

The Future of Retirement Wealth: Implications of the current financial crisis



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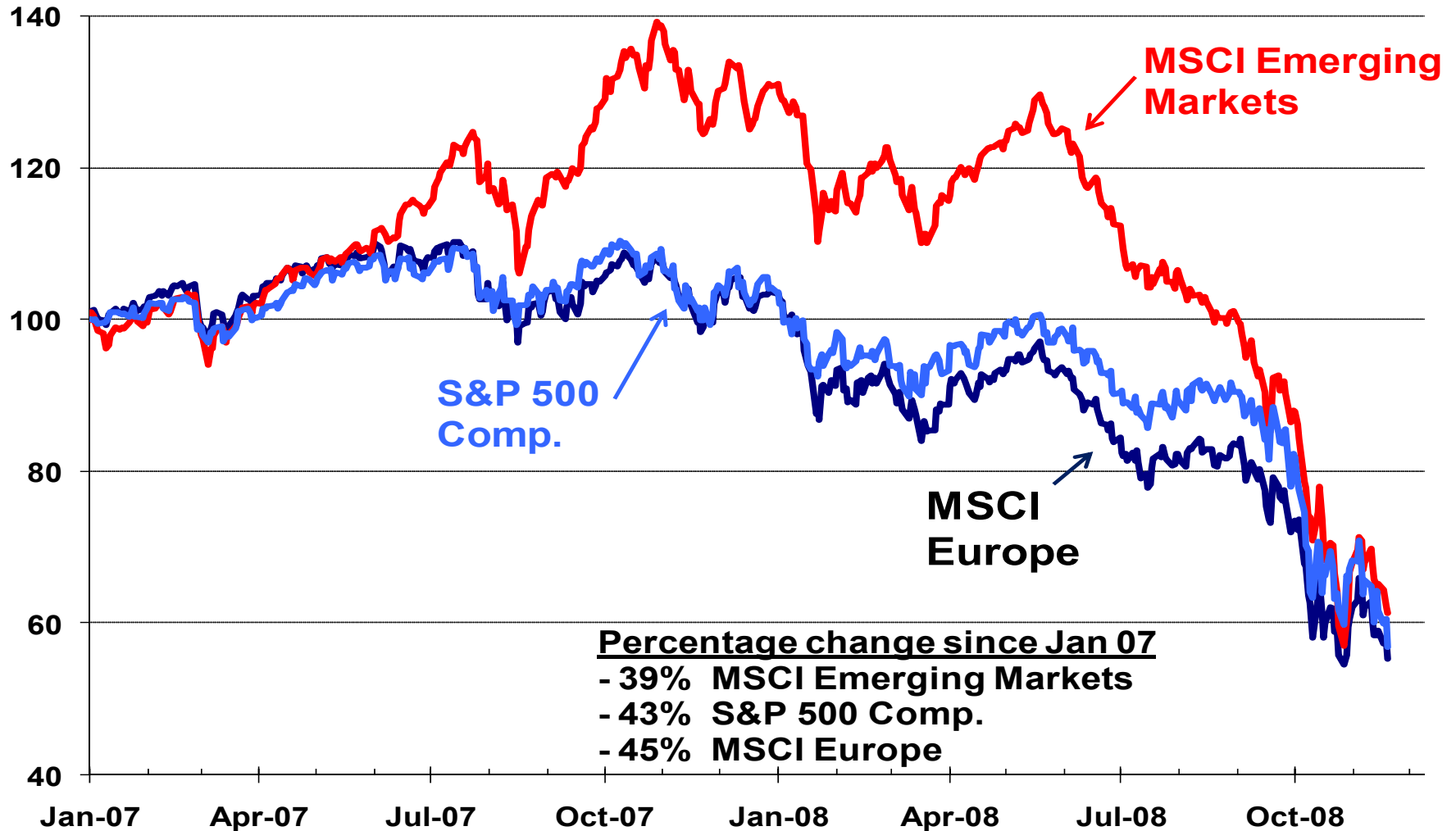


The current financial crisis

- Global retirement wealth ↓
- Stock market volatility ↑
- Government intervention in financial markets ↑

