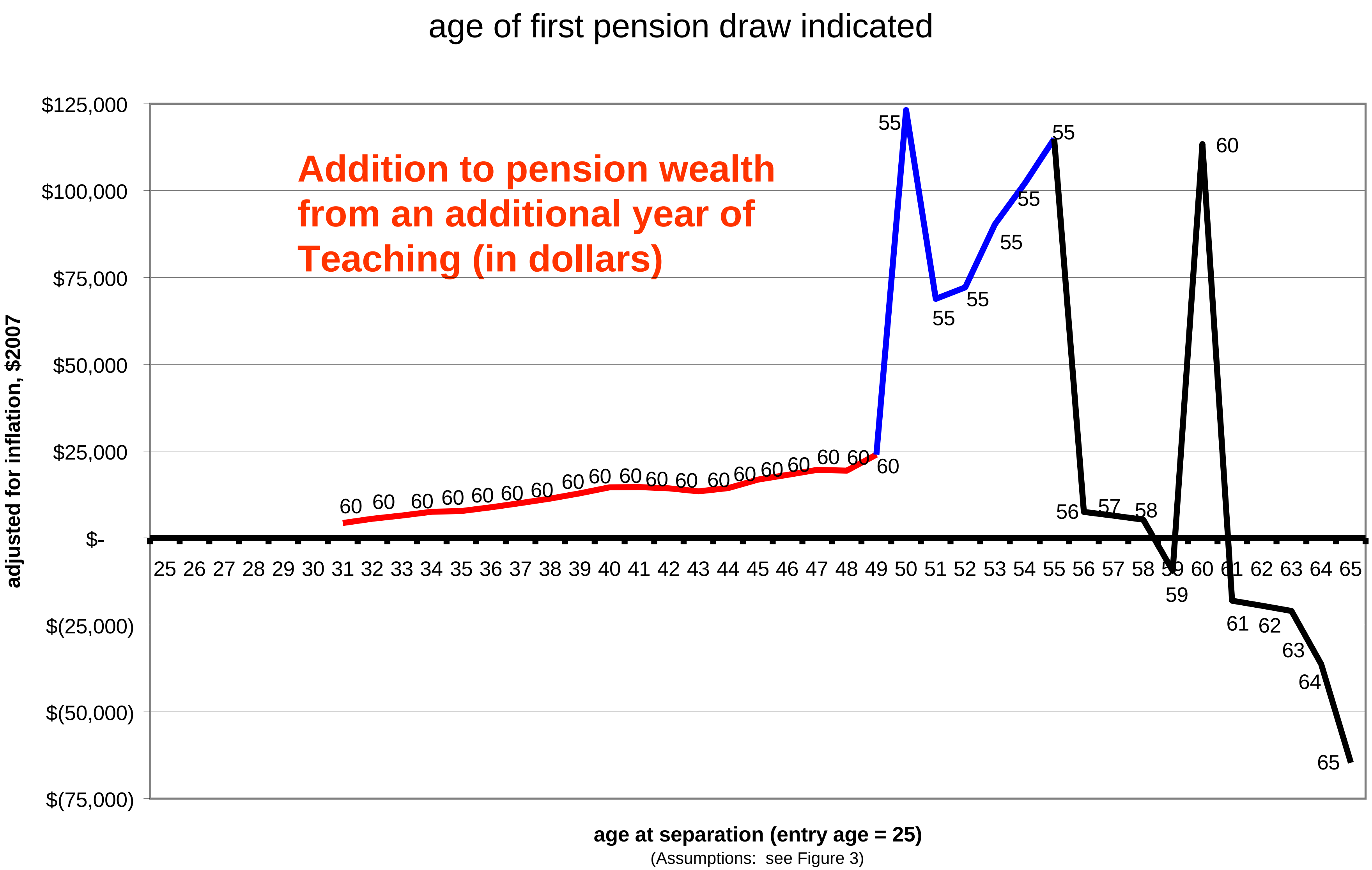


(Assumptions: 2006-2007 Columbus Public Schools Salary Schedule, all cells assumed to grow at 2.5% inflation, COLA = 3%, interest rate = 5%, unisex 2003 Mortality Table from IRS Revenue Ruling 2002-62 Appendix B.)

