



Jon Spain

"Yes, we have no equities..., but we should"

YES

WE HAVE NO EQUITIES...

July 2, 2002

GAD Professional Briefing (July 2002)

1



...BUT WE SHOULD

- personal remarks
- preliminaries
- critical points
- market values : planning ahead?
- implications
- the “Mrs Purves” effect
- conclusions



PRELIMINARIES

- can't cover all points in 15 minutes (Chester allocation)
- sometimes, bonds are more appropriate than equities
 - but certainly not always
- theory no better than practical effects
- but mustn't try to intimidate poor financial economists
- whose views are relevant?
- trustees **NORMALLY** have very long timeframe
 - quite different to other shareholders
- short-term shareholders not sole constituency
 - pensions just one element of business



CRITICAL POINTS

■ “two actuarial laws”

- (1) we don’t know future (but must make assumptions; more honesty?)
- (2) no such thing as free lunch over time (BUT can be opportunities)
- all the rest is just commentary

■ very long-term can imply different restraints

- can’t aim “short” and “long” at same time

■ three principal mantras targeted

- “equities are risky”
- “equities not a match for pay increases”
- “higher returns don’t reduce costs”



EQUITIES ARE RISKY {1 of 5}

- most investments are risky
- equities do tend to provide higher return than bonds
 - generally denied by financial economists
 - but admitted as possible (FE seminar 18 May 2000)
 - FEs say higher return is merely compensation for extra risk
 - recent “junk bonds” SIAS paper suggested higher returns
- a few charts
 - rolling periods of 10 years
 - UK indices from 1920 (thanx Inqa!)

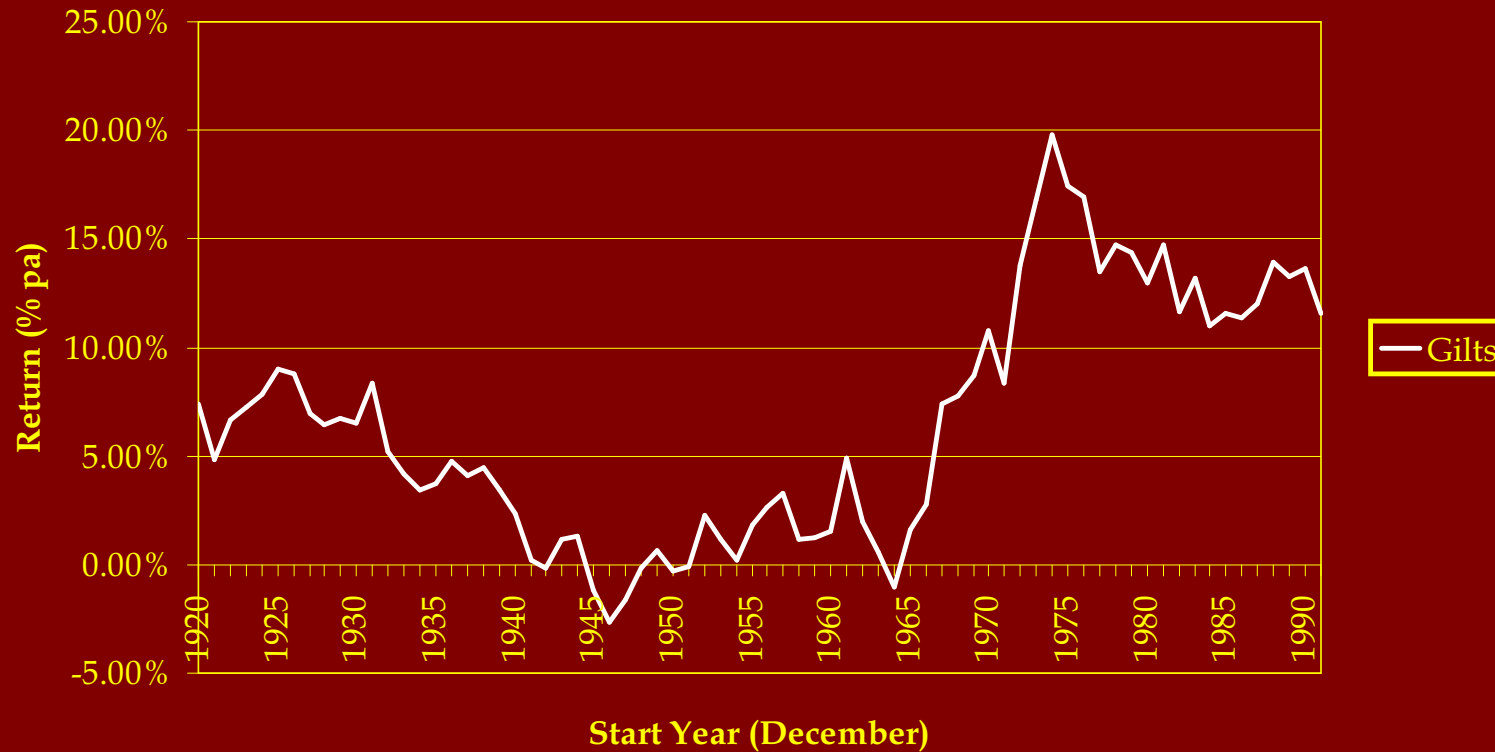


Jon Spain

“Yes, we have no equities..., but we should”

EQUITIES ARE RISKY {2 of 5}

Gilt Total Returns (Consols)



July 2, 2002

GAD Professional Briefing (July 2002)

6

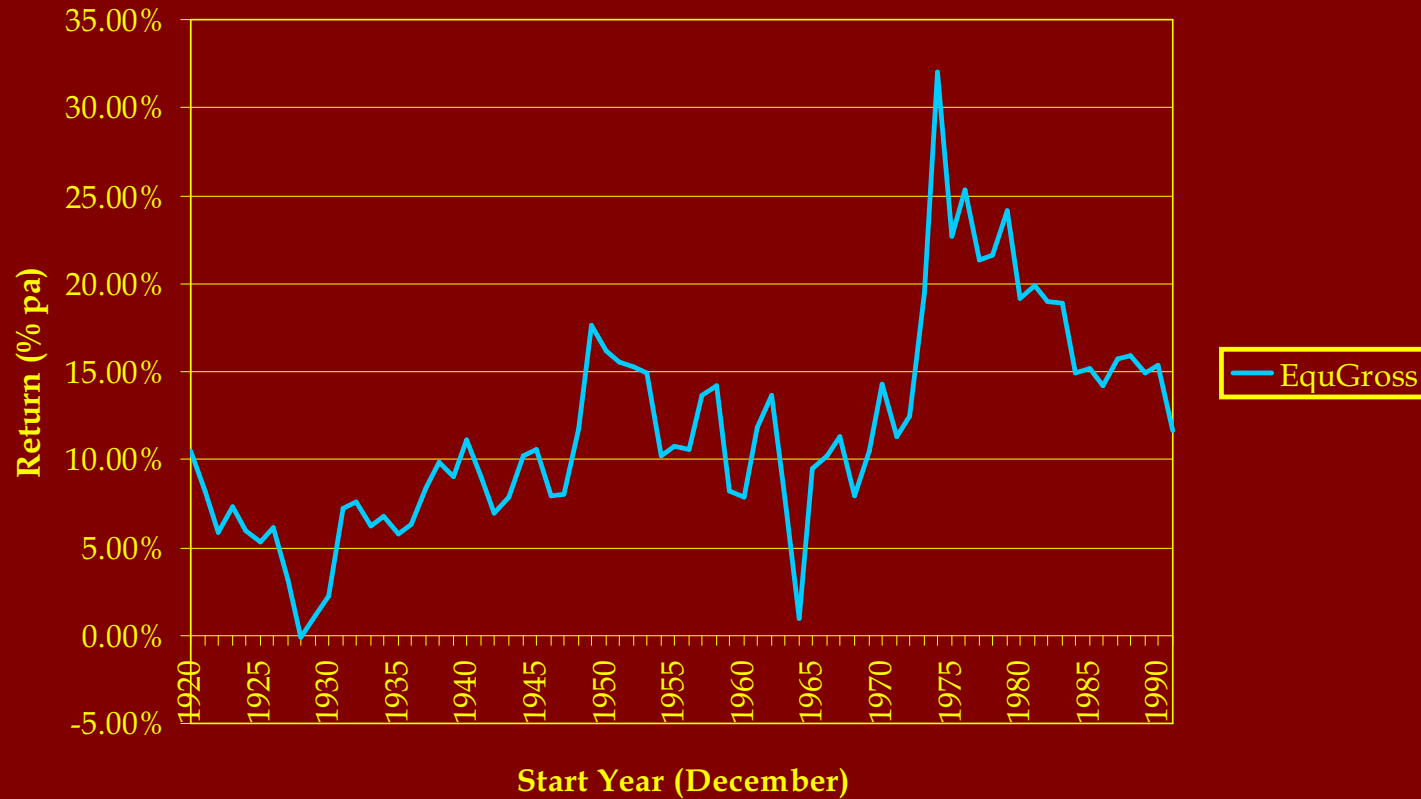


Jon Spain

“Yes, we have no equities..., but we should”