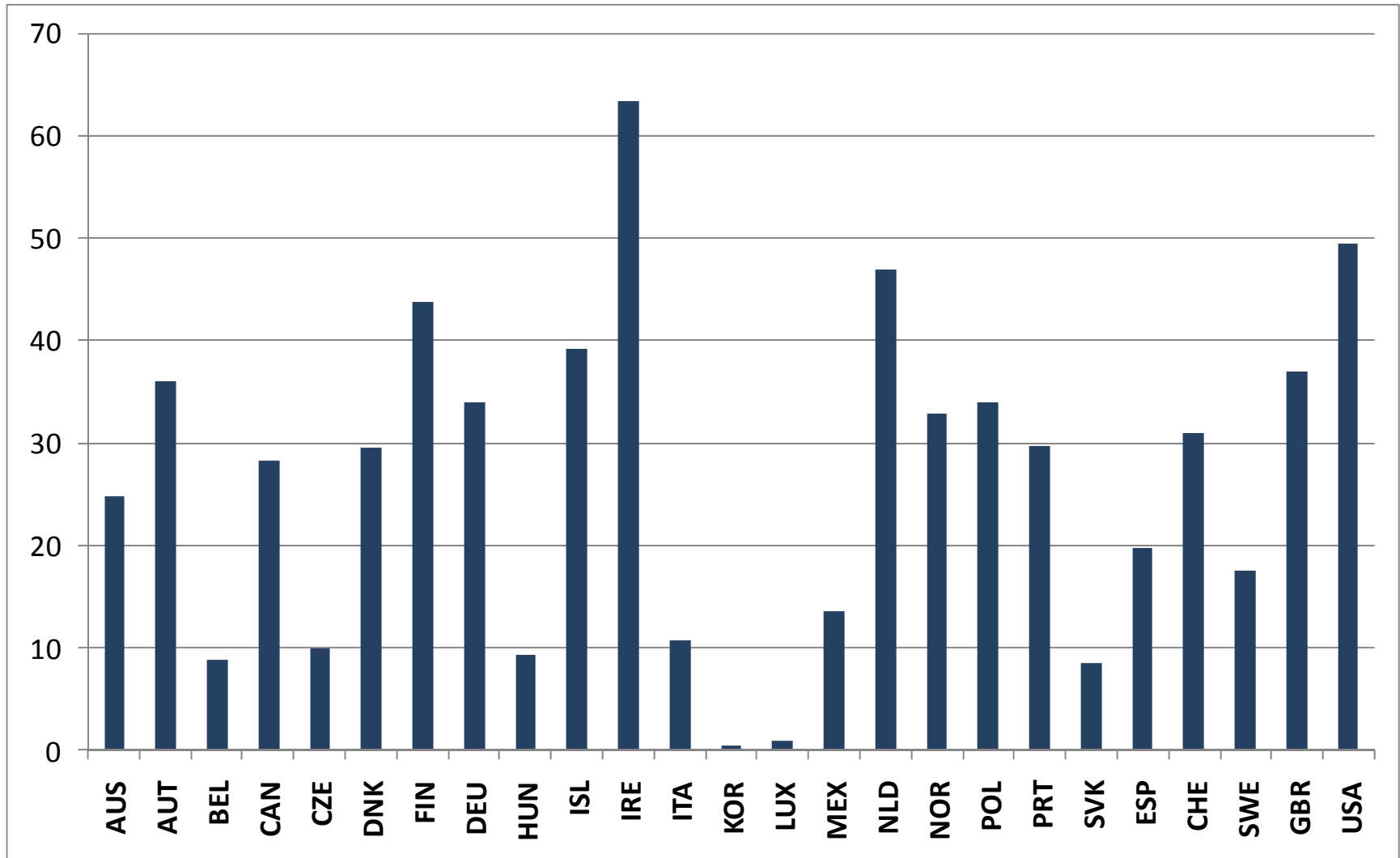
Global Stock Market Indices

(January 2007 = 100)



Equity allocations in global retirement wealth

(% total assets, 2006)



Source: OECD

Result: Large drop in global retirement wealth

THE WALL STREET JOURNAL Digital Network

MarketWatch

Pensions suffering in financial crisis

CBO analysis tallies up at least \$1 trillion in losses as asset values fell

Pensions & Investments Pionline.com

OECD: \$4 trillion lost by pension funds

By **Drew Carter**

Source: Pensions & Investments

Date: November 13, 2008

Estimates of losses in U.S. retirement wealth due to stock market decline

	2007 level		Equity change 10/9/07 - 10/9/08	
Defined contribution plans	8.2		-1.9	
Private employer		3.5		-1.1
IRAs		4.7		-0.8
Defined benefit plans	5.9		-1.9	
Private employer		2.7		-0.9
State and local plans		3.2		-1.0
Total	14.1		-3.8	

Source: Munnell, Aubrey, and Muntoon. 2008. "The Financial Crisis and Private Defined Benefit Plans"; excludes Federal gov't; 10/9/07: peak in S&P 500

