

Improving the Security of Retirement Income

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....What can be learned from US experience?

Douglas J. Carey, FSA, MAAA, EA, FCA

Executive Director IACA

Vice-chair AWB

Retired Global Consulting Actuary

The Problem

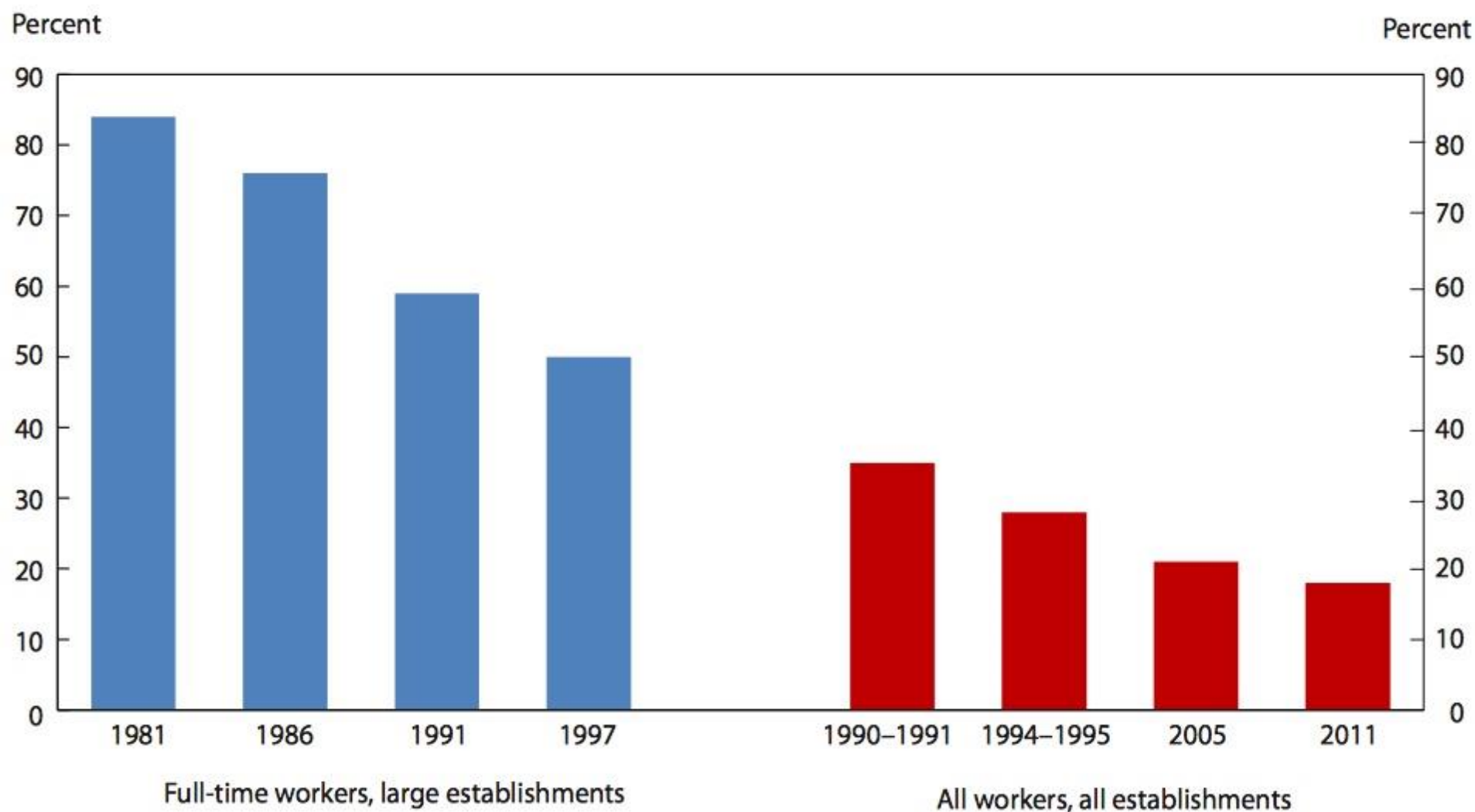
30 Years Ago . . .

- Vast majority of US employees were covered by funded defined benefit plans
- IF one spent a full career on one employer, he/she could expect a retirement income stream of about 50% of final 5 year average pay after 30 years service; 60% after 40 years
 - In most cases, not indexed for inflation
- If one changed jobs once half-way through their career, retirement benefits were eroded by about 25-35% since typically terminated vested pensions are not indexed

Shifting Landscape

- Introduction of 401K plans in the early 80s
- Initially *supplemental* to defined benefit pensions
- Then coordinated with DB pensions through offset/floor plans etc.
- By late 80s, early 90s, the erosion of DB plans had begun through
 - Conversion to “cash balance” or “pension account” plans
 - Closure to new entrants
 - Freezing of benefits (mostly without allowing for salary growth)