EQUITIES ARE RISKY {3 of 5}

Equity Total Returns (Gross)



July 2, 2002

GAD Professional Briefing (July 2002)

7

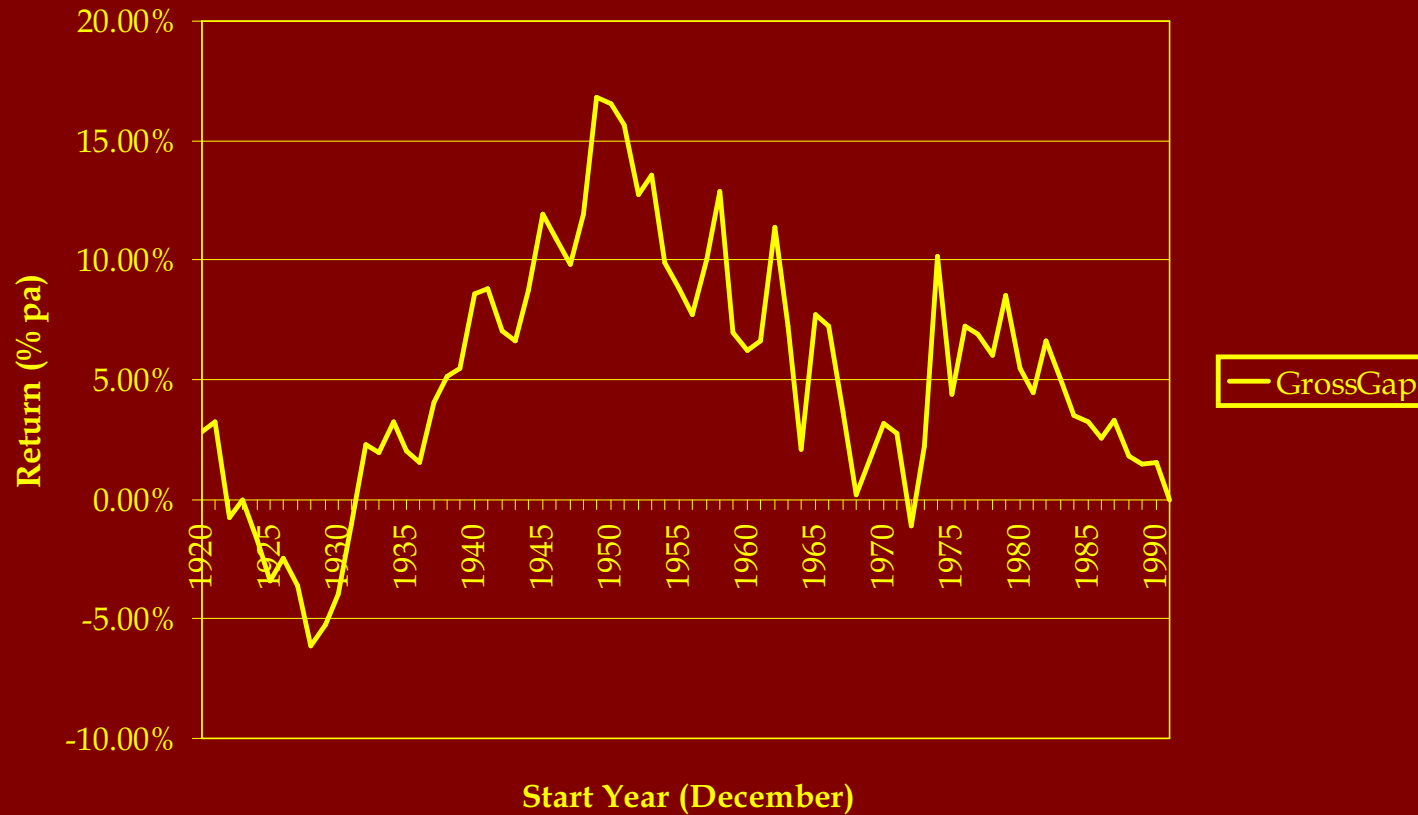


Jon Spain

"Yes, we have no equities..., but we should"

EQUITIES ARE RISKY {4 of 5}

Equity Risk Premiums (Gross)



July 2, 2002

GAD Professional Briefing (July 2002)

8



EQUITIES ARE RISKY {5 of 5}

- higher returns actually observed
 - not over all periods (especially over short terms)
 - figures already allow for failures (but not yet for Enron)
- investment is not a zero sum game



EQUITIES NO MATCH FOR PAY INCREASES {1 of 8}

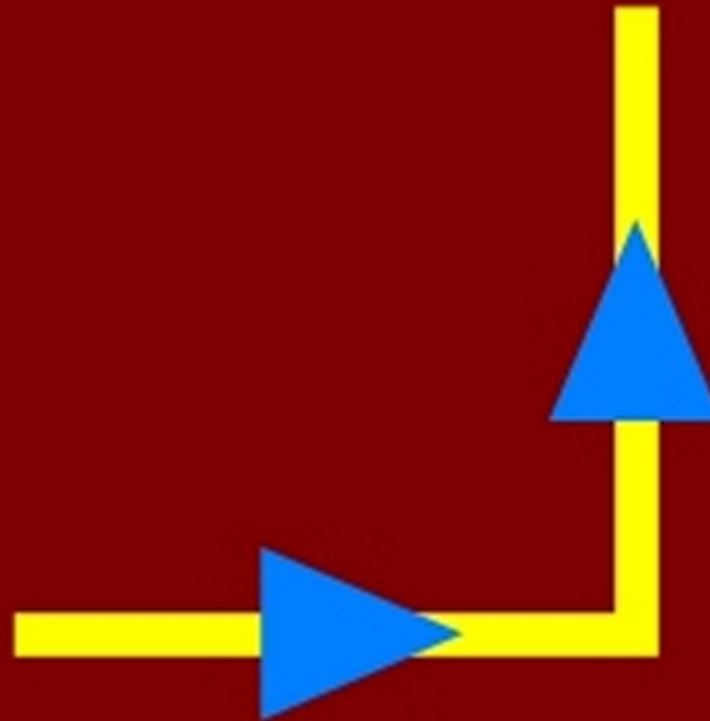
- correlations are not positive
- may have been formally accepted by actuarial profession
- but not really our concern
- instead, focus upon differences between means
- similar endpoint but different route
- we're only interested in the endpoint
- think of a square



Jon Spain

"Yes, we have no equities..., but we should"

EQUITIES NO MATCH FOR PAY INCREASES {2 of 8}



(c) Wolfgang 2002

July 2, 2002

GAD Professional Briefing (July 2002)