Pension Wealth, as Percent of Cumulative Earnings

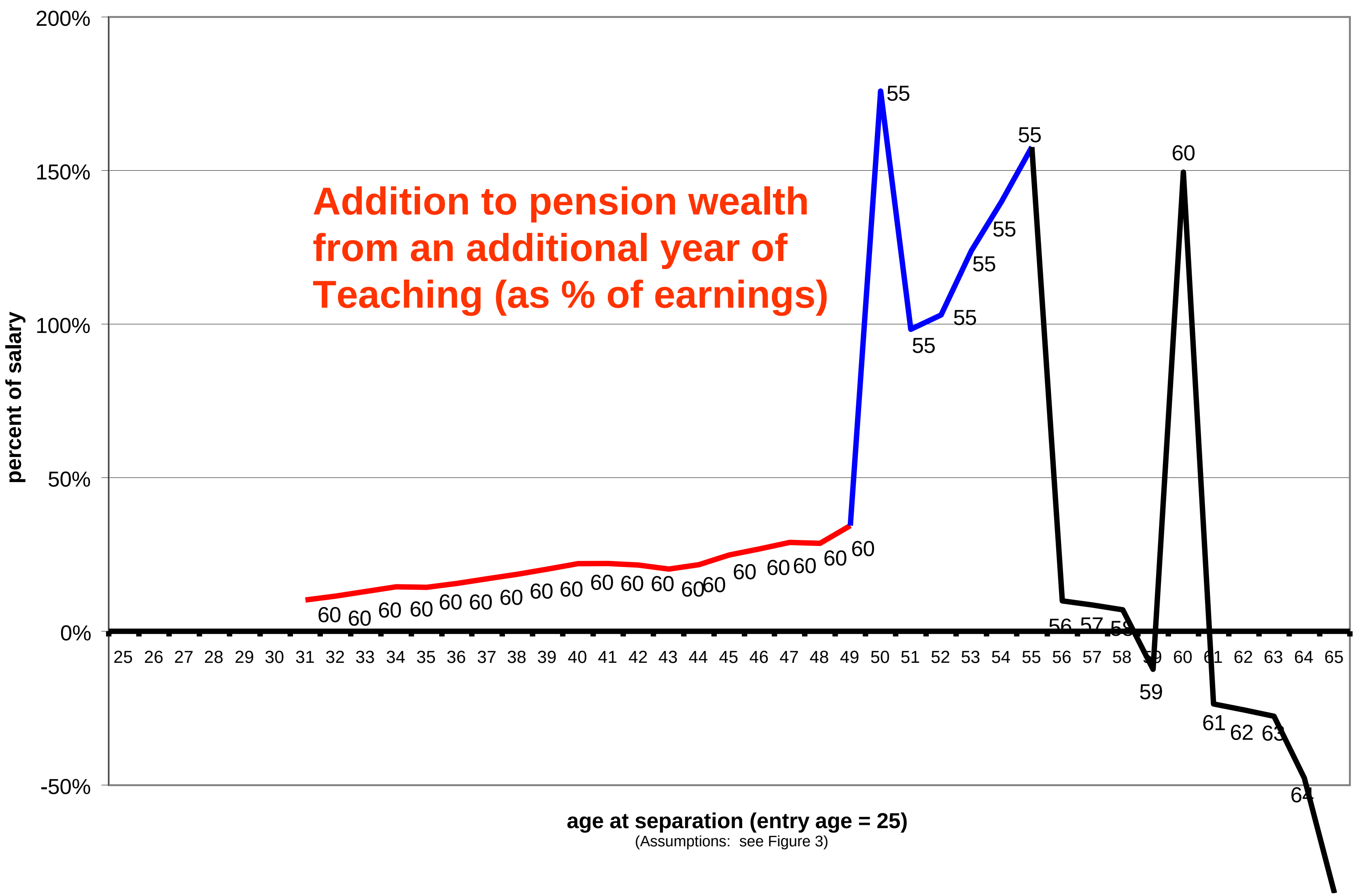


Deferred Income per Year, in Dollars



Deferred Income per Year, as Percent of Earnings

age of first pension draw indicated

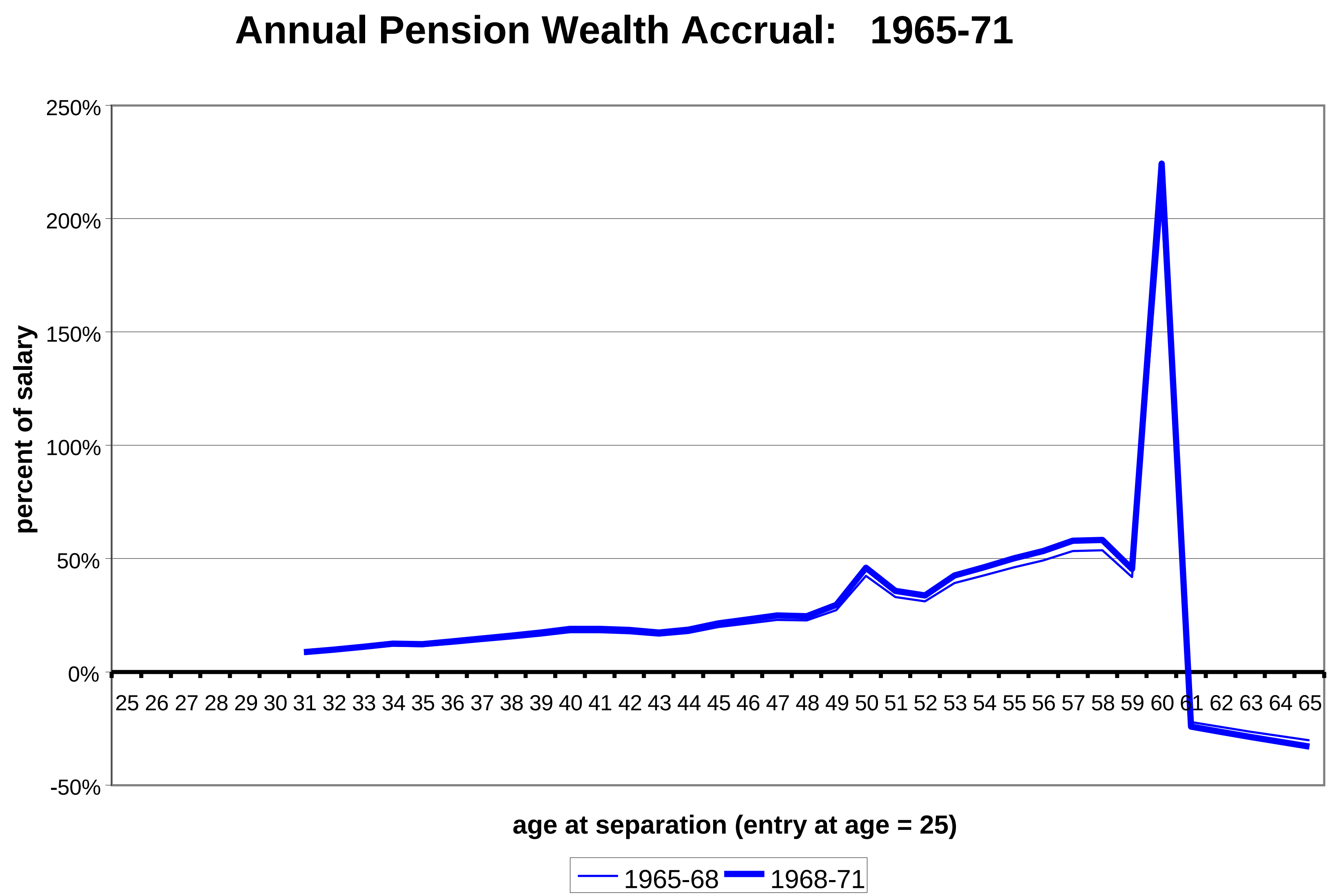


Benefit Enhancements Over Time Have Encouraged Earlier Retirement