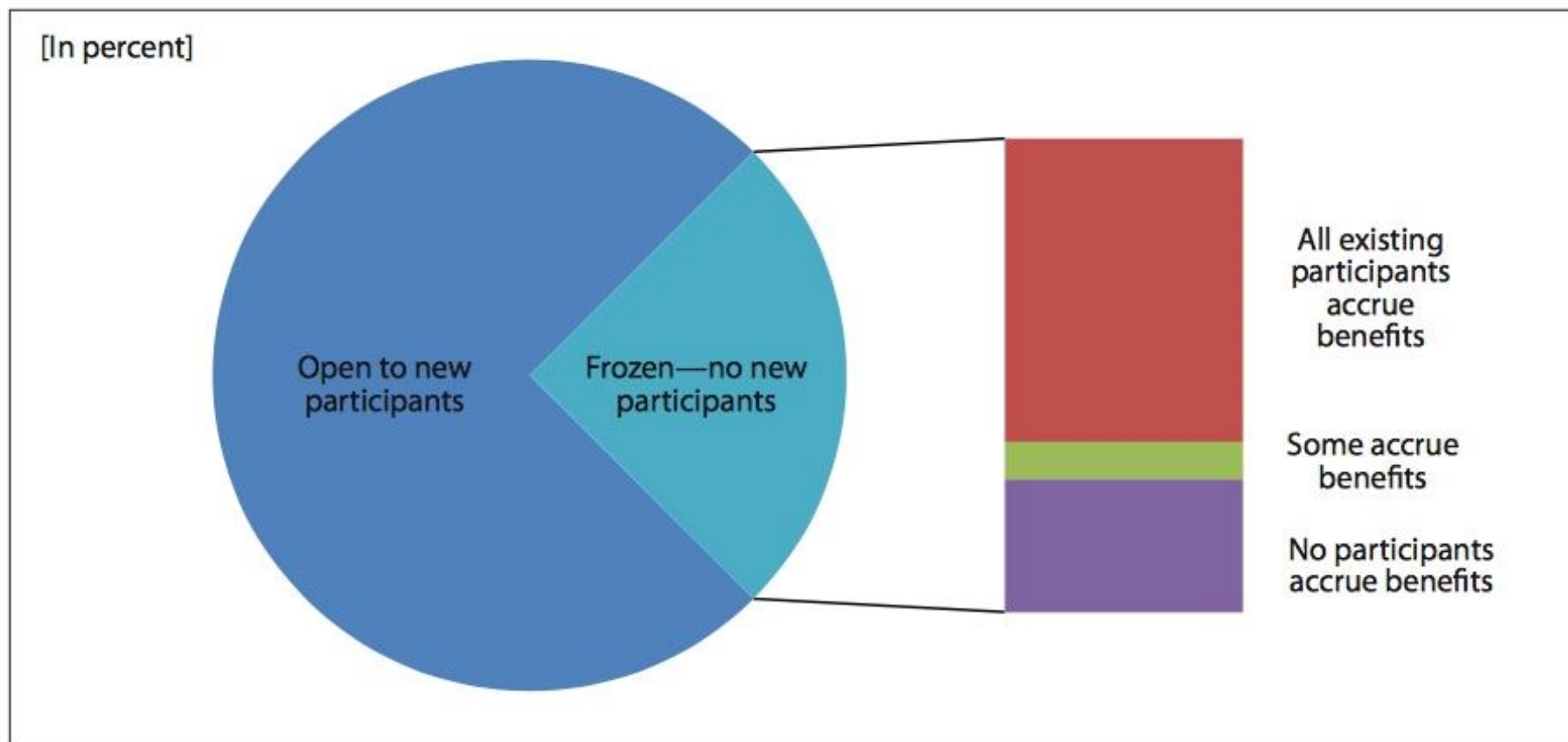
Percentage of employees participating in defined benefit pension plans, private industry, for selected years during 1981–2011



NOTE: Information shown for 1990–1991 and 1994–1995 uses combined data from separate surveys of small and large private establishments.