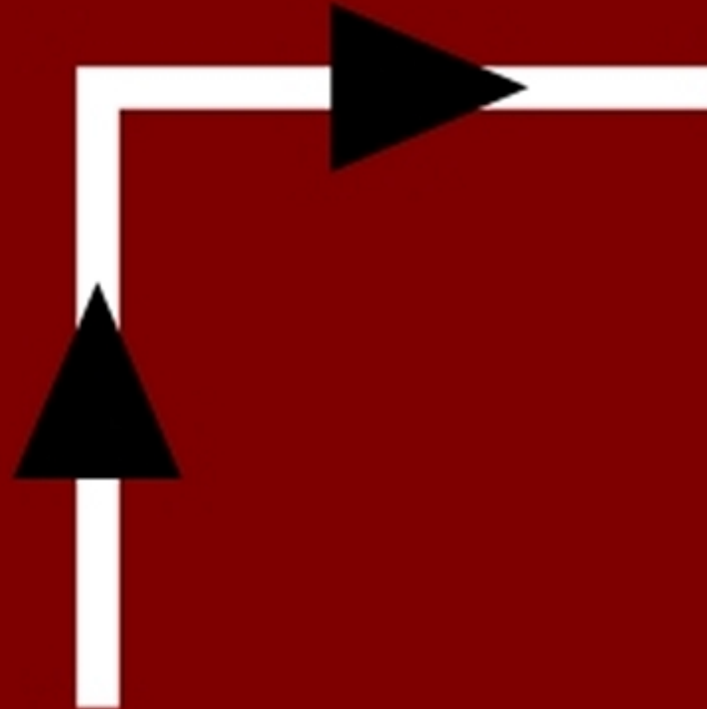
11



Jon Spain

"Yes, we have no equities..., but we should"

EQUITIES NO MATCH FOR PAY INCREASES {3 of 8}



(c) Wolfgang 2002

July 2, 2002

GAD Professional Briefing (July 2002)

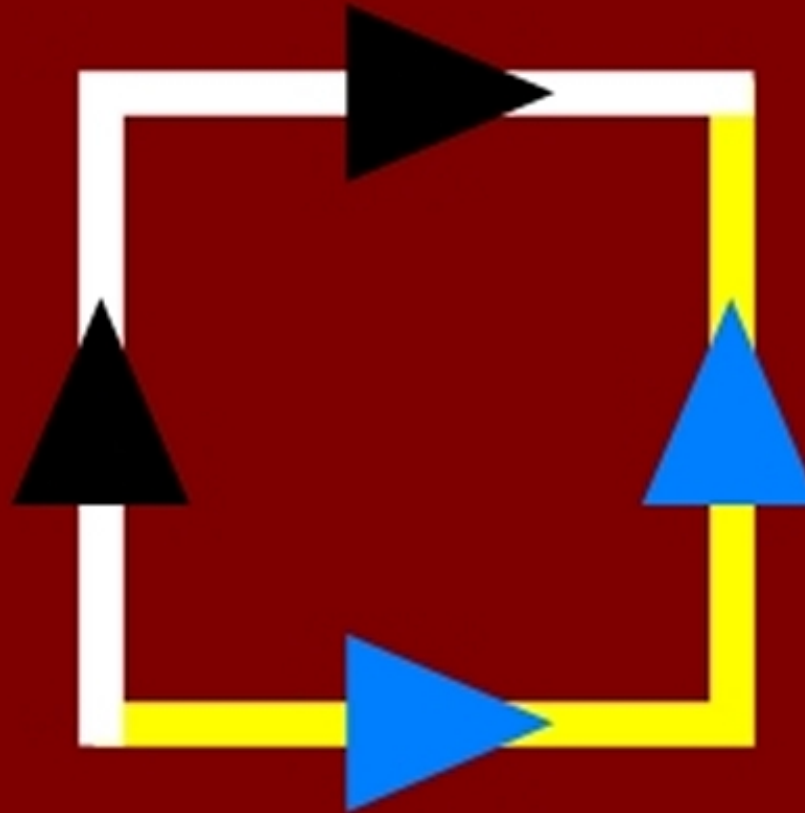
12



Jon Spain

"Yes, we have no equities..., but we should"

EQUITIES NO MATCH FOR PAY INCREASES {4 of 8}



(c) Wolfgang 2002

July 2, 2002

GAD Professional Briefing (July 2002)

13

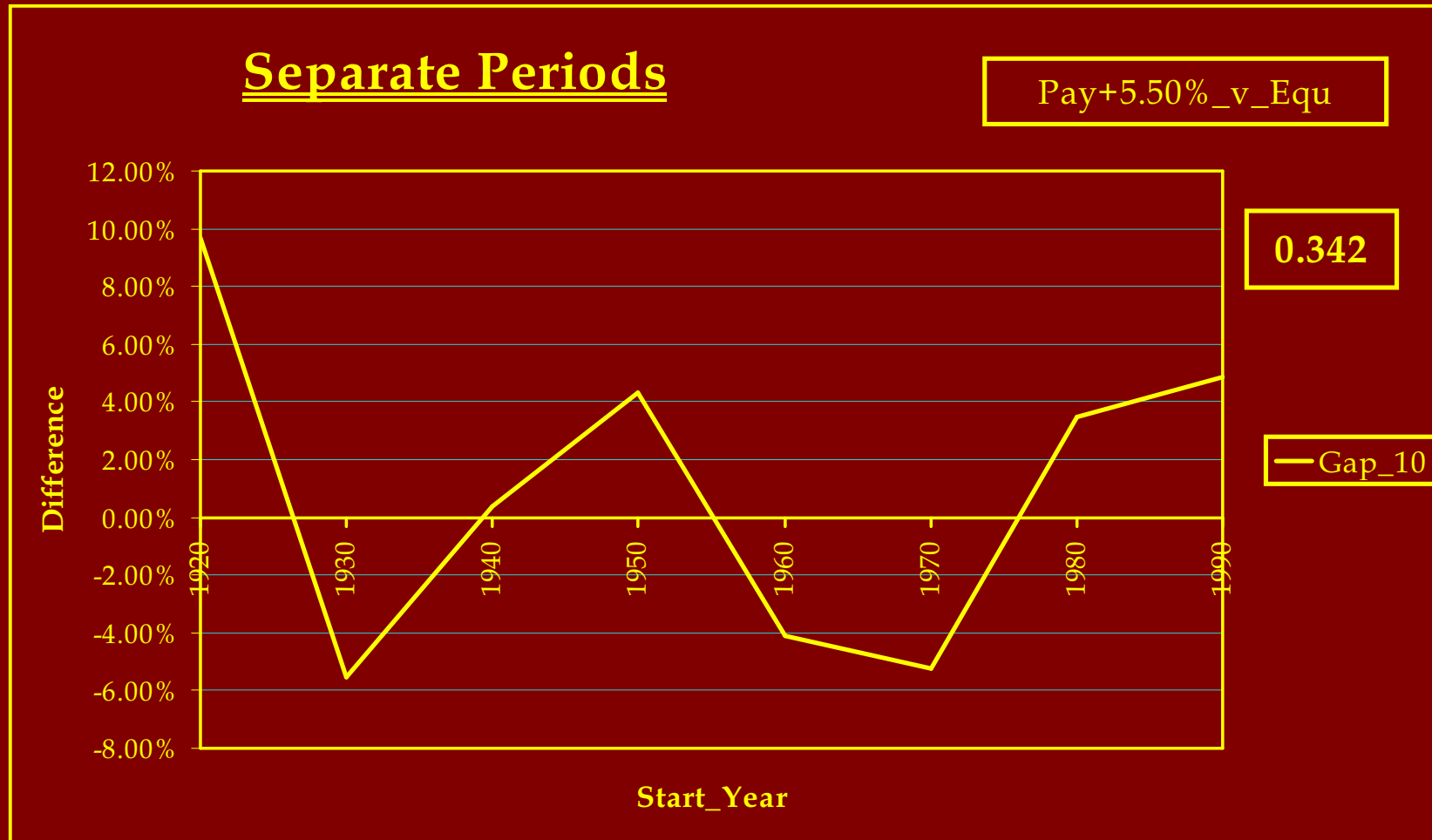


EQUITIES NO MATCH FOR PAY INCREASES {5 of 8}

- we're really only interested in the endpoint
- charts for separate periods shown
 - 10 years
 - 15 years