And probably another \$1 trillion since Oct 9

Stock market volatility has risen substantially

VIX: Implied volatility S&P 500
Nov 2003 – Nov 2008

CBOE VOLATILITY INDEX (^VIX)

At 4:04PM ET: **74.40** ↑ 6.76 (9.99%)

Enter name(s) or symbol(s)

GET CHART

COMPARE

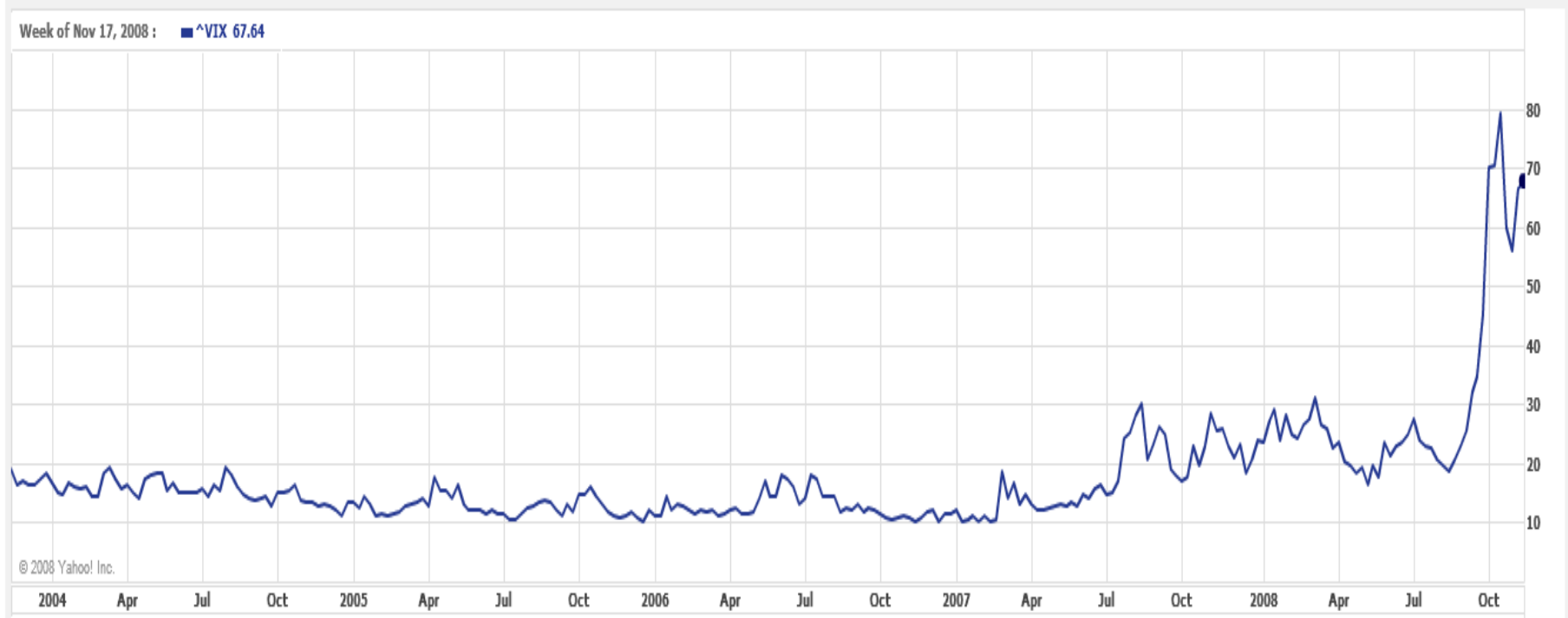
EVENTS ▾

TECHNICAL INDICATORS ▾

CHART SETTINGS ▾

RESET

Week of Nov 17, 2008 : ■ ^VIX 67.64



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Government s have become deeply involved with financial markets

- Bailouts of financial and other firms
- Equity injections
- Credit guarantees

Everyone is feeling the stress...

- These are challenging and stressful times for everyone involved with asset management
 - Individual investors and advisors
 - Asset managers
 - Plan designers
 - Government policymakers

The crisis will have important implications for

- Defined Benefit (DB) market
- Defined Contribution (DC) market

INTERNATIONAL
Herald Tribune

EUROPE: Finance crisis prompts pension reform rethink

As was the case during the equities markets collapse in 2001, the current financial turmoil will reshape the political debate in Europe over public pension reform and the structure of pension provision. While all privately funded pensions in Europe will suffer unavoidably in the short term from the general malaise in financial markets and the expected low growth in the real economy, the more important implication of the crisis is that debates will intensify among policymakers and practitioners over the broader issues of pension fund governance and collective risk-sharing.