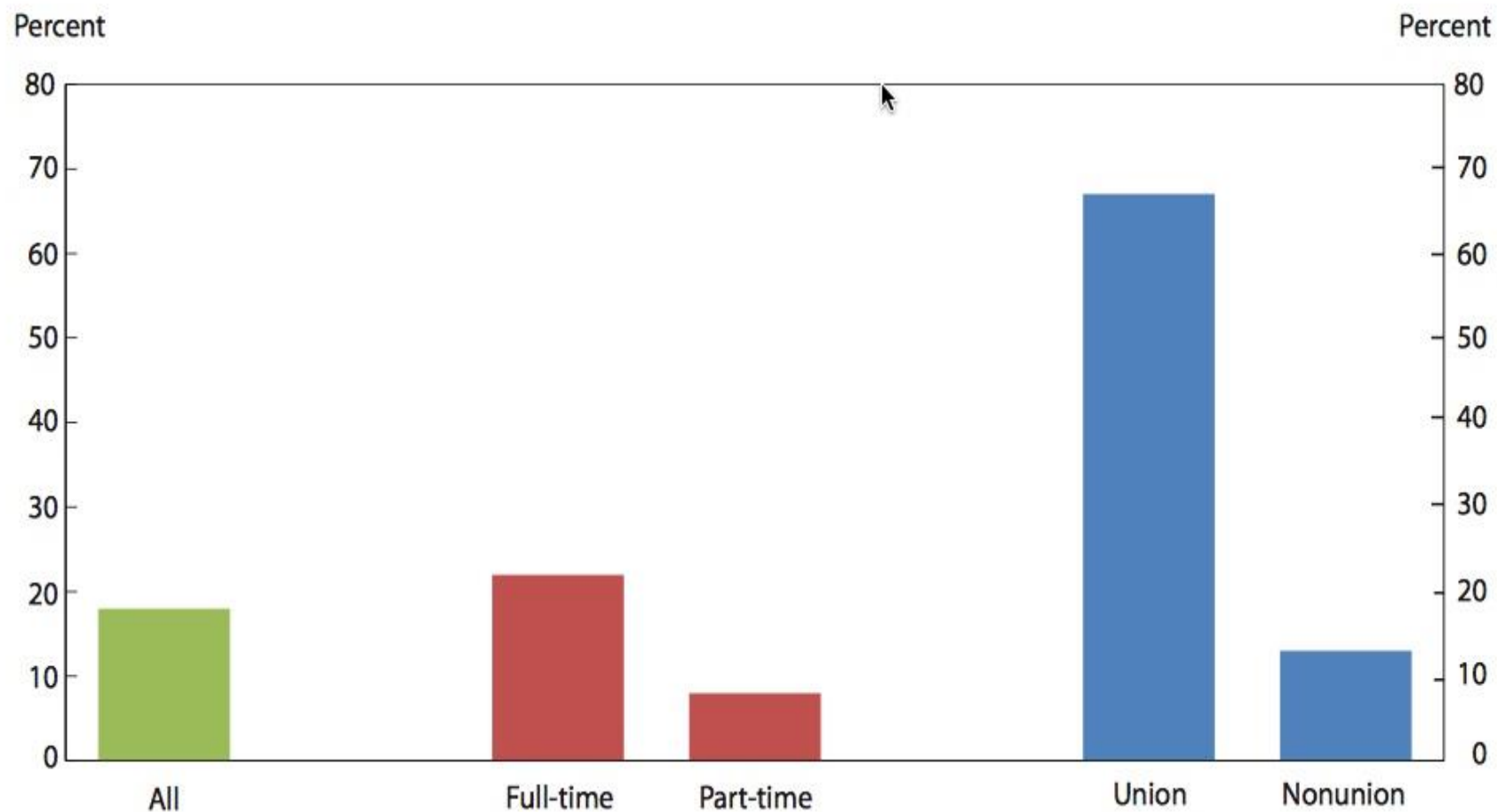
SOURCE: U.S. Bureau of Labor Statistics.

Percentage of defined benefit pension plan participants in open and frozen plans, private industry, 2011



SOURCE: U.S. Bureau of Labor Statistics.

Percentage of employees participating in defined benefit pension plans, by selected characteristics, private industry, 2011



SOURCE: U.S. Bureau of Labor Statistics.

DB Plans No Longer a Factor

- Other than unionized employees and in some industries (principally pharmaceuticals), DB plans are not a significant factor in private employment
- In the public sector, many DB plans exist but all are under severe pressure

On the Other Hand

- Defined Contribution/401k plans now cover 94% employees working at medium and large employers
- The “typical” DC plan allows employees to contribute up to 10% pay, of which up to 6% is matched, at a typical rate of 50%
- So, the typical employee has an opportunity to defer up to 9% of annual pay subject to IRS limits