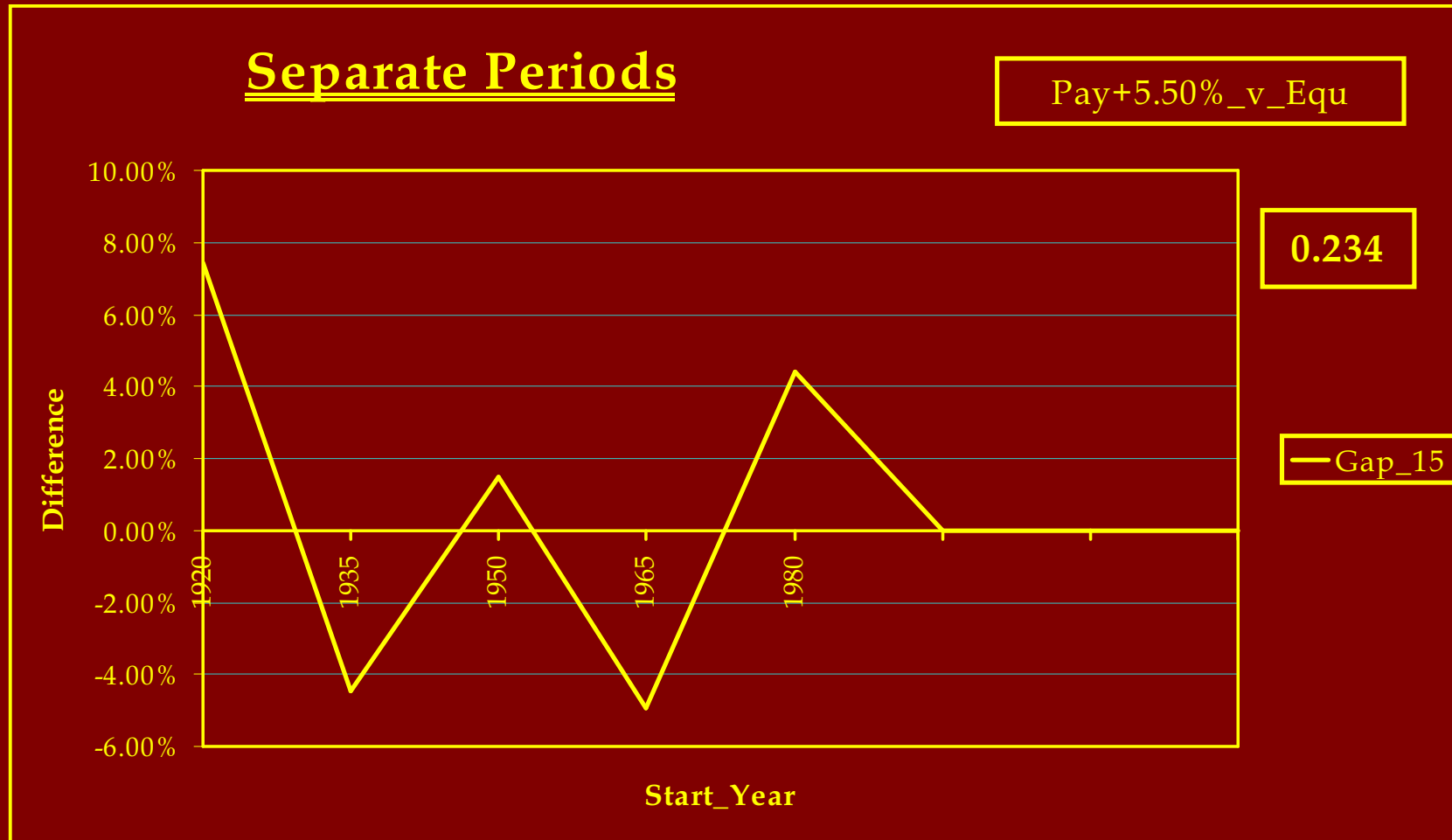


EQUITIES NO MATCH FOR PAY INCREASES {6 of 8}





EQUITIES NO MATCH FOR PAY INCREASES {7 of 8}





EQUITIES NO MATCH FOR PAY INCREASES {8 of 8}

- we're really only interested in the endpoint
- over longish terms, we see seesaw effect
 - neither “over” nor “under” over whole period
 - movements admittedly extreme
- means not significantly different



HIGHER RETURNS **DO** REDUCE COSTS {1 of 7}

- generally denied by financial economists
- basic equation no longer true?
- *costs + return = benefits cost + surplus*
- look at it graphically



Jon Spain

"Yes, we have no equities..., but we should"

HIGHER RETURNS **DO REDUCE COSTS {2 of 7}**

the fund

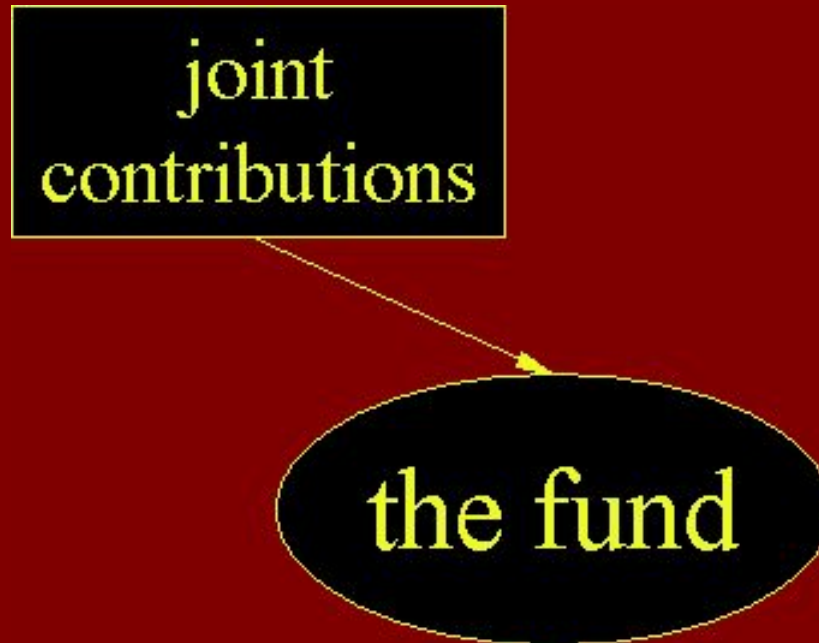
July 2, 2002

GAD Professional Briefing (July 2002)

19



HIGHER RETURNS **DO** REDUCE COSTS {3 of 7}

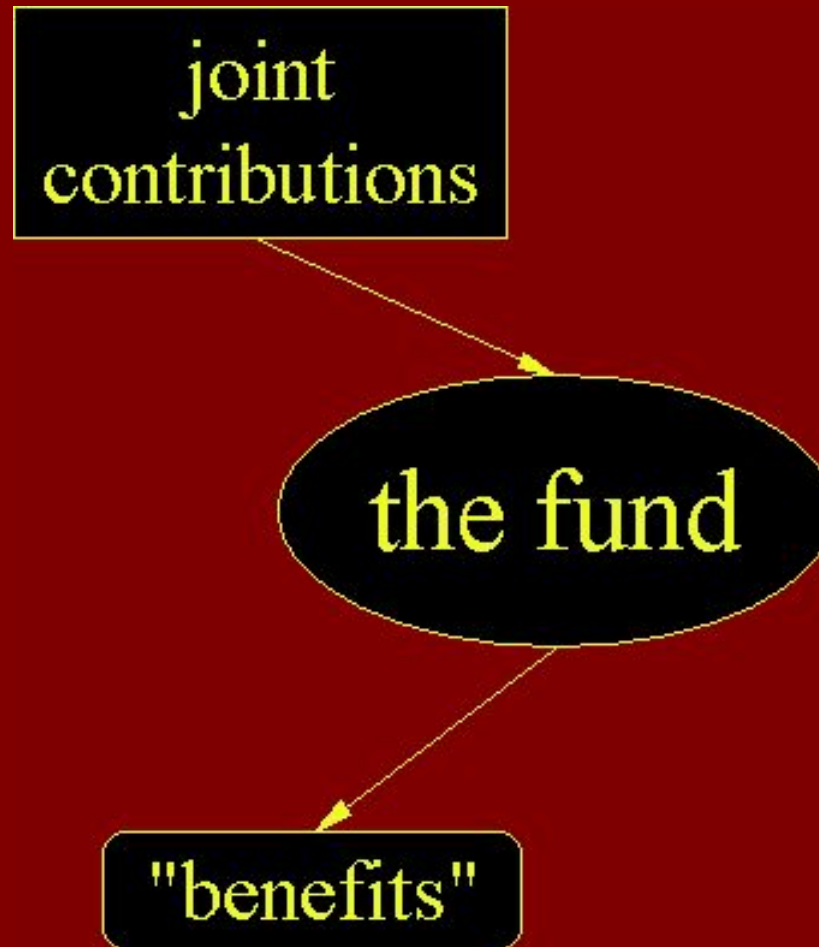




Jon Spain

"Yes, we have no equities..., but we should"

