# YES

# WE HAVE NO EQUITIES…

# …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

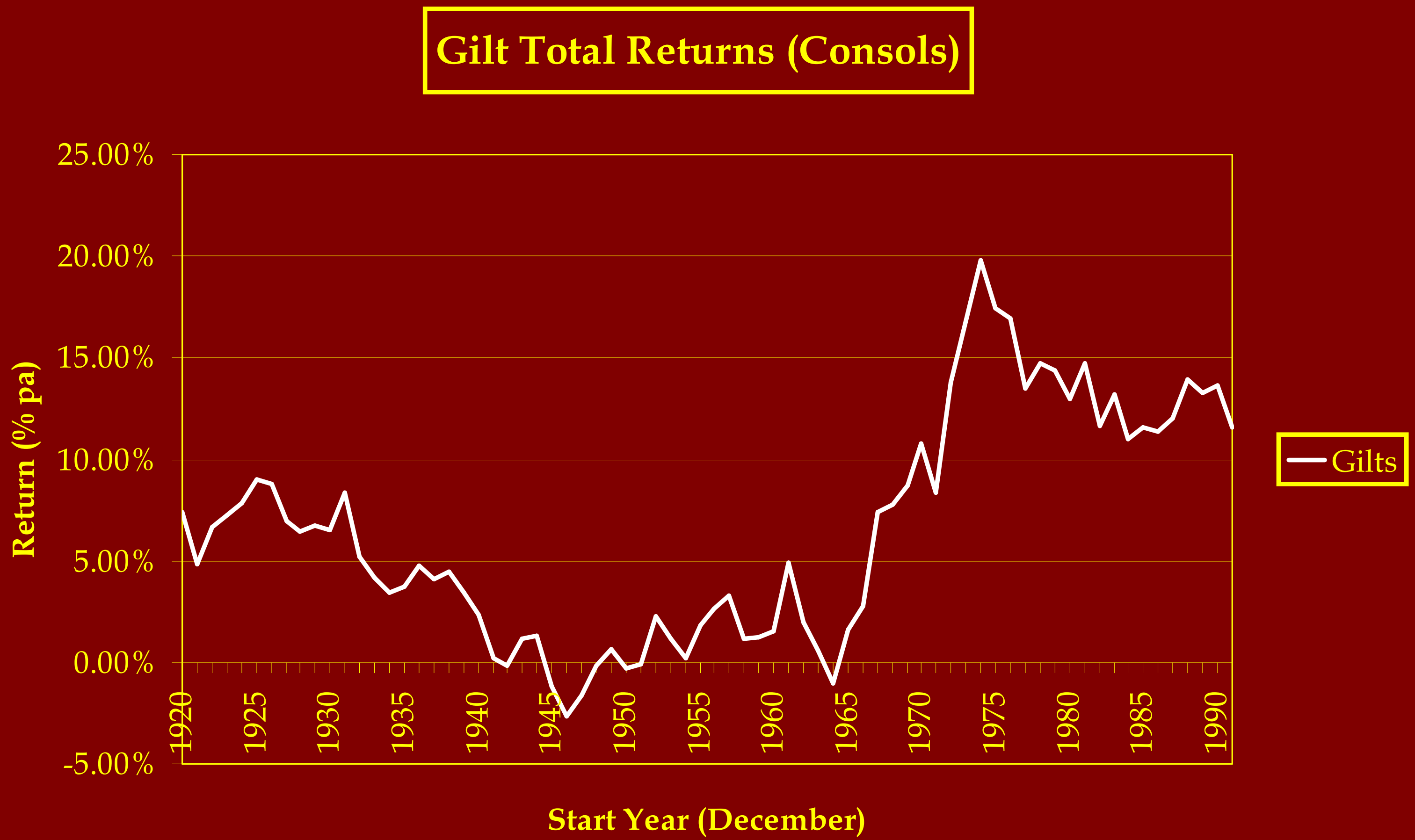
# CRITICAL POINTS

- "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"