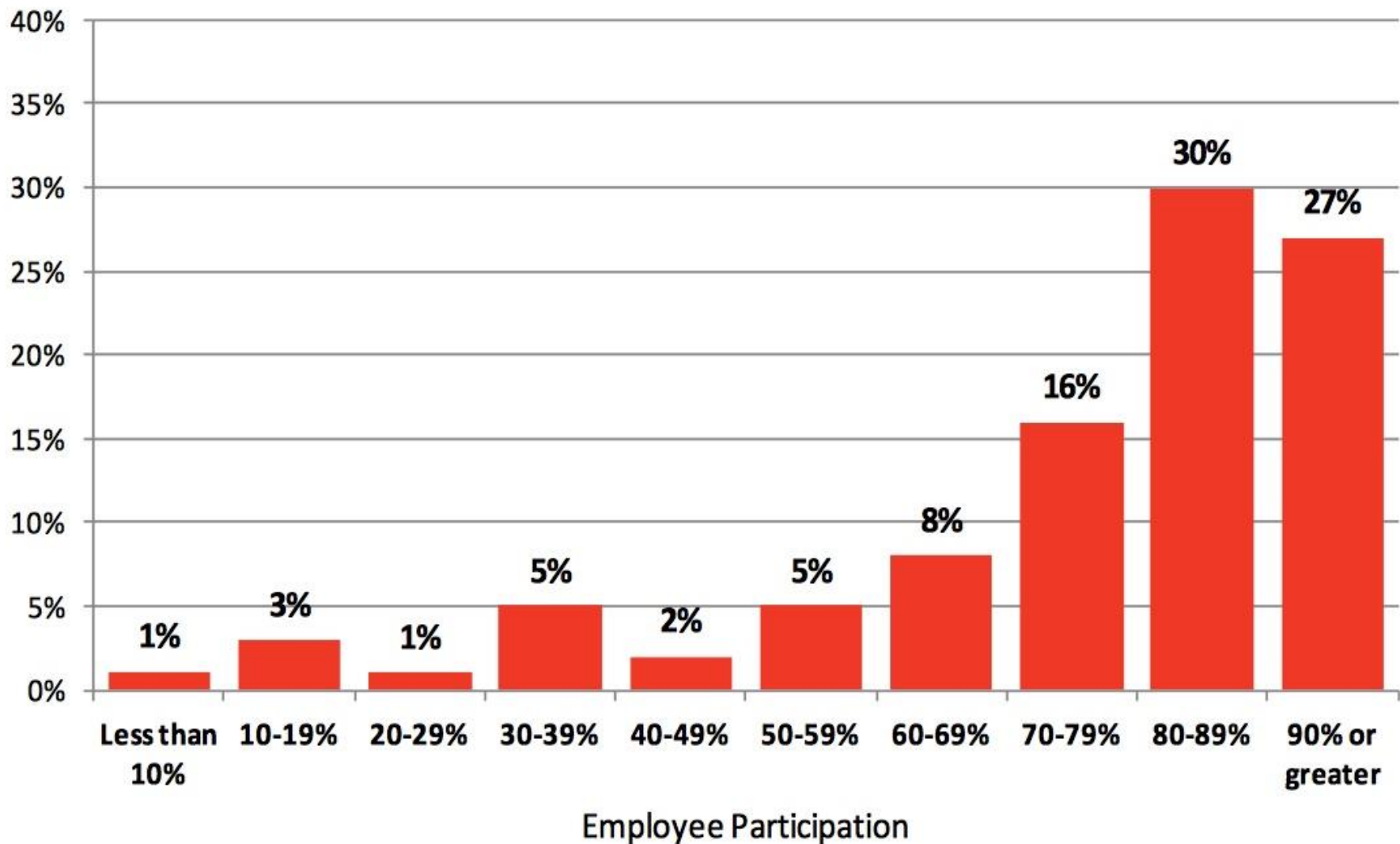
Source: 2014 WorldatWork survey

So Far, So Good

- A 9% annual contribution invested for 40 years can provide retirement income of 55-60% of final average pay
- Assumptions:
 - Investment return: 7%
 - Salary Increases: 3%
 - Inflation: 4%
 - Straight life annuity at age 65

Figure 3: Percentage of Employees Participating in a Plan

“What percentage of your organization’s U.S./eligible employees is currently participating in the 401(k) plan?” (n=369)



Source: WorldatWork 2014 survey

Now, the Reality

- Low participation
- Low contributions
- Immediate gratification (Stanford Marshmallow experiment)
- Ability to borrow money
- Availability of hardship withdrawals
- Low initial contributions not increased

The Crux of the Problem . . .

Illustrated by:

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Stanford University Marshmallow Effect Experiment led by psychologist Walter Mischel in late 1960s