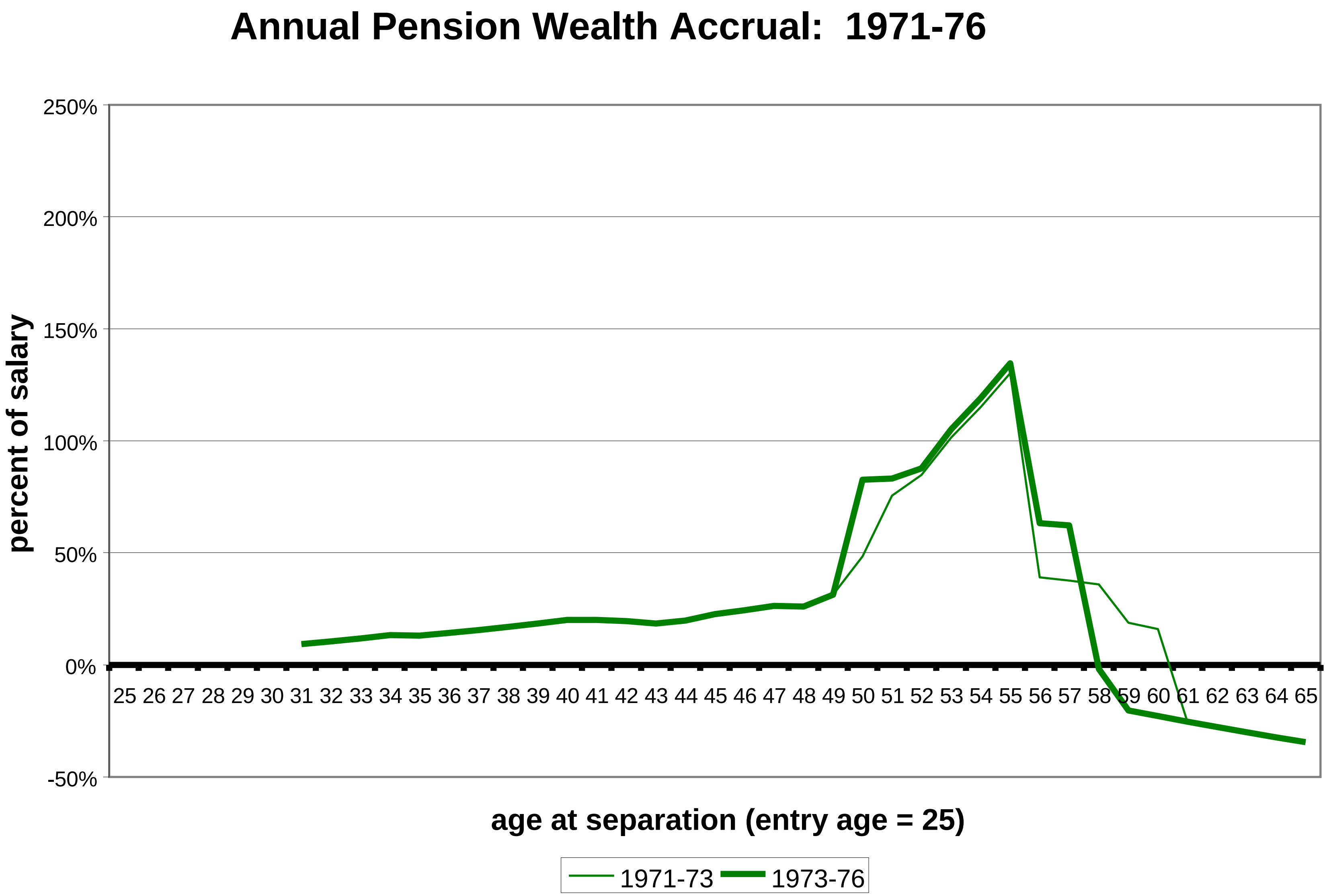
- **Traditional rationale for DB systems: longevity**
- **This is no longer the case**
- **Legislatures periodically enhance benefit formula**
  - Typically after a stock market boom, when the unfunded liability drops
- **These enhancements often favor early retirement**