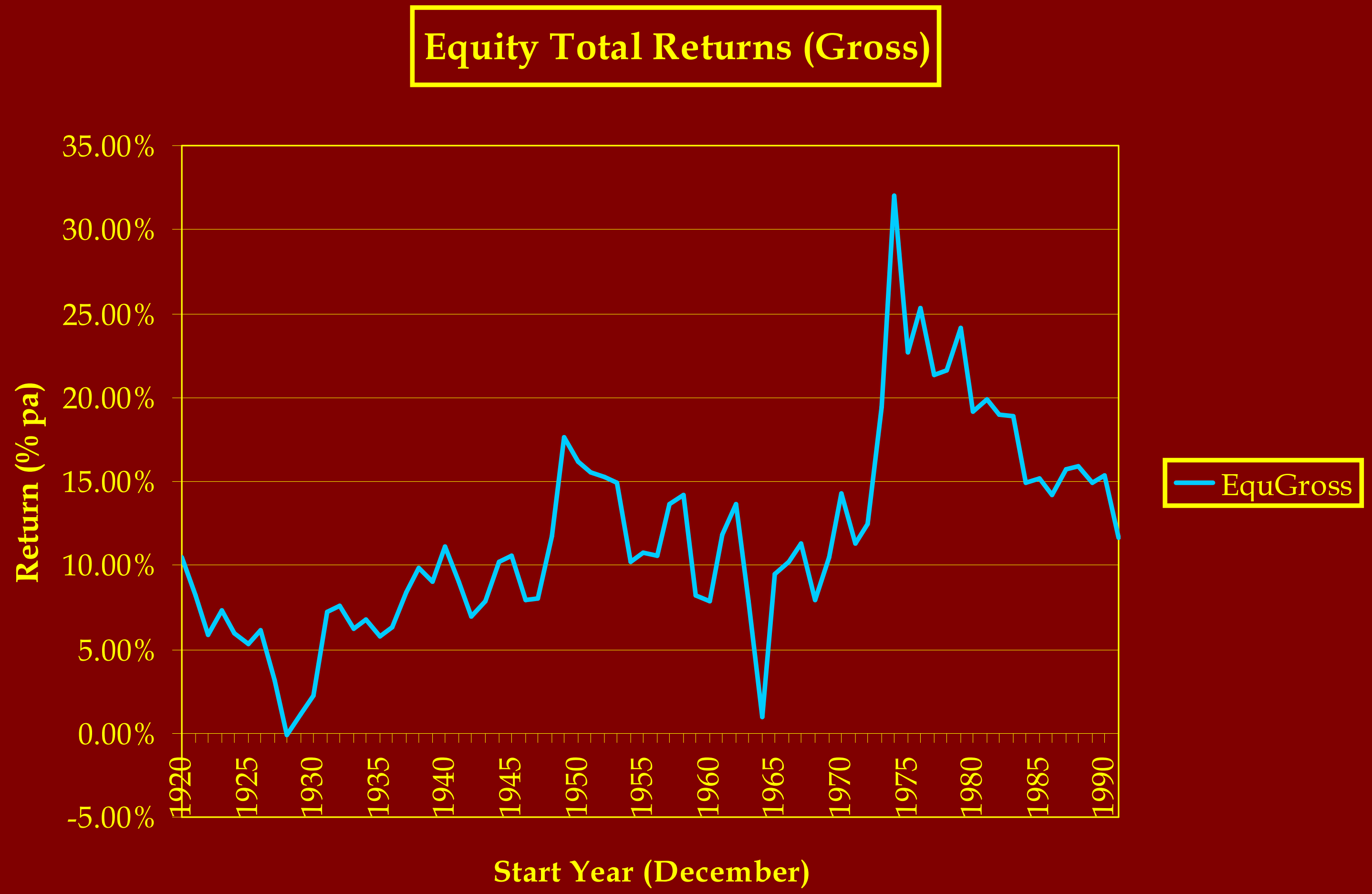
# EQUITIES ARE RISKY {1 of 5}

- 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!)