Potential Solutions

Increased Communication

- Financial
- Behavioral

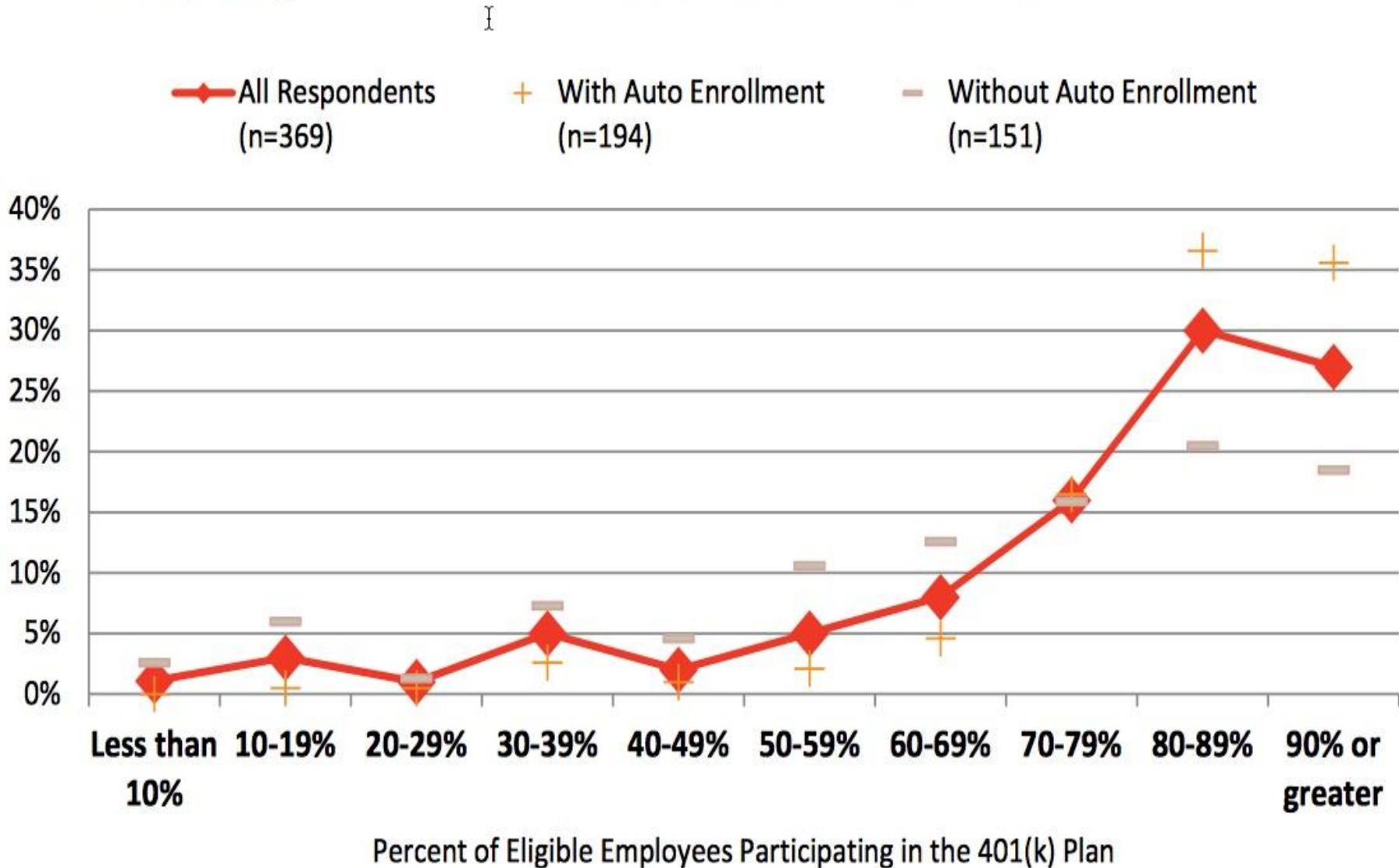
Increased Education

- Modeling tools
- Investment strategies including lifecycle investment
- Investment advice
- Role of annuities during payout phase

Use or Increased Use of Auto Features

- Auto-enrollment (allowed in US since 2006)
 - In US, subject to restrictions on levels, required employer contributions and investment choices
- Auto escalation of participant contributions
- Default investment choices

The graph below includes the employee participation information above as well as differences in participation levels depending on whether an organization offers automatic 401(k) plan enrollment. (See Figure 14 for more detail on automatic enrollment.)



An Interesting Behavior Transformation Strategy

Save More Tomorrow TM

Developed by Richard H. Thaler, University of Chicago and Shlomo Benartzi, UCLA

Implementations in conjunction with Hewitt Associates in early 2000s

Note: The following slides were developed by Thaler and Benartzi

Save More Tomorrow™



Using Behavioral Economics to Increase Employee Saving.

By Richard H. Thaler and Shlomo Benartzi

Agenda

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2.

The Approach

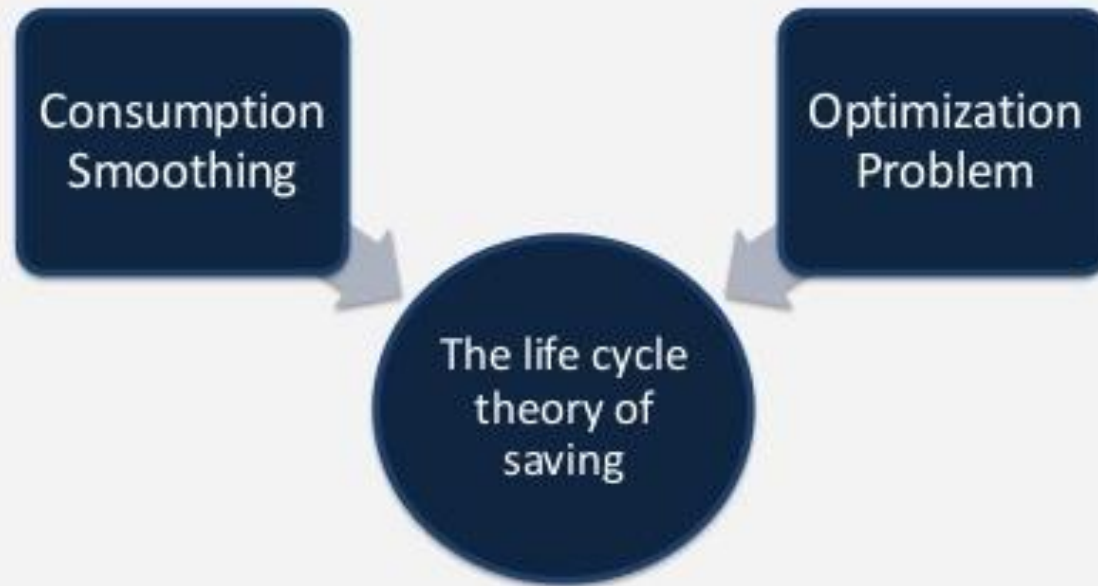
3.