HIGHER RETURNS **DO** REDUCE COSTS {4 of 7}



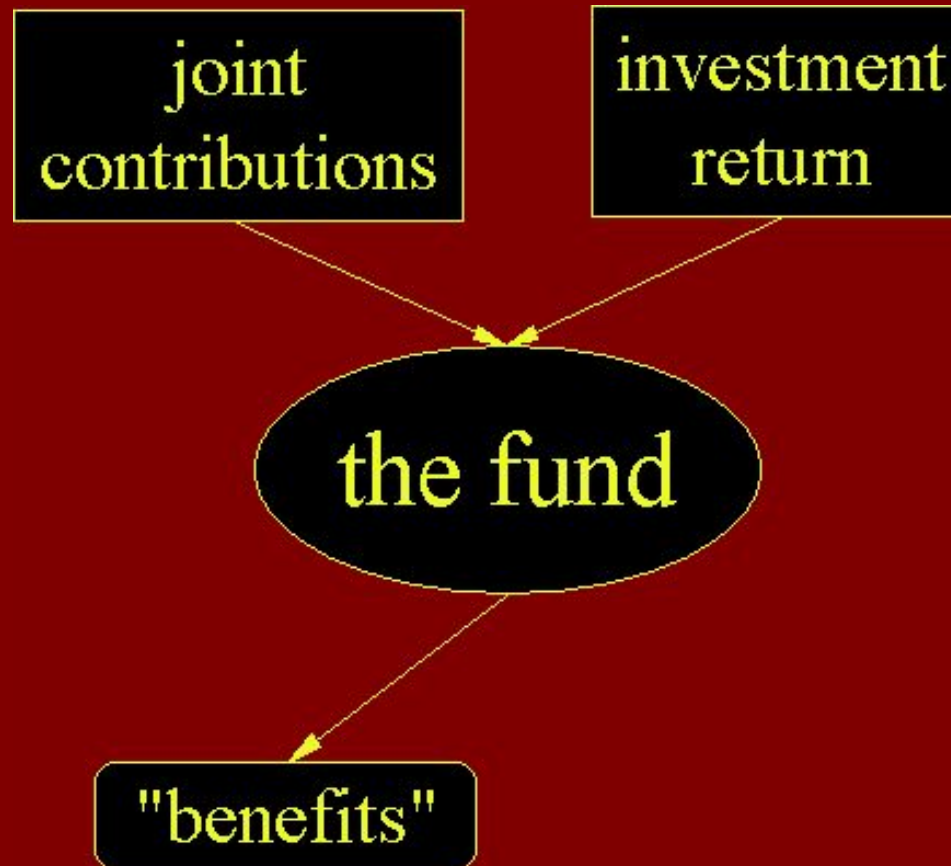
July 2, 2002

GAD Professional Briefing (July 2002)

21

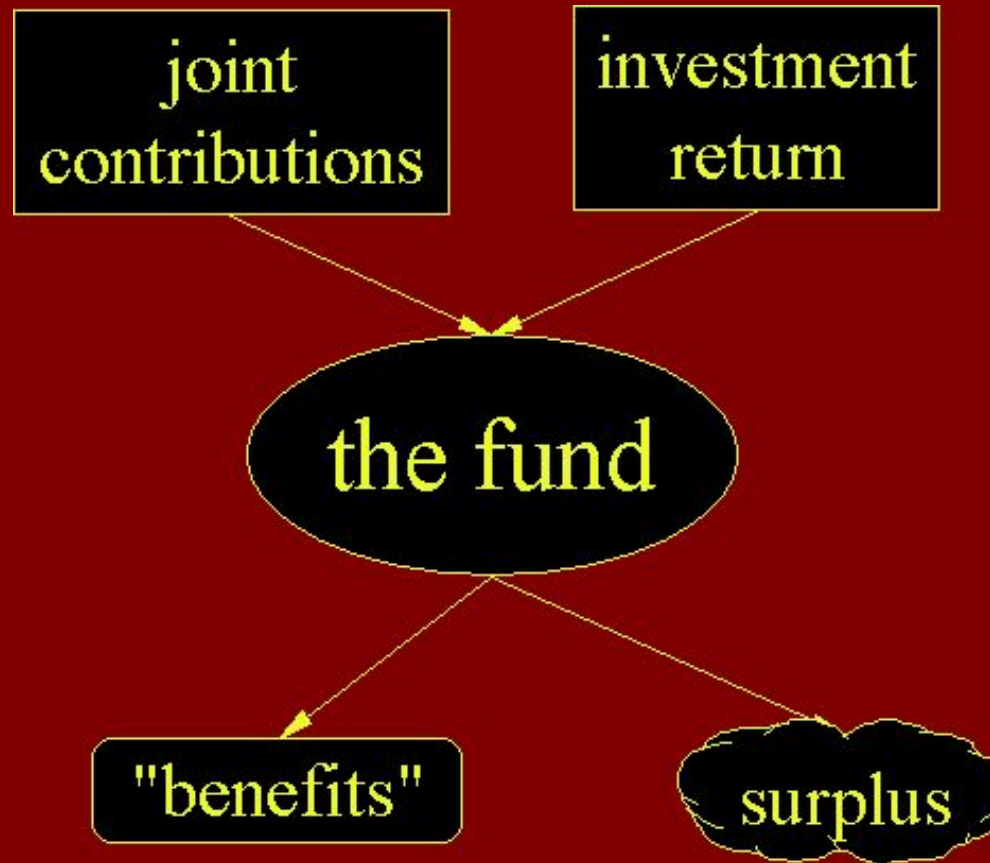


HIGHER RETURNS **DO** REDUCE COSTS {5 of 7}





HIGHER RETURNS **DO** REDUCE COSTS {6 of 7}





HIGHER RETURNS **DO REDUCE COSTS {7 of 7}**

- therefore, higher returns **DO** reduce costs



MARKET VALUES : PLANNING AHEAD?

- market values are not stable
- we KNOW that future will be different
 - don't know how far
 - don't know which direction
 - don't know how long
- contemporary conditions very poor indicator of future reality
- investment returns considered on www.dvr.org.uk
- simplified annuity-certain initial pricing problem