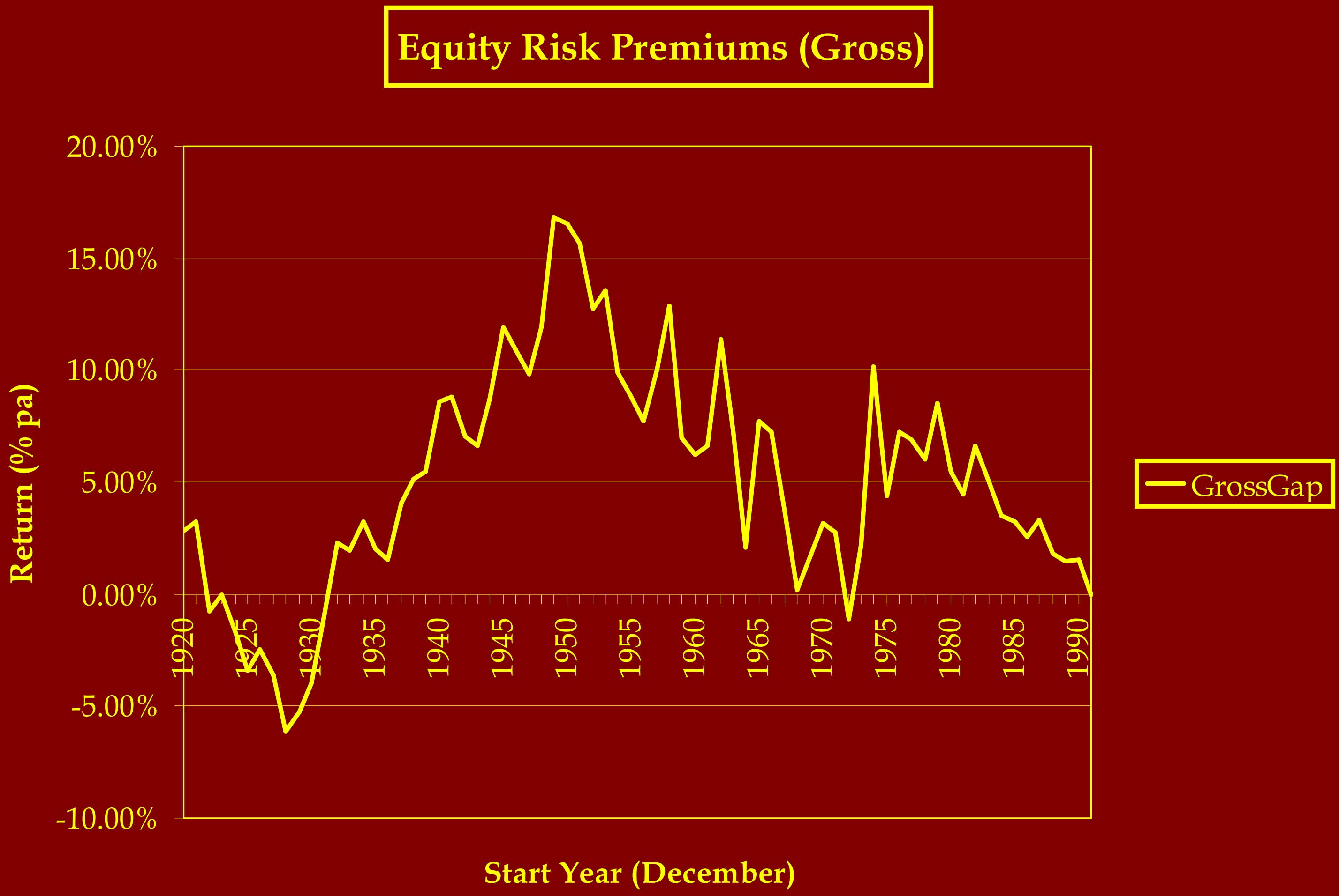
# EQUITIES ARE RISKY {2 of 5}



# EQUITIES ARE RISKY {3 of 5}



# EQUITIES ARE RISKY {4 of 5}



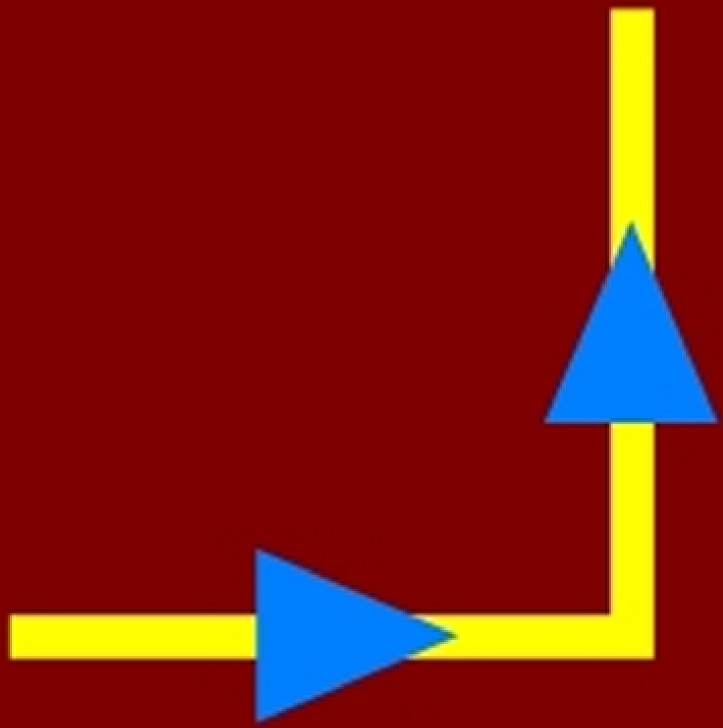
# EQUITIES ARE RISKY {5 of 5}

- 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}

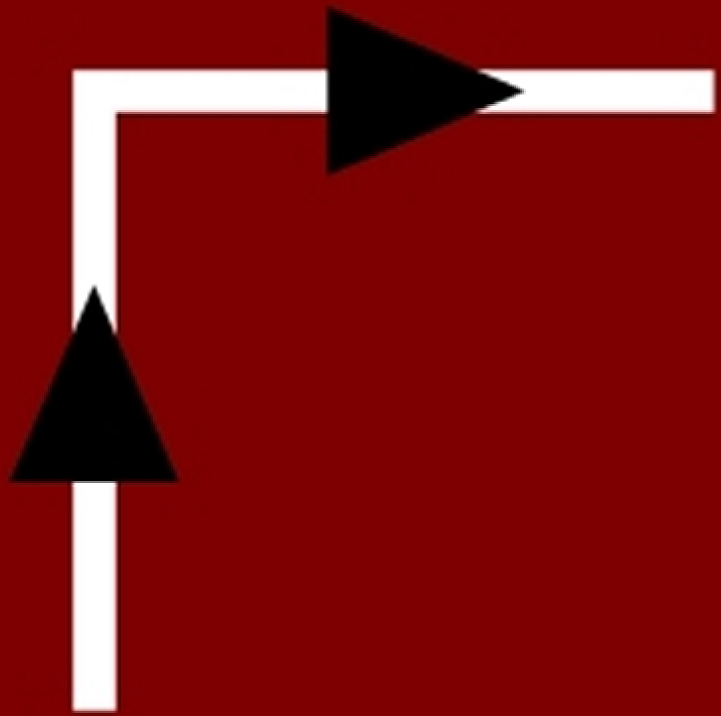
- correlations are not positive
- may have been formally accepted by actuarial profession