The SMarT Program™

4.

Conclusion

Economic theory assumes that people solve problems as economists would.



Households are assumed to solve this optimization problem in each period.

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Actual household behavior might differ for at least two reasons.



Problem is a
hard one.

Lack of
self-control.

Households might fail to compute the correct savings, or be unable to reduce present consumption in favor of future consumption.

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Over the last decade, there have been changes on how pension plans are defined.

Social Security &
Defined-benefit
Pension Plans.

Defined-contribution
Pension Plans.

Plans now require employees to actively join and select their own savings rate.

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There are three different kinds of economic analyses.

- **Normative theories:** characterize rational choice.
- **Descriptive theories:** model how people actually choose.
- **Prescriptive theories:** offer advice on how people can improve decision making and get closer to the ideal.

The authors take a prescriptive approach to increasing saving rates.



There is a possibility that some low-saving workers are making a mistake.

Determining the appropriate savings rate is difficult.

Not satisfactory heuristic that approximate a good solution.

Households would like to save more but lack the willpower.

Procrastination & Status Quo bias.

The proposed program will take all these factors into account.

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The Save More Tomorrow™ Program has four main features.

1.

Employees are approached about increasing their contribution rates a considerable time before their scheduled pay increase.

2.

If employees join, their contribution to the plan is increased beginning with the first paycheck after a raise.

3.

The contribution rate continues to increase on each scheduled raise until the contribution rate reaches a preset maximum.

4.

The employee can opt out of the plan at any time.

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The First Implementation of SMarT™: Midsize Manufacturing Company

- Company suffered from both **participation** and **saving** rates.
- It was being constrained by U.S. Department of Labor rules that restrict the proportion of benefits that can be paid to the higher-paid employees in the firm.
- Management was concerned that some of the workers may not be saving enough.

They hired an investment consultant and offered his services to every employee eligible for the retirement savings plan.

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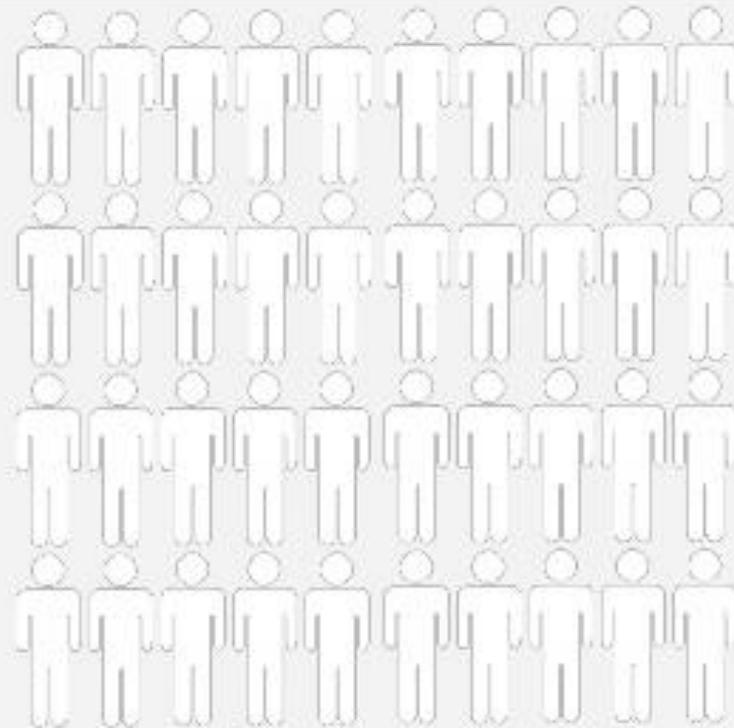
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The company had 315 eligible employees.



All but 29 agreed to meet with the consultant and get his advice.