DB pensions: short term effects

- Drop in funding ratios for DB plans
- Higher required contributions by corporations and state and local governments
- Weakening of financial health of government insurers of pensions (PBGC)

DB pensions: responses and implications for the future

- Short-run government relief
- Increased attention to hedging by firms and regulators
- Acceleration of shift from DB to DC
- Transfer of plan liabilities and assets to third parties and capital markets

Short-run government action

- Firms will find it difficult to make pension contributions during severe economic slowdown and will ask for relief

The New York Times

November 20, 2008

After Losses, Pensions Ask For a Change

By [MARY WILLIAMS WALSH](#)

Stung by outside investment losses, some of the nation's biggest companies are pushing Congress to roll back rules requiring them to put more money into their pension funds, just two years after President Bush signed a law meant to strengthen the pension system.

- If government helps now, they should mandate higher contributions during good times (pro-cyclical funding)

Increased attention to hedging: plan sponsors

- Plan sponsors should and will increasingly take into account risk properties of pension liabilities when choosing allocation of assets
- Since pension liabilities are predominantly bond-like, assets should be more heavily weighted toward bond-like instruments
- Liability-driven-investment (LDI) can be done with
 - Long-duration bonds
 - Swaps and derivatives
- Presence of salary risk suggests modest role for equities

Government should mandate some LDI

- If a firm declares bankruptcy, government insurer (PBGC) must cover the pension liability
- In return for this pension insurance, government should require firms to hedge more of their liabilities

Increased attention to hedging: managing PBGC reserves

- PBGC changed strategy in Feb 2008 and announced it was substantially increasing its exposure to equities (20% → 55%)



- Not only bad timing (ex-post) but bad policy (ex-ante)
 - PBGC insuring against state of world: company bankrupt and pension plan underfunded. This occurs during severe downturns, when the stock market will be low.
 - Analogy: A firm that insures against hurricane damage investing its reserves in beachfront property (Bodie, FT, 2/26/08)
- May need a large government bailout of PBGC ...

Acceleration of shift from DB to DC

- Major shift over 30 years toward DC from DB
- Last few years have witnessed significant numbers of plan freezes
- More plan freezes and terminations are likely to result from the current crisis
 - Bankruptcies of firms with DB plans
 - Choice by sponsors to avoid future volatility

Transfer of frozen plans to third parties and capital markets

- Removing liabilities from the books
 - Firms eager to eliminate costs and risks of managing future payouts for former workers
- Possible channels
 - Pay insurance firms to take over liabilities
 - Create structured products and trade in financial markets → markets to trade pension claims
 - Likely to also see markets developing to trade aggregate longevity risk directly
- Important regulatory issues still to be worked out

DB pensions: investment opportunities?

- Some assets have low prices because fundamentals are low
- Others have low prices because undervalued because they are less liquid or less valuable as collateral
- Could this be an opportunity for unleveraged and long-horizon pools of money such as pension funds and endowments?