- but not really our concern
- instead, focus upon differences between means
- similar endpoint but different route
- we're only interested in the endpoint
- think of a square

# EQUITIES NO MATCH FOR PAY INCREASES {2 of 8}



(c) Wolfgang 2002

# EQUITIES NO MATCH FOR PAY INCREASES {3 of 8}



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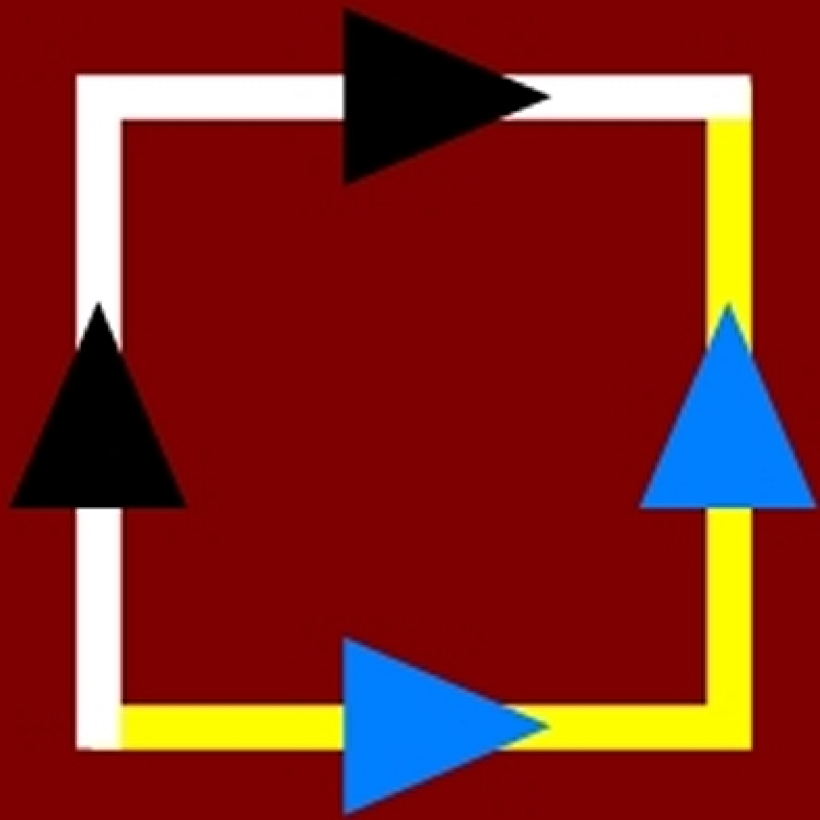