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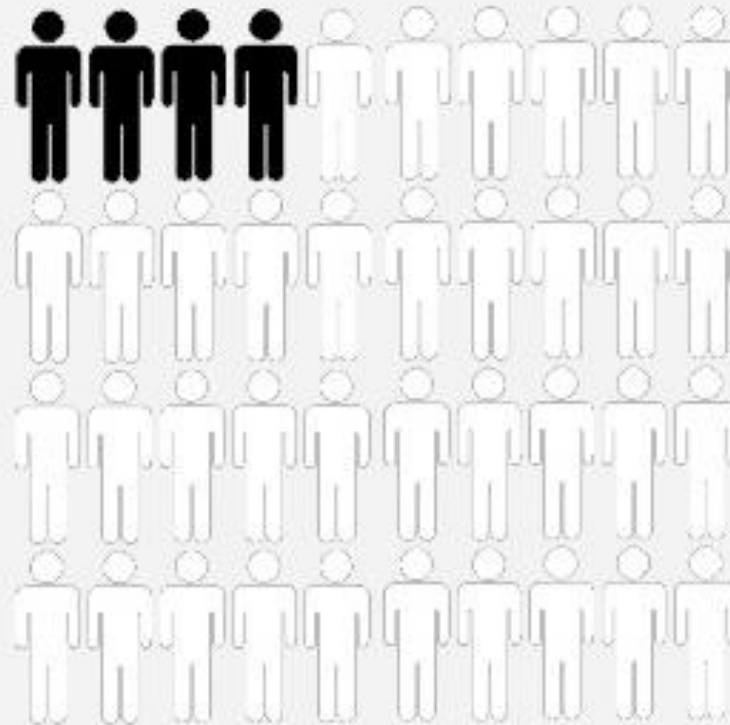
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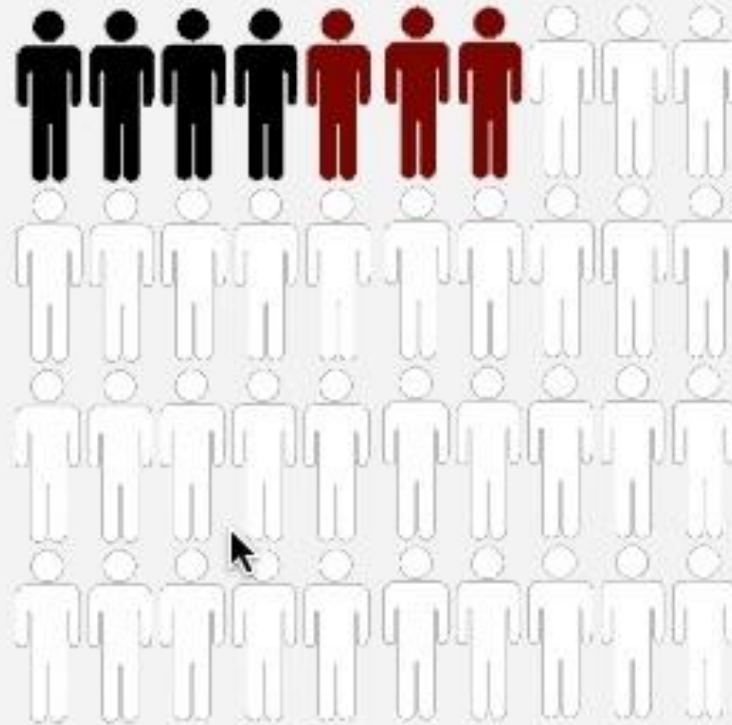
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However, just 79 of them agreed to follow his advice.



For the rest of the participants, the planner offered a version of the SMarT™ plan as an alternative.

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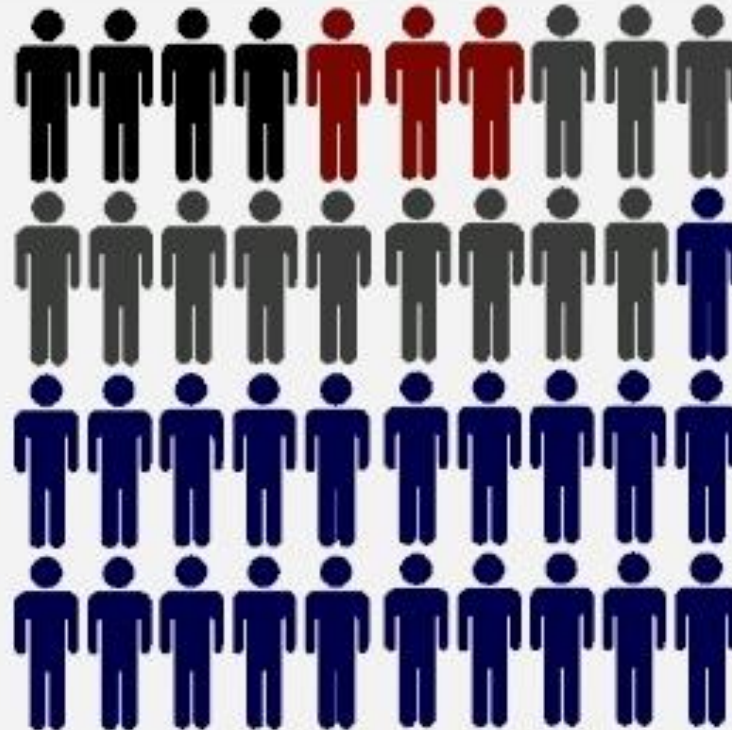
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From these, almost 80% accepted the SMarT™ plan.