Defined Contribution pensions: short term effects

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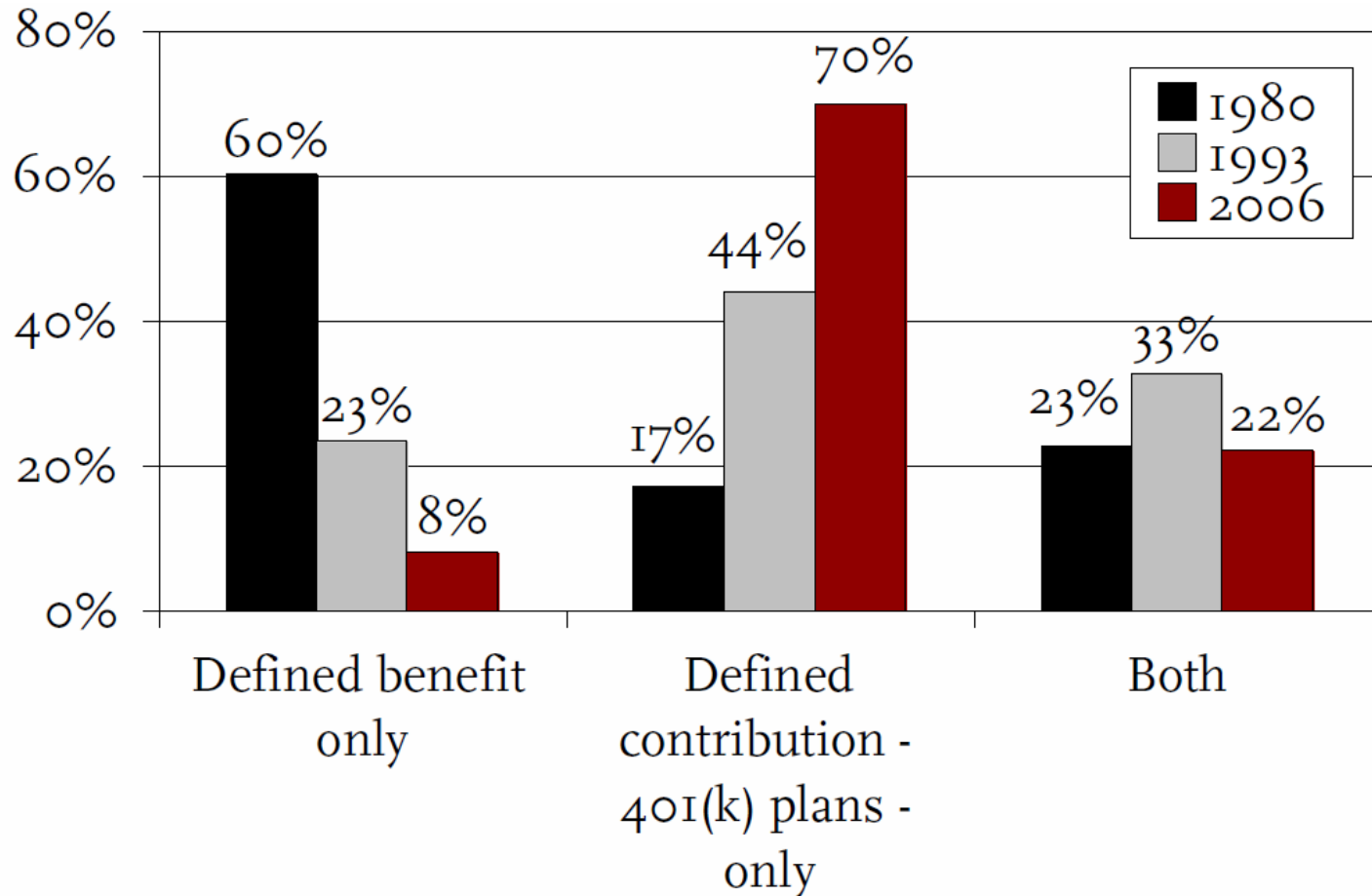
Who's feeling the most pain?

- All households affected...
- But those in their 50s, 60s, and 70s will feel this most
- They have substantially more financial wealth than younger age groups, and only slightly lower equity allocations
- Older groups: somewhat lower allocation to equities

First major test of DC model in the U.S.

- 401(k) accounts have surged in popularity in the last 25 years...

The Rise of DC Pensions 1980-2006



Workers covered by different types of plans, as a percentage of all workers with plans.
Source: Boston College Center for Retirement Research Brief #8-18, Nov 2008

First major test of DC model in the U.S.

- But older cohorts still have substantial wealth in DB plans
- Haven't yet seen a cohort of retirees with substantial numbers relying predominantly on DC wealth...
- Until those headed for retirement age now!

Therefore

- It's a good time to be examining the 401(k) model to make sure it's working and consider reforms to improve it...

Defined contribution pensions: responses and implications for the future

- Short-run government relief
- More attention to risk
- Encouraging / mandating greater enrollment and contributions
- Incorporation of DB-like features into DC plans

Possible short-run government actions

- Direct additional increment to accounts
- Minimum return guarantee
- Convert to government run fund
- Beware of moral hazard concerns (ex-post vs ex-ante changes)

More attention to risk

- The crisis has raised participants awareness and understanding of risk!
- Re-examine target-date-fund glide paths?
(currently 50-60% in equities at retirement date)
- Add design features to incorporate return guarantees?

Important questions about equity market risk

- Can we count on the stock market recovering?
- Are stocks less risky over the long run than over the short run?
- How much risk should be borne by:
 - Individuals
 - Pension funds
 - Governments

Encouraging / mandating greater enrollment and contributions

- Auto-enrollment as default
- Auto-escalation as default
- Relax minimum distribution requirements (RMD) at age $70\frac{1}{2}$

Incorporation of DB-like features into DC plans

- More attention needed to payout phase of DC plans
- DB-like features for DC plans?
 - Longevity insurance (standard life annuities, deferred annuities, guaranteed minimum withdrawal benefit,)
 - Inflation protection
 - Minimum return guarantees
- Tradeoffs: insurance vs flexibility

Conclusions

- The current crisis: major implications for global retirement wealth
- Individuals, asset managers, firm sponsors, and government policymakers can use this as a wakeup call and an opportunity to improve the functioning of both DB and DC retirement wealth systems around the world