Evolution of Ohio Teacher Pension System

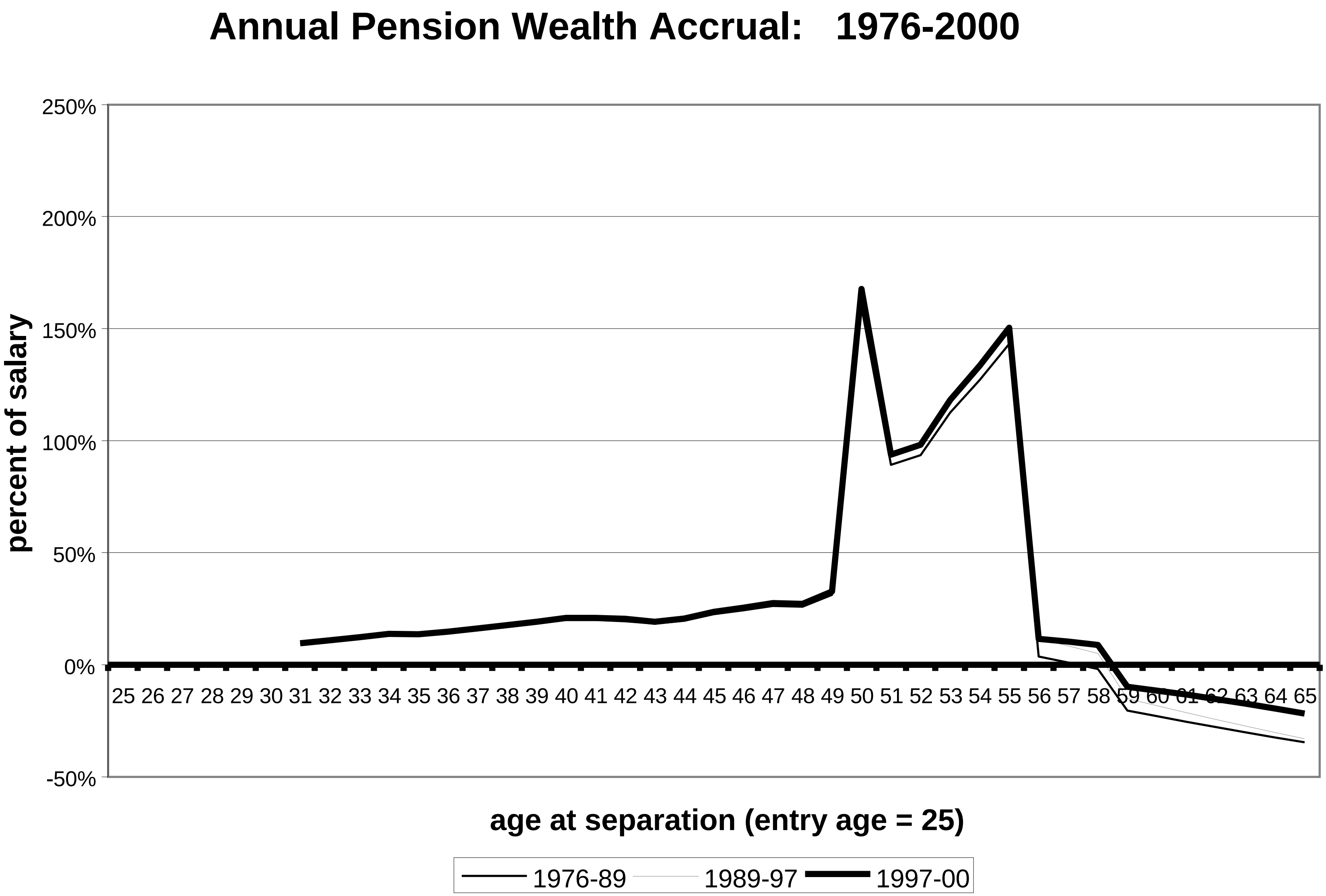
Pension Spike at Age 60, until 1971



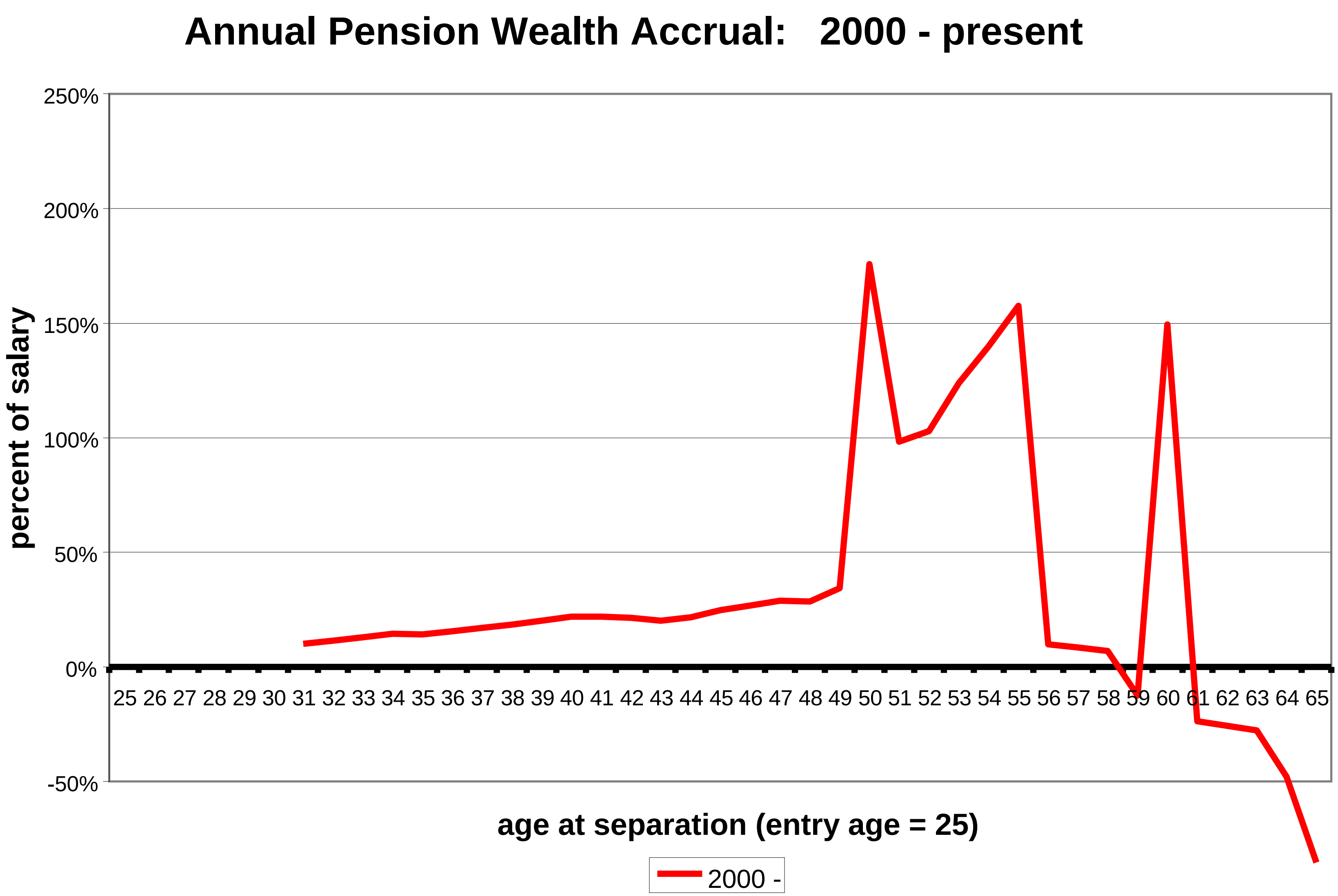
… Spike Shifts from 60 to 55 …



… 2nd Spike Added at 50 …



...Oops – Went too far! Add back spike at 60.



Other Ad Hoc Fixes: Post-Retirement Re-Employment