■ Save More Tomorrow™

The proposed increase in their saving rates was three percentage points each year, starting with the next pay increase.

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The impact of the program on saving is shown in the table below.

TABLE 2
AVERAGE SAVING RATES (%) FOR THE FIRST IMPLEMENTATION OF SMarT

	Participants Who Did Not Contact the Financial Consultant	Participants Who Accepted the Consultant's Recommended Saving Rate	Participants Who Joined the SMarT Plan	Participants Who Declined the SMarT Plan	All
Participants initially choosing each option*	29	79	162	45	315
Pre-advice	6.6	4.4	3.5	6.1	4.4
First pay raise	6.5	9.1	6.5	6.3	7.1
Second pay raise	6.8	8.9	9.4	6.2	8.6
Third pay raise	6.6	8.7	11.6	6.1	9.8
Fourth pay raise	6.2	8.8	13.6	5.9	10.6

The hypotheses of SMarT™ plan participants having a higher “taste for saving” can be ruled out by the design of the study.

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The Second Implementation of SMarT™: Ispat Inland

Main Differences:



- **No** financial consultant hired.
- Employees received **a letter** inviting them to join the program.
- Annual increase to the savings rate was set at **two** percentage points.
- It was implemented with quite minimal resources.

Despite the lower costs of implementing, the program was still popular among employees.



The impact of the program in the second implementation is shown below.

TABLE 3
AVERAGE SAVING RATES FOR ISPAT INLAND (%)

	EMPLOYEES WHO WERE ALREADY SAVING ON MAY 31, 2001		EMPLOYEES WHO WERE NOT SAVING ON MAY 31, 2001		ALL ELIGIBLE EMPLOYEES (N=5,817)
	Joined SMarT (N=615)	Did Not Join SMarT (N=3,197)	Joined SMarT (N=165)	Did Not Join SMarT (N=1,840)	
Pre-SMarT (May 2001)	7.62	8.62	.00	.00	5.54
First pay raise (October 2001)	9.38	8.54	2.28	.26	5.83

Those joining SMarT™ increased their saving rates by roughly 2 percent, whereas those not joining the program did not change their saving rates much.

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Key takeaways from the Third Implementation of SMarT: Philips Electronics

The **SMarT™** design feature linking savings increases to pay increases may not be essential.

One-on-one meetings with a financial planner appear to be a very effective (though costly) recruitment tool.

Despite the lower costs of implementing, the program was still popular among employees.

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SMarT—Current Status

- While an interested theory, it has not prevailed in the US marketplace
 - Expensive to hire financial counselors
 - Better suited to small to mid-size employers
 - Auto enrollment in 401K plans allowed in 2006 have been more pervasive
- It is clear that the behavioral modifications outlined in SMarT still have validity and applicability

OECD Recommendations for “Good” DC Plan Design—10 principles

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1. Achieve consistency in design between accumulation and payout phases
2. Encourage enrollment and contributions for long periods
3. Improve incentives to save
4. Promote low cost retirement savings vehicles
5. Establish appropriate default investment strategies
6. Consider life-cycle investment options as defaults for older members

OECD Recommendations for “Good” DC Plan Design—10 principles

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7. Encourage annuitization during payout
8. Promote supply of annuity vehicles to achieve cost efficient results
9. Develop appropriate hedging instruments to deal with longevity risk
10. Ensure effective communication and address financial illiteracy and lack of awareness

Conclusions

Lessons Learned from US

- DB plans are gone for good
 - Too high employer risk
 - Today's workforce too mobile
 - Frequent job changes
 - Much part-time
 - Job sharing
 - Low perceived current value in future annuity stream

Lessons Learned from US

- DC plans are here to stay
 - Highly appreciated by employers and employees
 - Tax effective
 - Attractive to top management
- In most cases, a DC plan will NOT provide an adequate retirement income
 - Marshmallow effect
 - Too many diversions before retirement
 - Powerful attraction of lump sum at retirement
 - Low rate of savings

Lessons Learned from the US

- To improve adequacy of retirement income provided from DC plans, interventions are needed. Examples:
 - Auto-enrollment
 - Auto contribution increases
 - Financial and behavioral education and modification
 - Investment education and advice
 - More aggressive positioning of annuity payout options

Thank You!

Douglas J. Carey, FSA, MAAA, EA, FCA

doug@dougcarey.com

+1.203.434.0434