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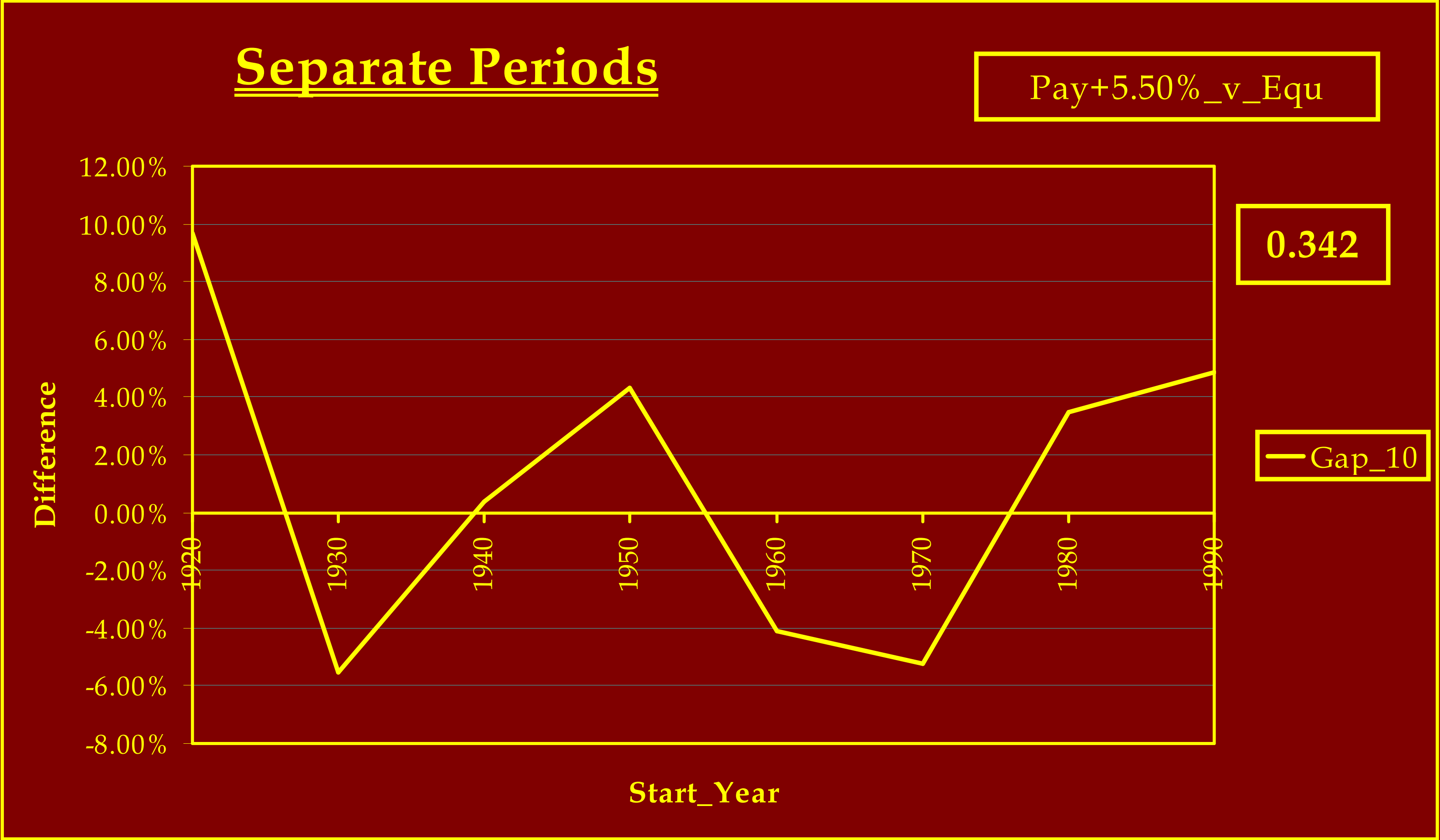
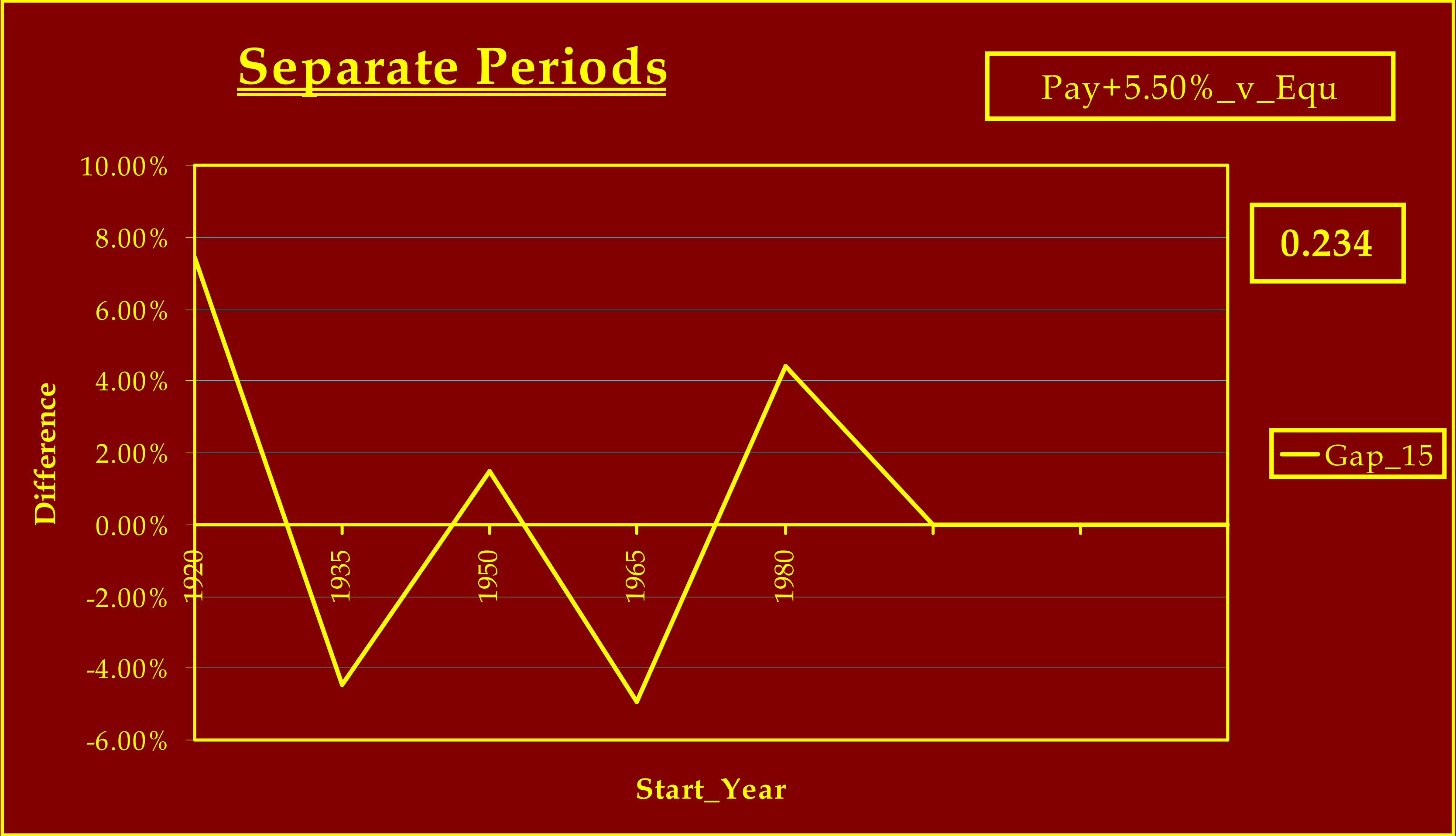
# EQUITIES NO MATCH FOR PAY INCREASES {5 of 8}