- **Traditional bars to “double dipping”**
- **The bars are being dropped**
  - Time & earnings limits
  - “critical shortage” exemptions
  - Break in employment
  - DROP plans
- **Ohio: Very liberal “double dipping” rules**
  - Over 19,000 double dippers in STRS

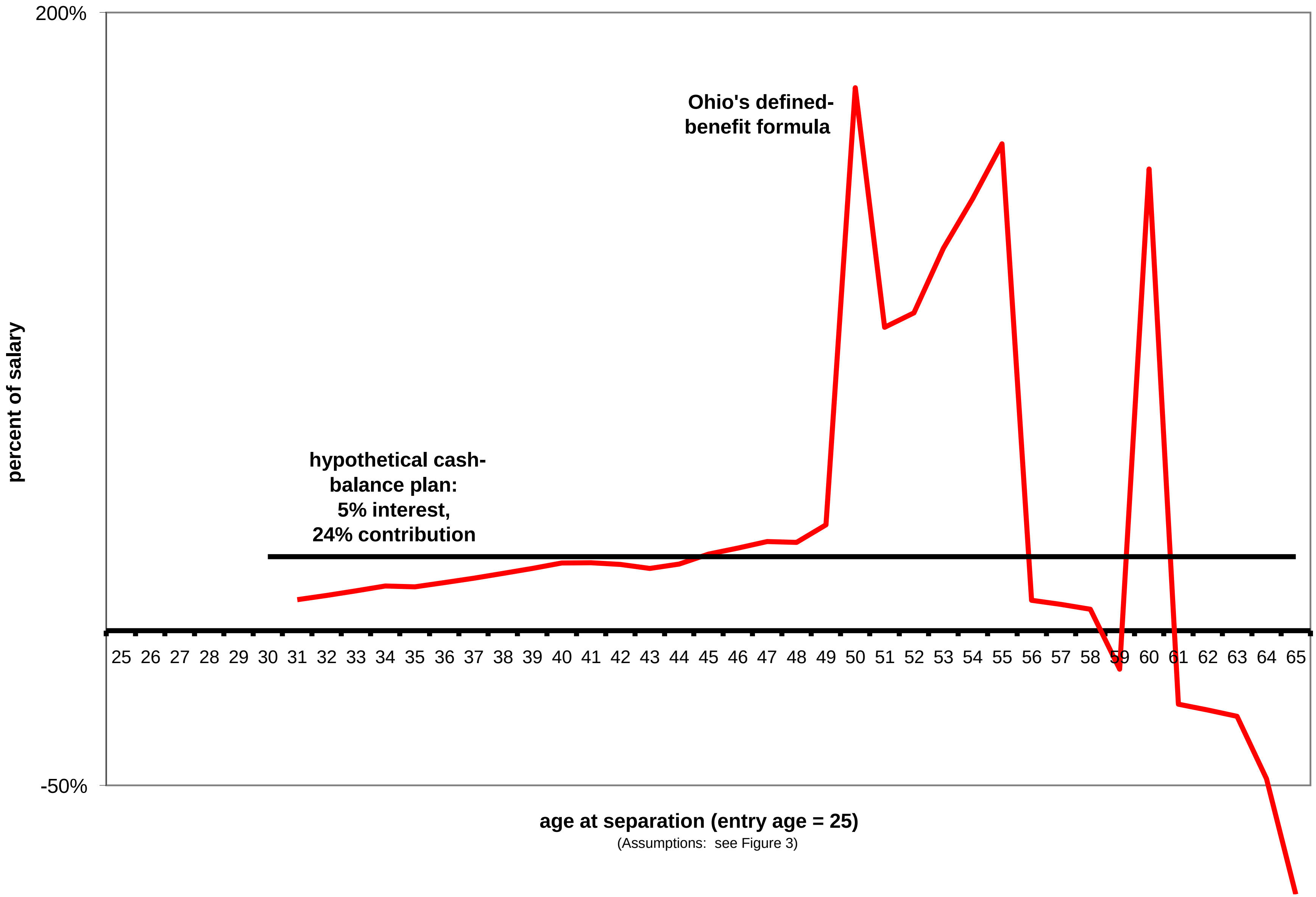
Why Patch a Broken System?