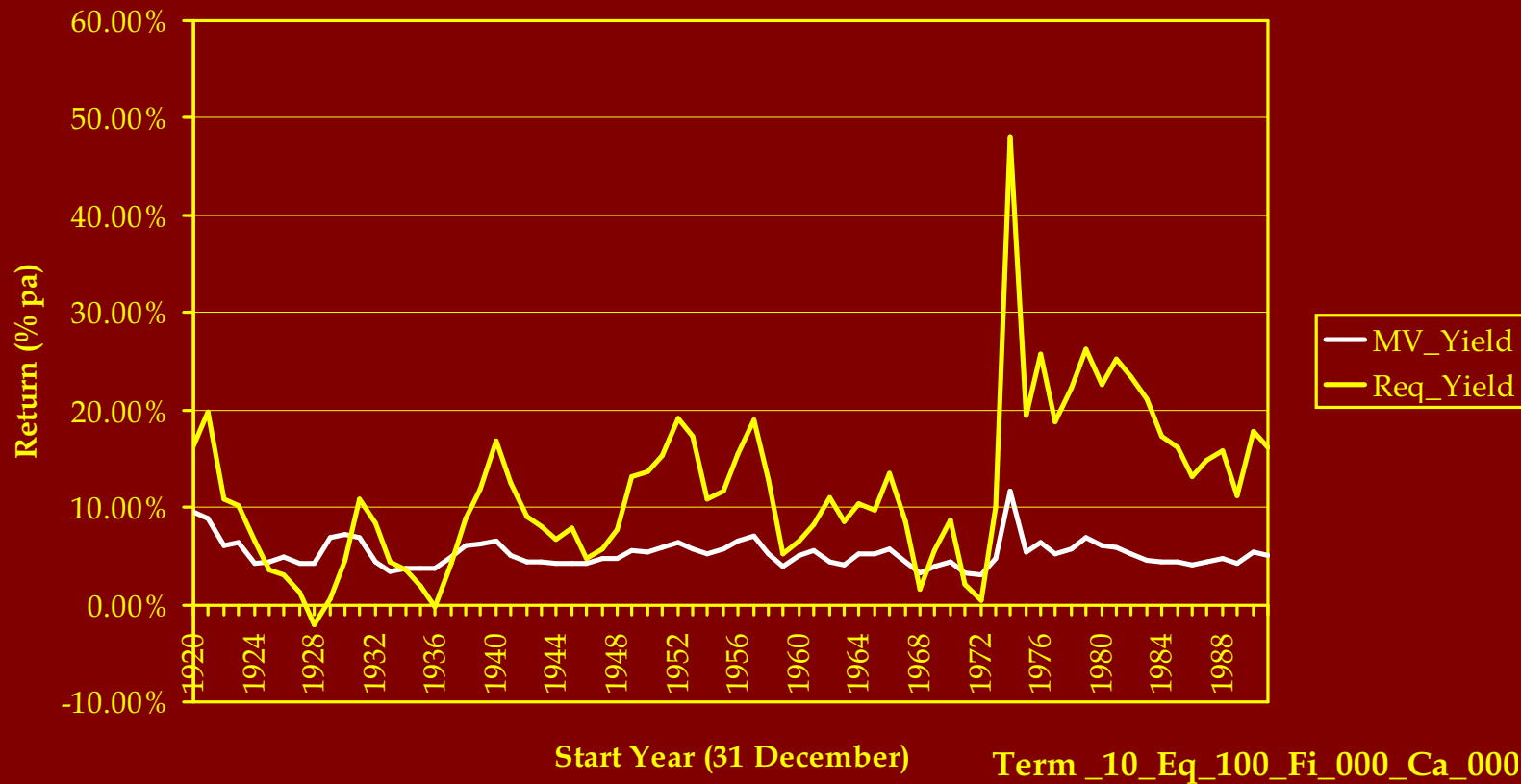
SIMPLIFIED ANNUITY PRICING PROBLEM {1 of 7}

- no mortality (more complex example used for Chester)
- level payments annually in arrears
- no expenses
- take account of “actual future investment experience”
 - no, I know we can’t, I said so!
- initial return required?
- yes, it certainly is simplistic
 - but it should give some reasonable indication