- 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

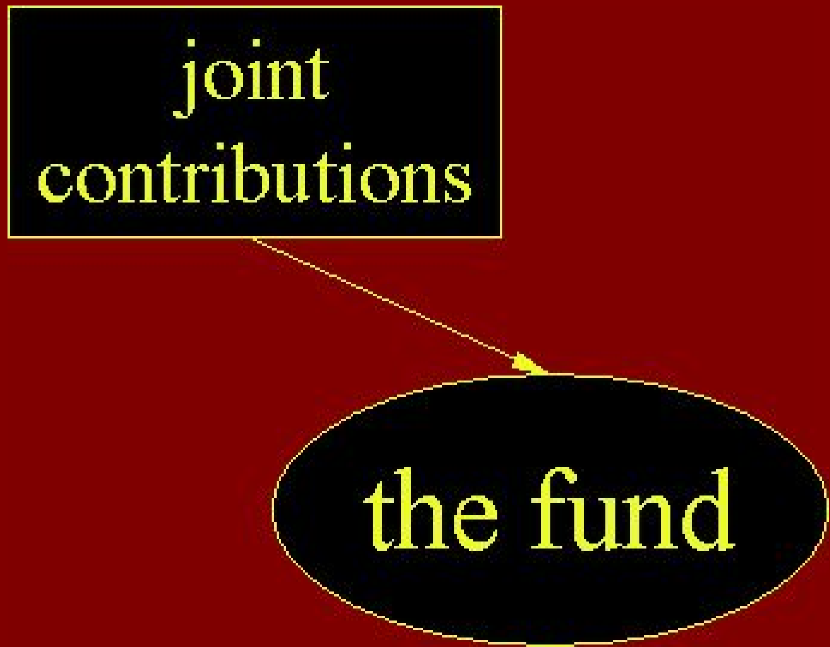
# HIGHER RETURNS DO REDUCE COSTS {1 of 7}