- **DB systems lack retirement-neutrality**
  - – No reason to drive all teachers to same retirement age
  - – Modern teaching workforce is more diverse
- **DB formulas lack transparency**
  - – "Pension savants" game the system
  - – Special interests often drive legislative changes, since few people understand the formulas

Cash-Balance (CB) & Defined-Contribution (DC) Plans

- **Key point is to tie benefit to joint contribution**
- **How they work**
  - Similarities & differences between CB & DC plans
- **Growth in private sector conversions to CB**
- **Incentive-neutrality in CB and DC's**

Deferred Income: Ohio's DB vs. Hypothetical CB Plan



Ohio’s Alternative Pension Plans

- **Defined-Contribution**
- **Combined Plan**
- **Money-Purchase**
- **All of these current plans are unattractive in their design for most Ohio teachers**
  - E.g., no health insurance, no COLA, below market interest rate

Pension Reform: Key Principles

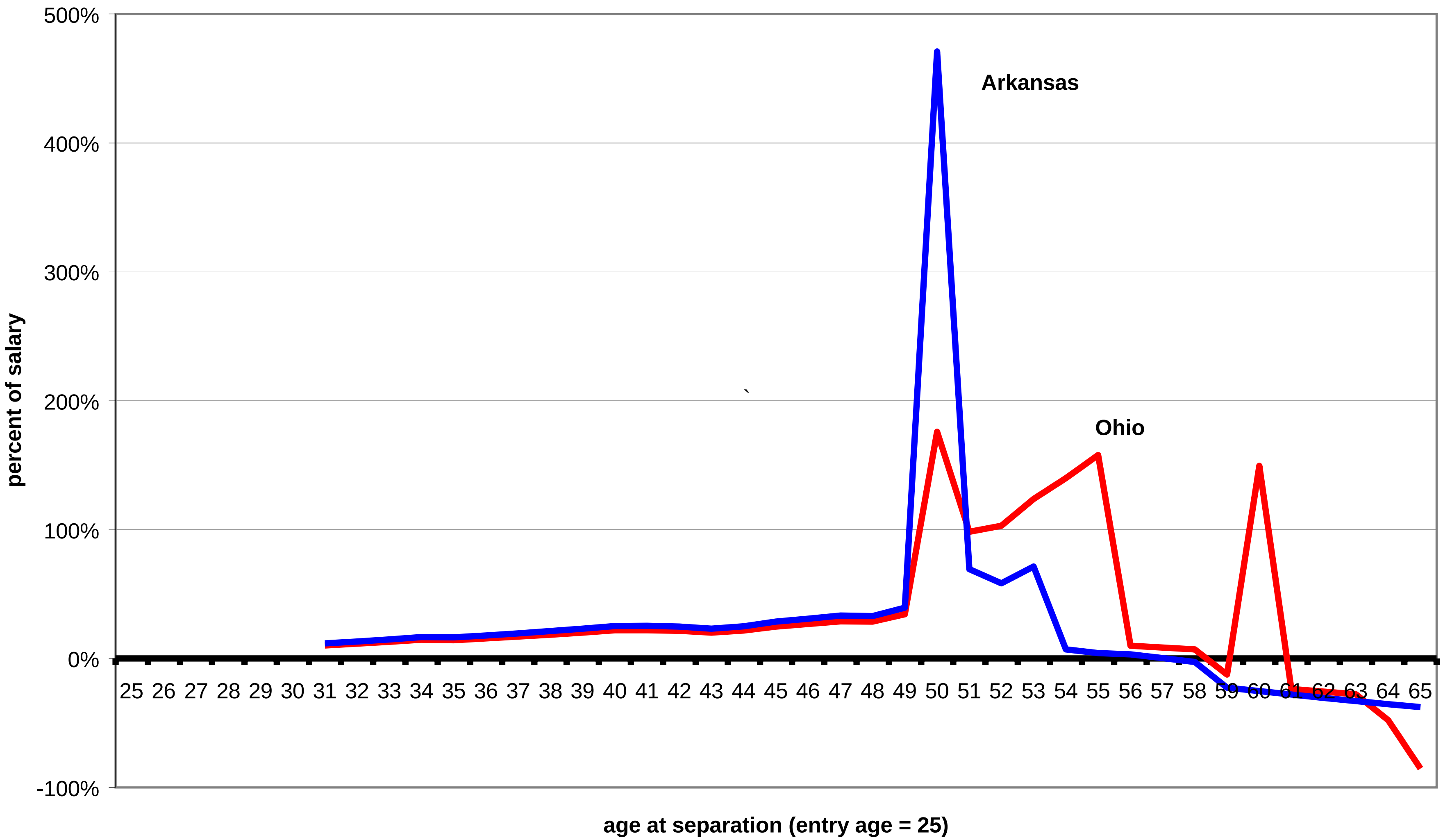
- **Neutrality**
  - A year of work adds to pension wealth in a uniform way
  - No peaks, no valleys
- **Transparency**
  - Accrual of benefits should be simple and clear
  - No opportunities for “gaming” the system
- **Portability**
  - Do not penalize mobile professionals
- **Sustainability**
  - The system should be self funding
  - Benefits should be tied to contributions