SIMPLIFIED ANNUITY PRICING PROBLEM {2 of 7}

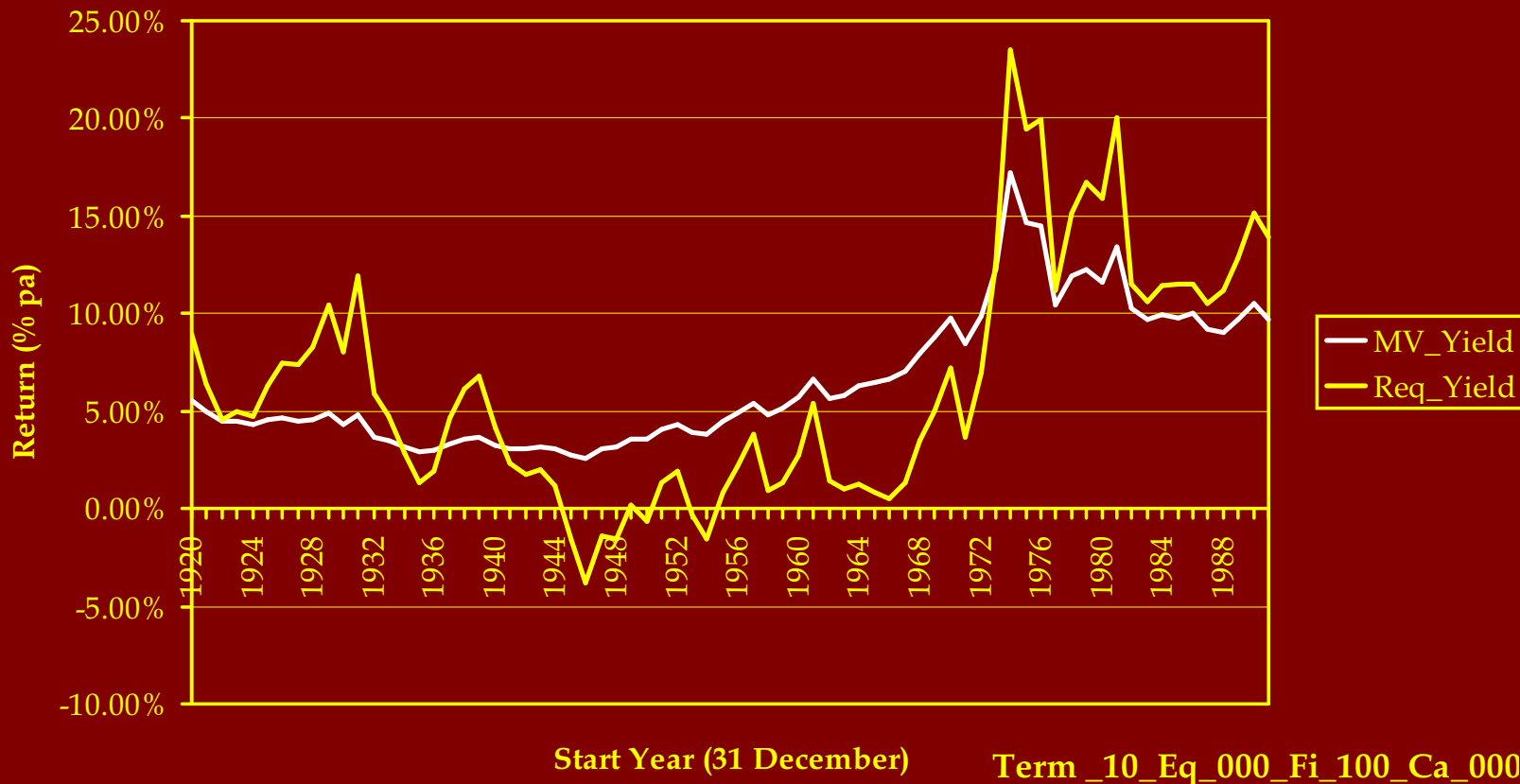
MARKET VALUE PROJECTIONS : ANNUITIES CERTAIN





SIMPLIFIED ANNUITY PRICING PROBLEM {3 of 7}

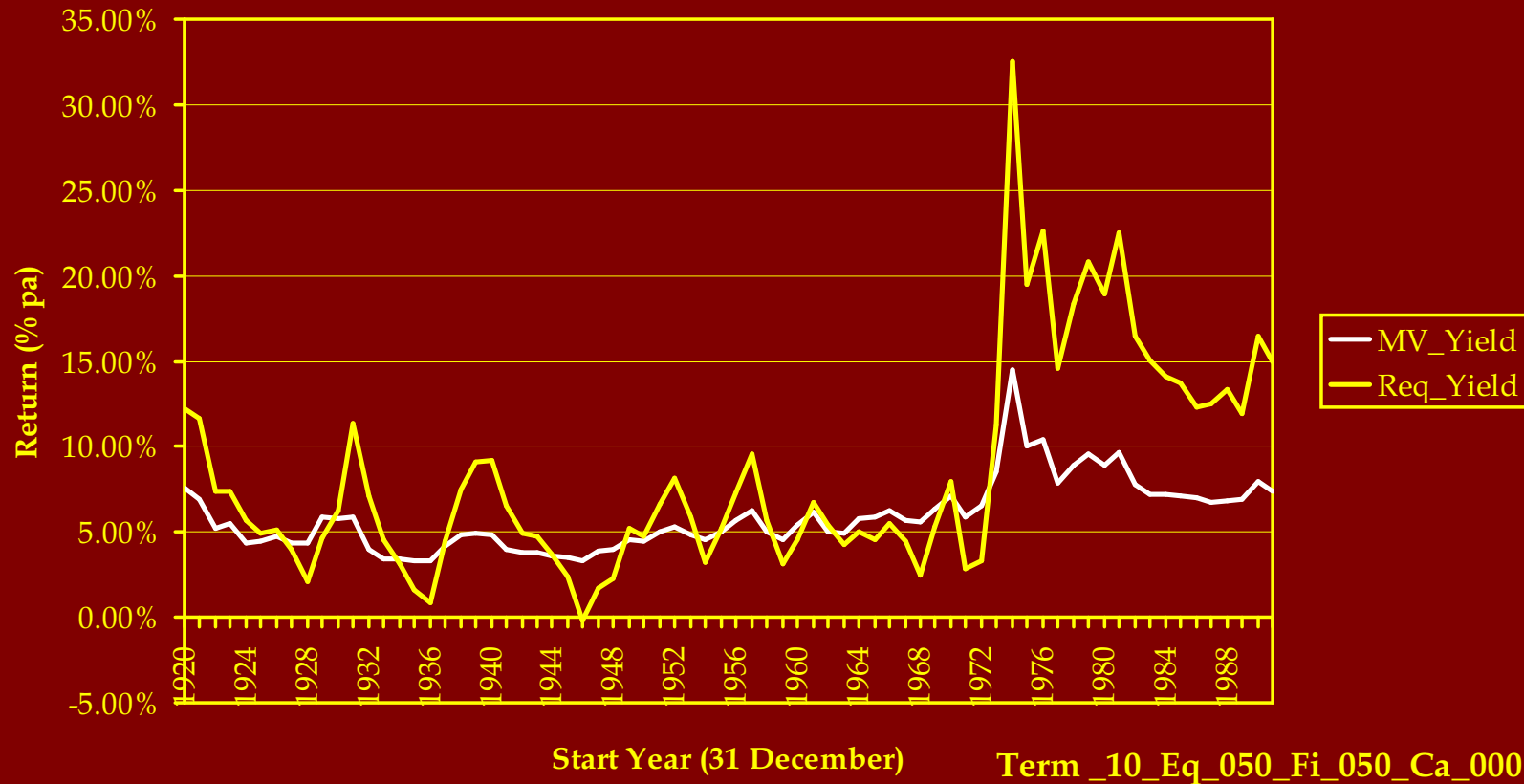
MARKET VALUE PROJECTIONS : ANNUITIES CERTAIN





SIMPLIFIED ANNUITY PRICING PROBLEM {4 of 7}

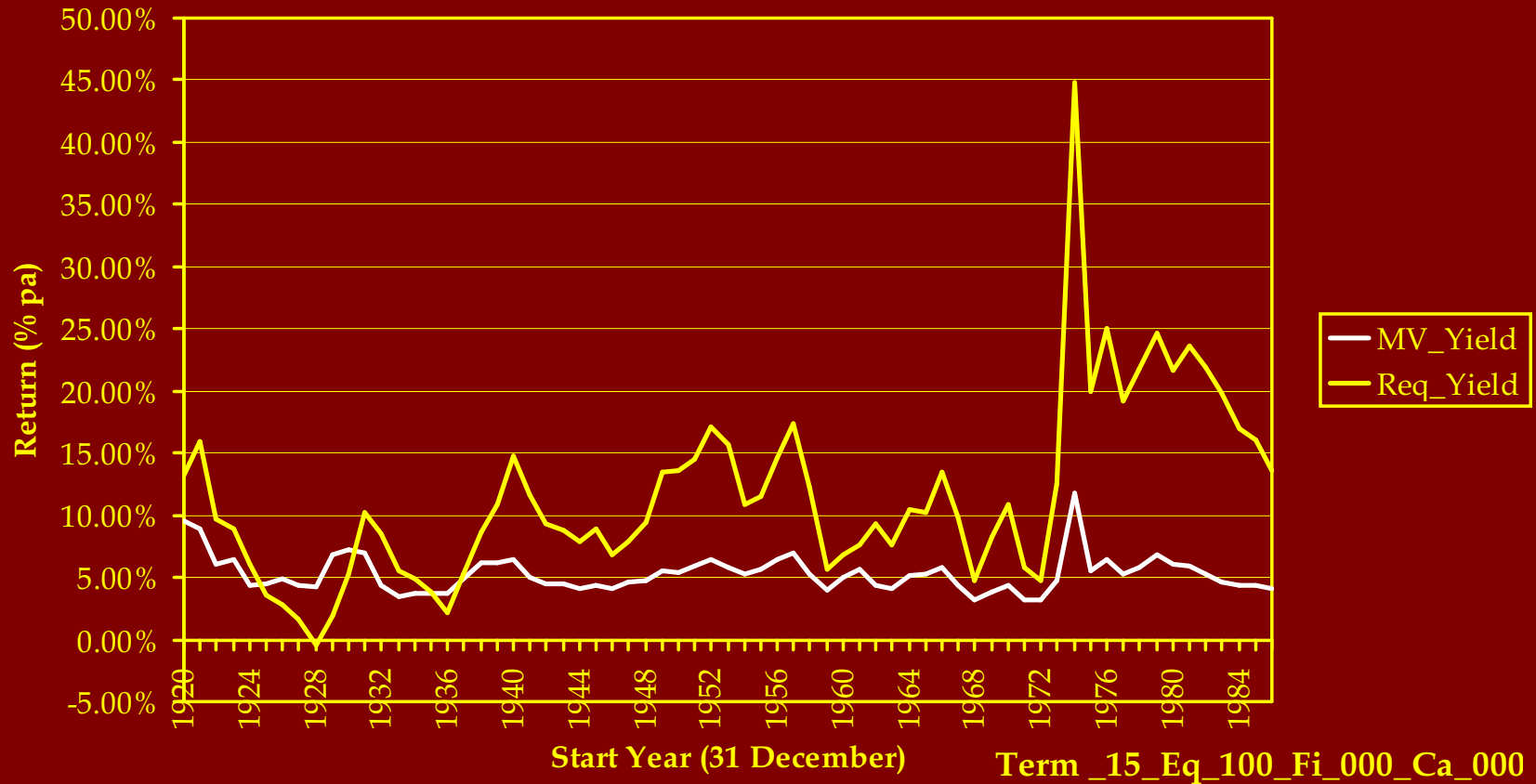
MARKET VALUE PROJECTIONS : ANNUITIES CERTAIN





SIMPLIFIED ANNUITY PRICING PROBLEM {5 of 7}

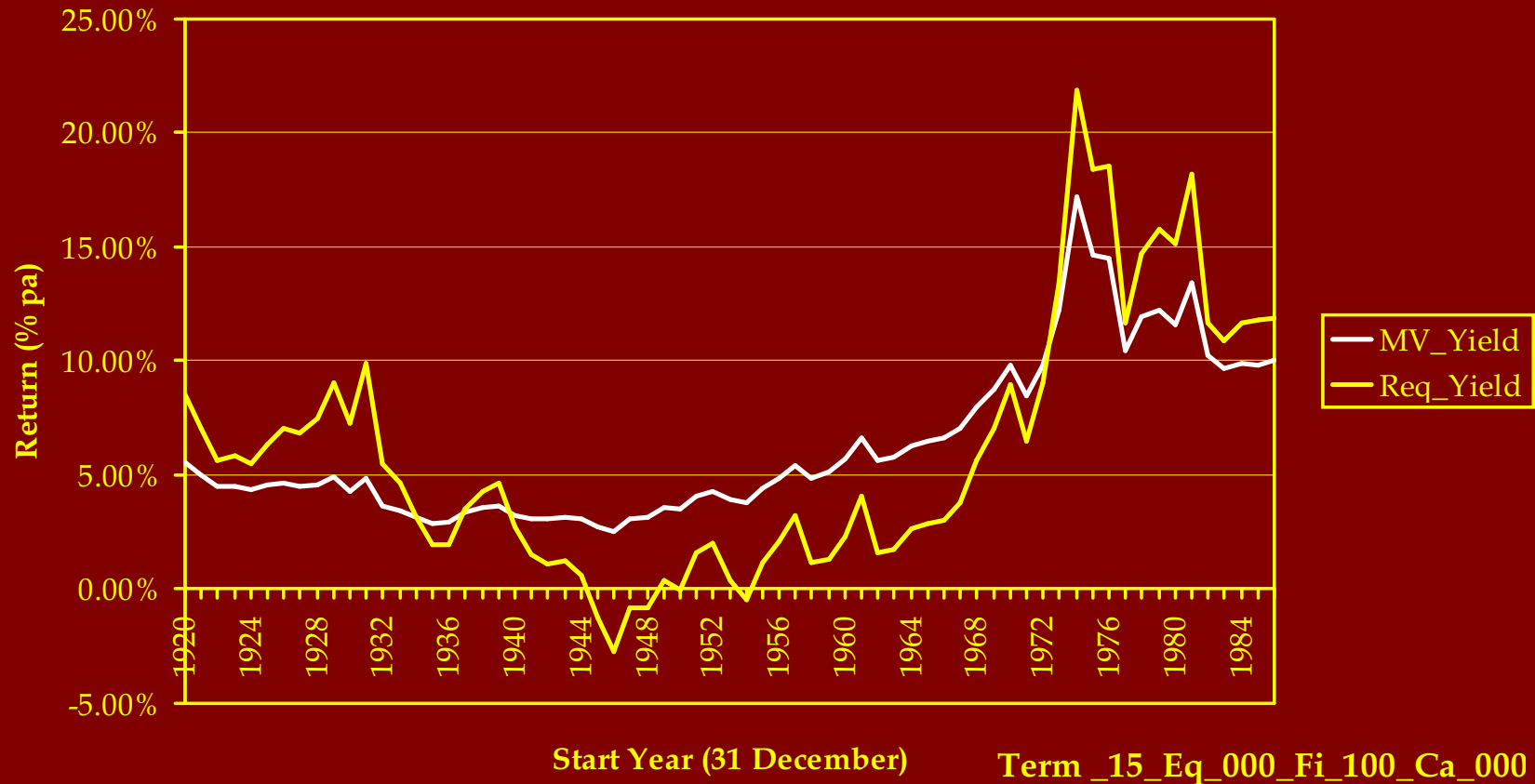
MARKET VALUE PROJECTIONS : ANNUITIES CERTAIN





SIMPLIFIED ANNUITY PRICING PROBLEM {6 of 7}

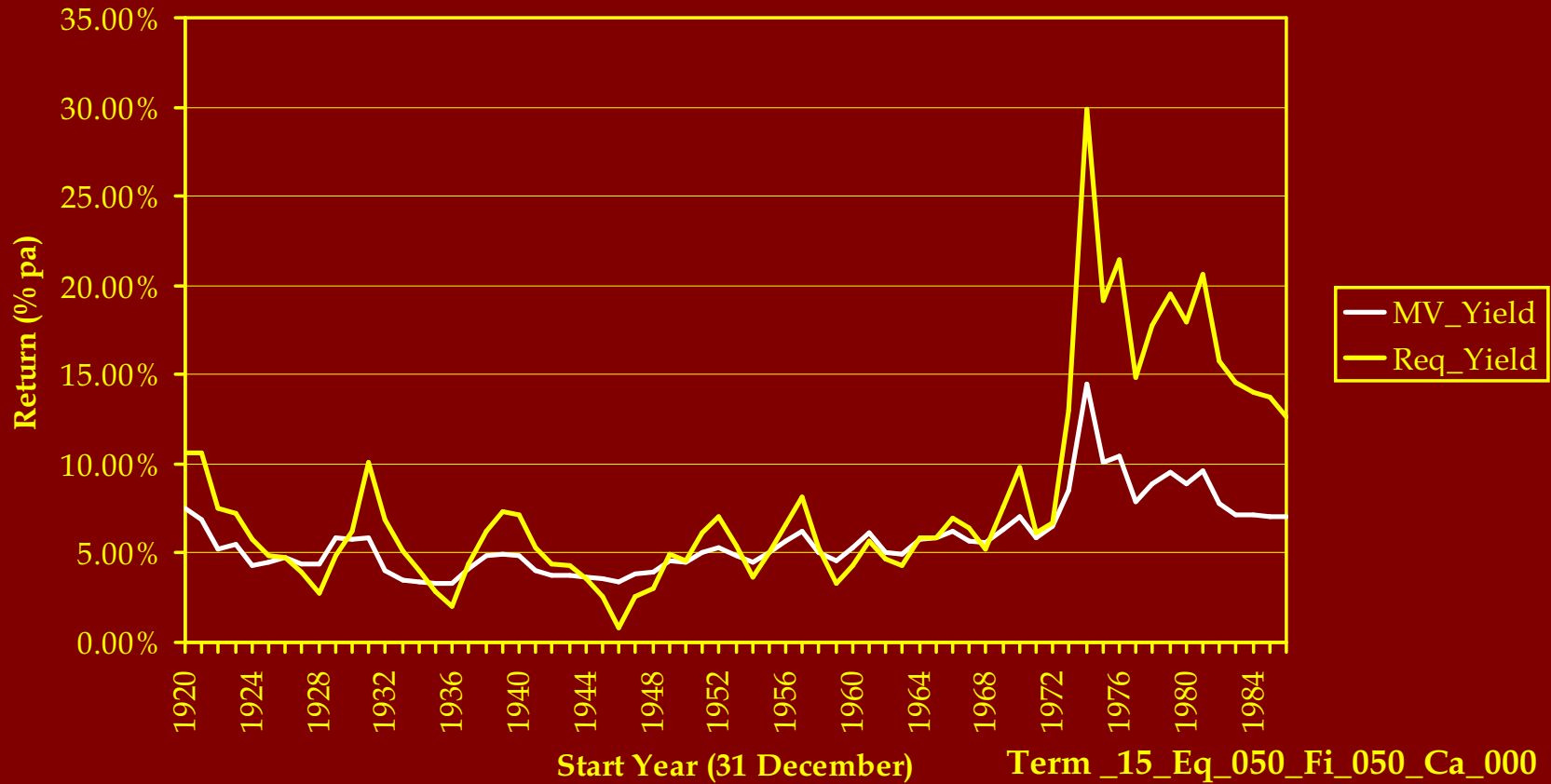
MARKET VALUE PROJECTIONS : ANNUITIES CERTAIN





SIMPLIFIED ANNUITY PRICING PROBLEM {7 of 7}

MARKET VALUE PROJECTIONS : ANNUITIES CERTAIN





IMPLICATIONS

- equities held should be reflected in costing basis
 - ding-dong, the wicked dividend discount model is dead
 - long live amended dividend discount model
 - give alternative description?
- excluding equities will
 - upset most (not all) employers
 - extra volatility and higher costs
 - upset most trustees
 - may become less willing to accept responsibilities
 - upset members
 - lower possibility of better benefits



THE “Mrs PURVES” EFFECT

- “Mrs Purves”
- pension actuaries in particular
- a few TLAs (“SP”, “ASP”, “ISP”)
- but “USP” is the most important of all
- what is our function?
- our long-term outlook is virtually unique
- are we actuaries?
 - or are we just financial economists?



CONCLUSIONS

- excluding equities WILL lead to
 - greater volatility
 - higher costs
- pragmatic point
 - don't ignore Paul Myners
- going for bonds alone will be precisely wrong
 - instead of being in broadly reasonable region
- is that what we really want?
- if we don't behave like proper actuaries...
- ...we'll be treated as mere actuaries (clerks)