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

# HIGHER RETURNS DO REDUCE COSTS {2 of 7}

the fund

# HIGHER RETURNS DO REDUCE COSTS {3 of 7}



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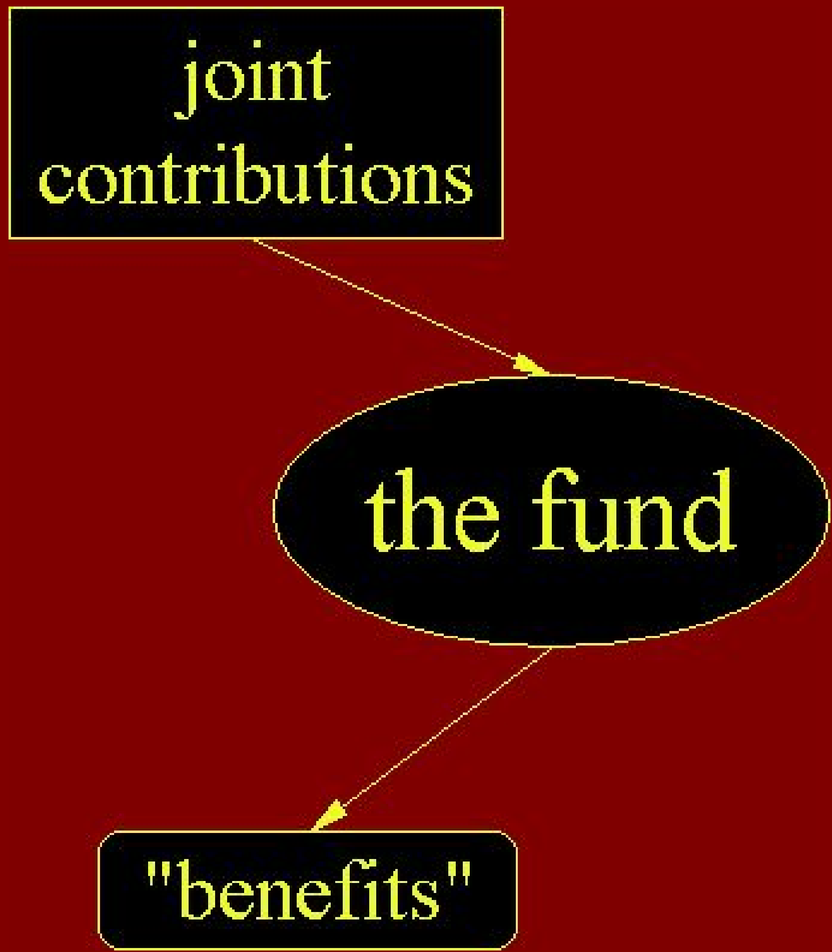