Implementation of Reform in Ohio

- **Build on existing Ohio alternative plans for current teachers**
- **Phase out traditional DB plan for new teachers**
- **Will <u>not</u> help current problem of unfunded accrued liability but will help avoid future financing problems and improve teacher recruitment**

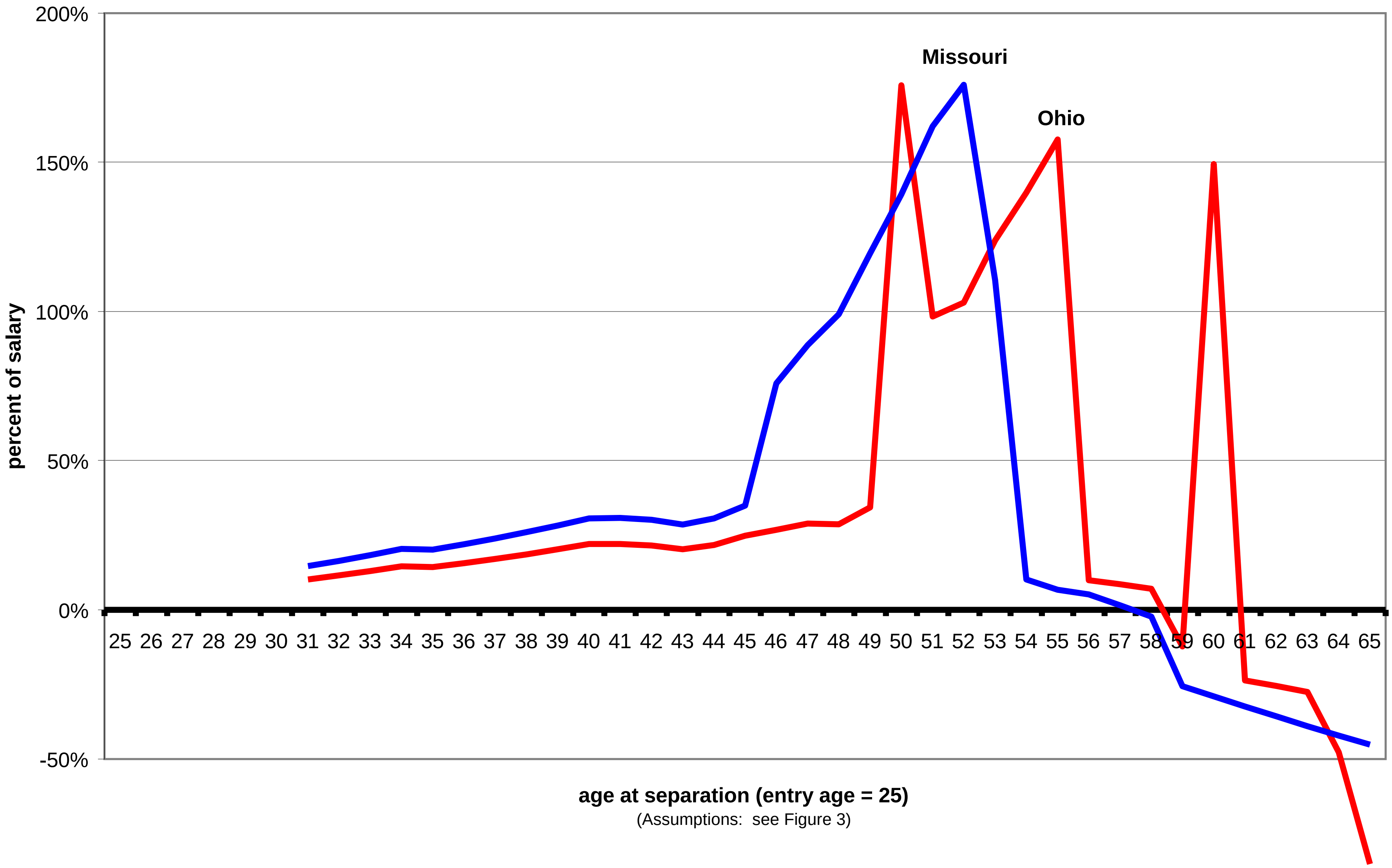
Background:
Comparisons to Other States

Deferred Income per Year: Ohio vs. Arkansas

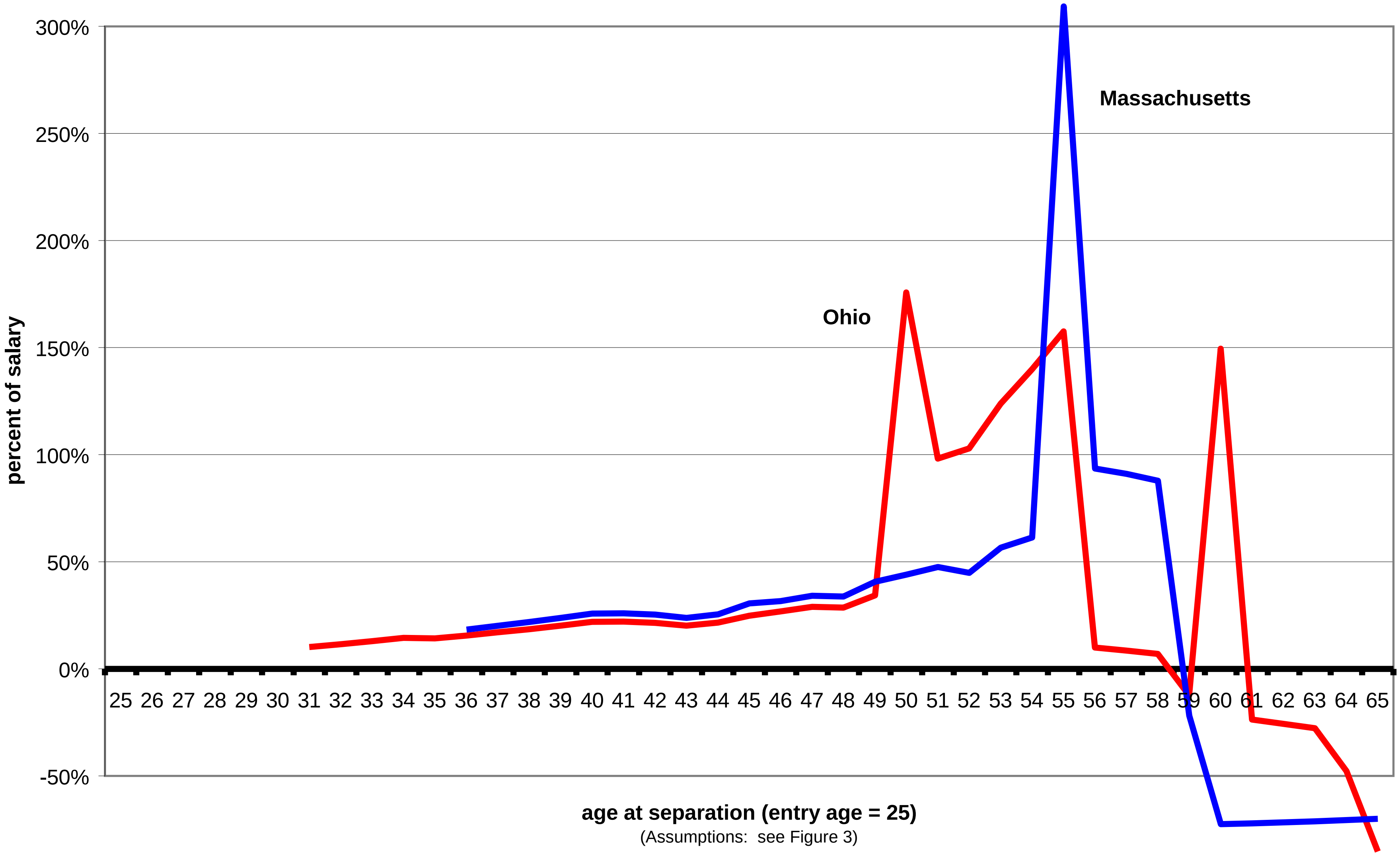


(Assumptions: see Figure 3)

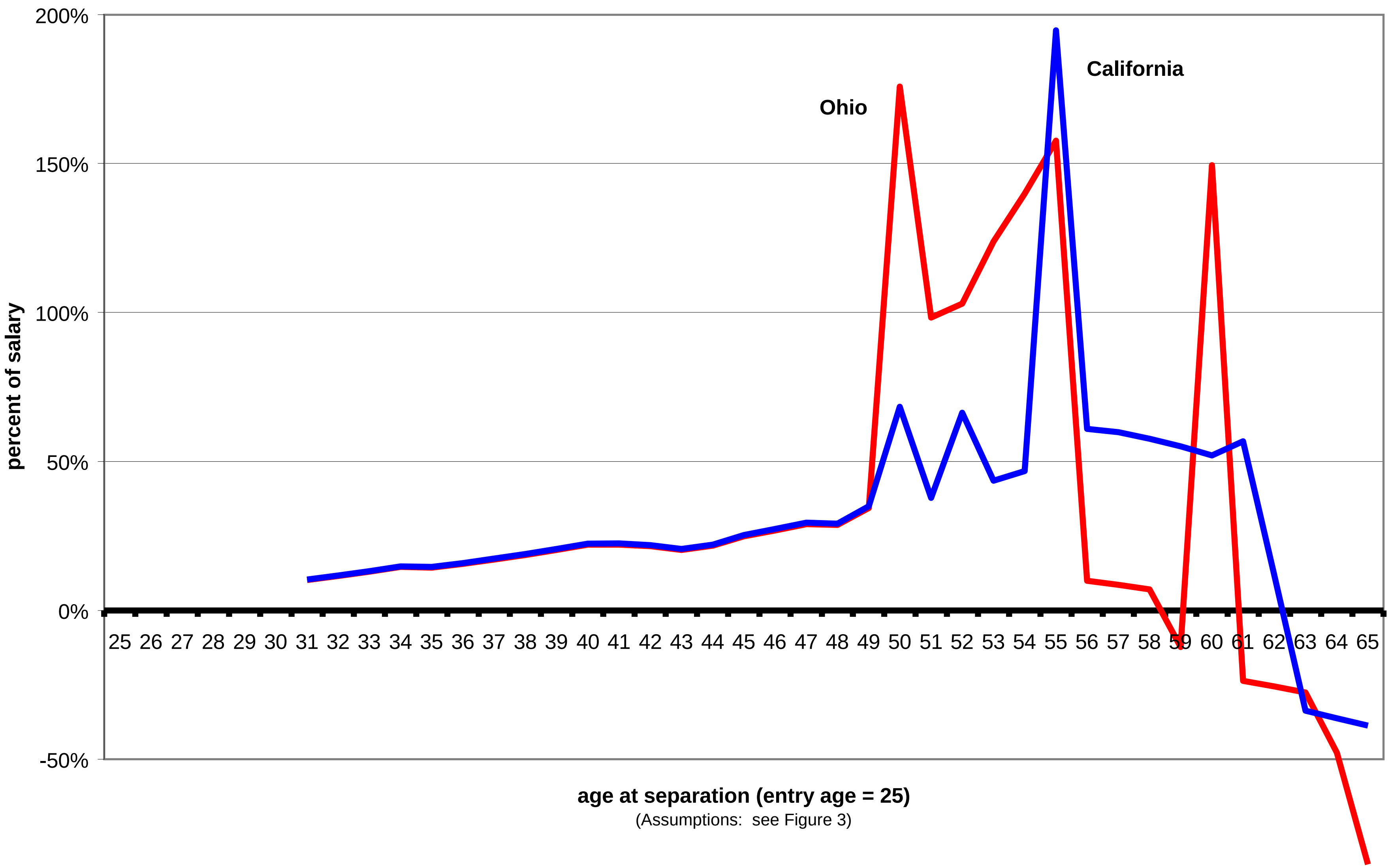
Deferred Income per Year: Ohio vs. Missouri



Deferred Income per Year: Ohio vs. Massachusetts

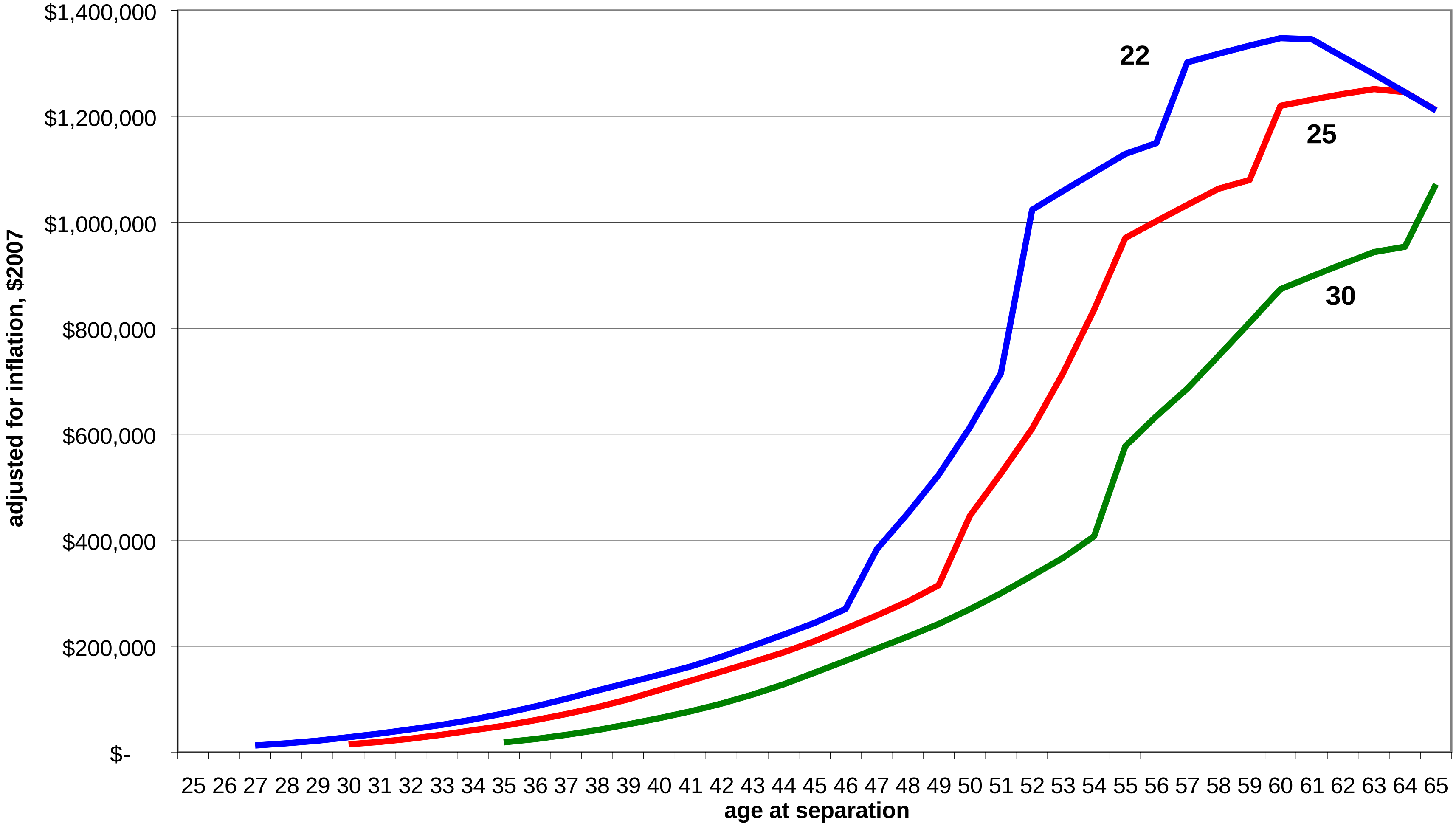


Deferred Income per Year: Ohio vs. California



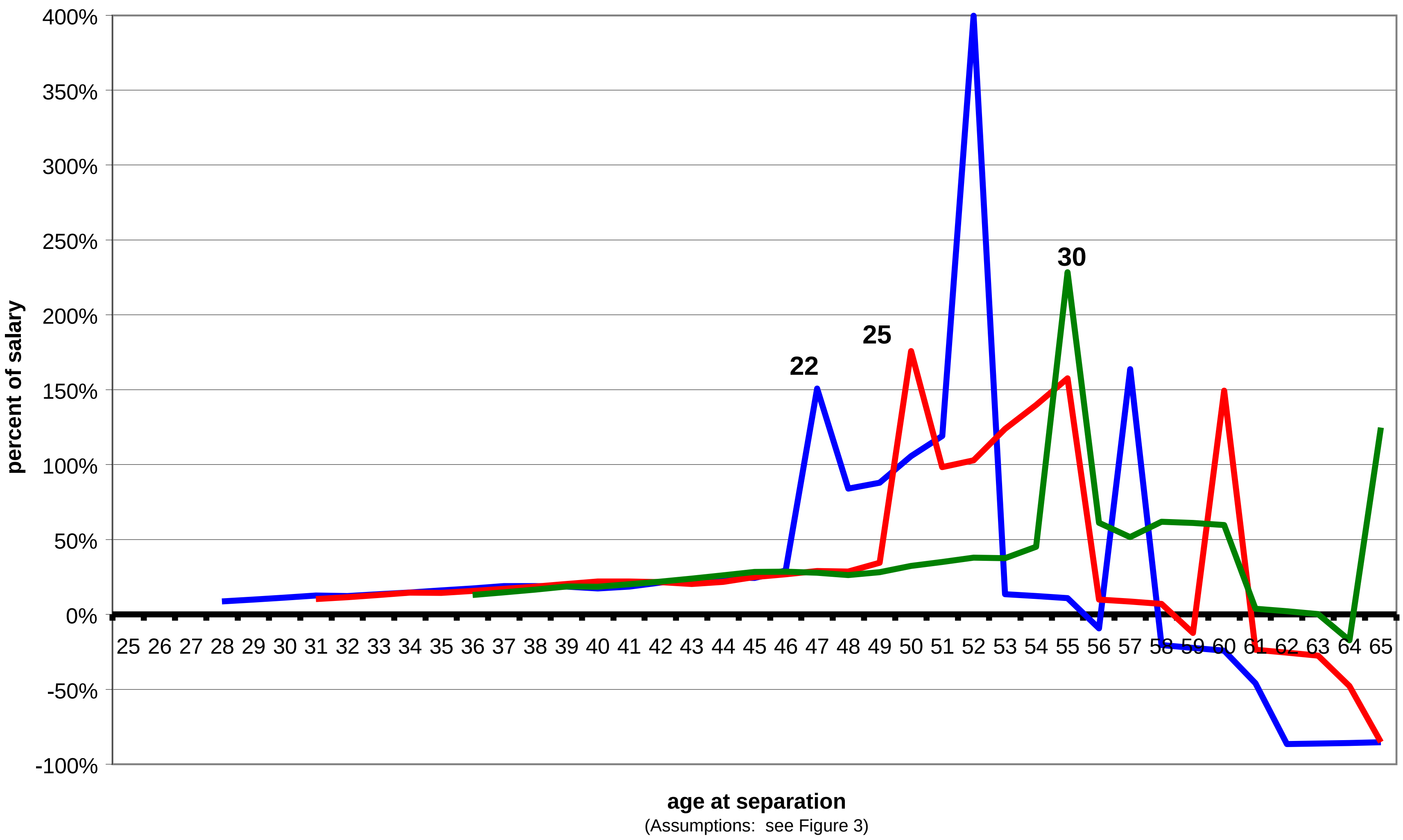
Background:
Wealth Accumulation for Alternative Age Cohorts

Pension Wealth, Entry Ages 22, 25, 30



(Assumptions: see Figure 3)

Deferred Income per Year: Entry Ages 22, 25, 30



Background:
Ohio’s Money-Purchase Alternative

Pension Wealth Under Ohio's "Money-Purchase Plan"