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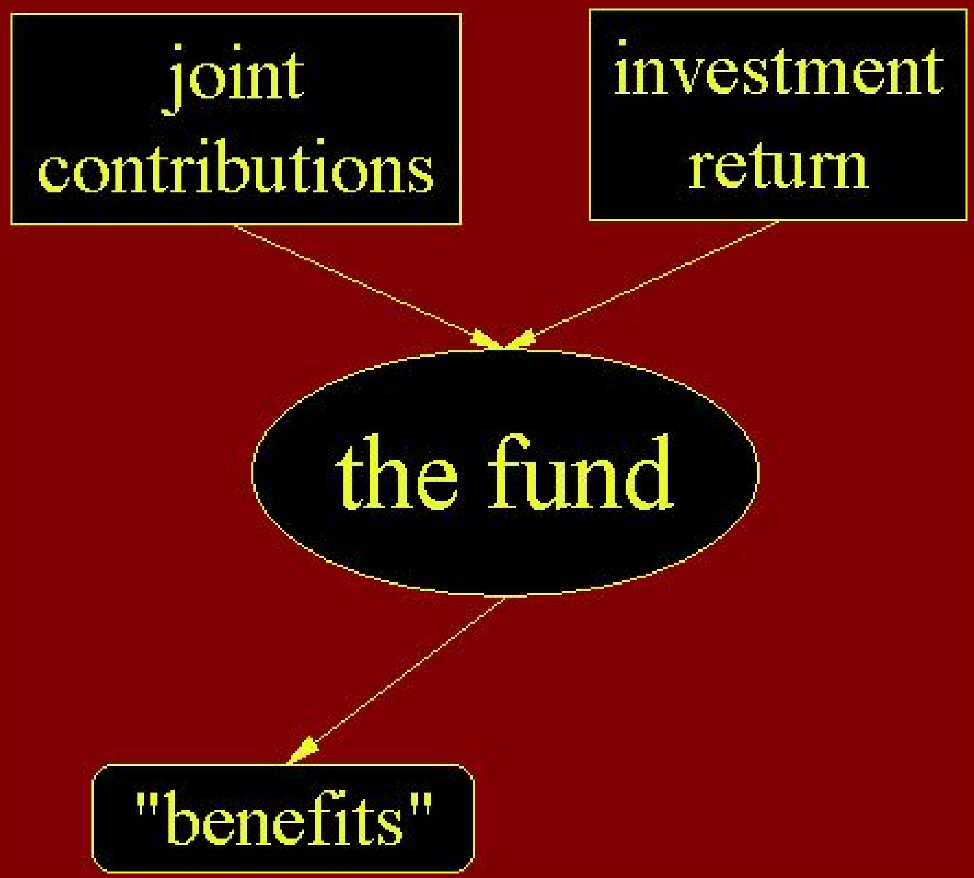

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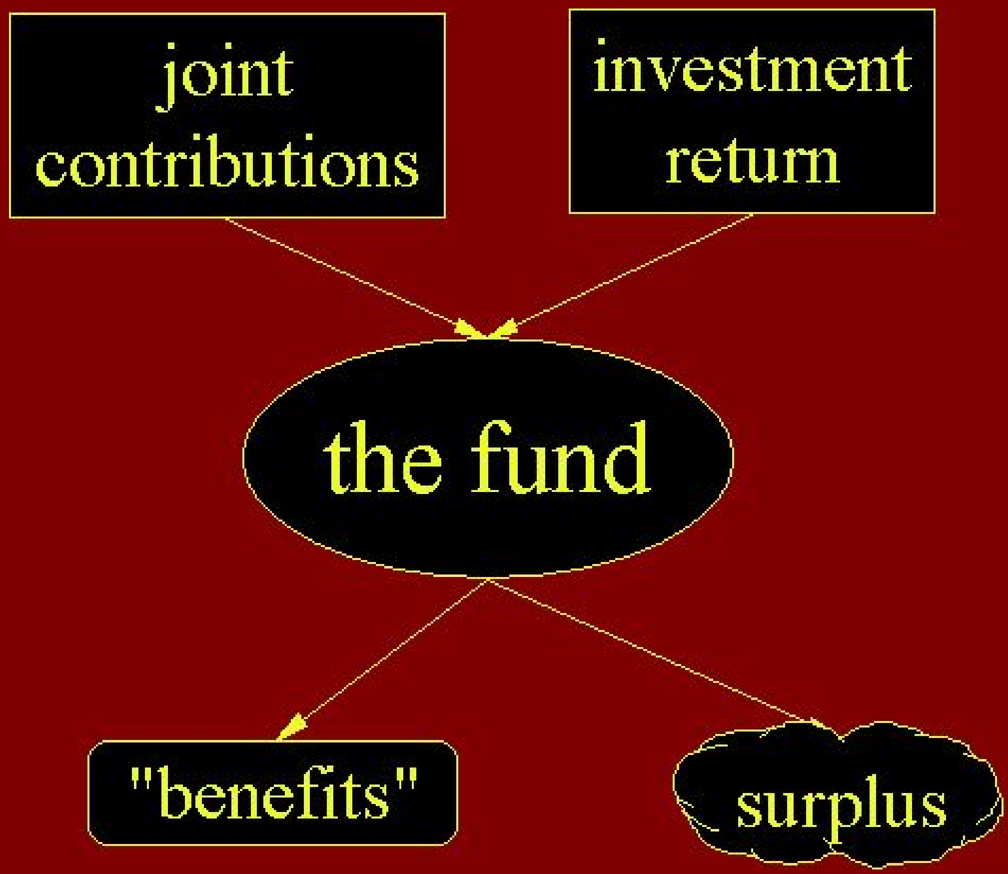


## HIGHER RETURNS DO REDUCE COSTS {7 of 7}

- therefore, higher returns DO reduce costs

# MARKET VALUES : PLANNING AHEAD?

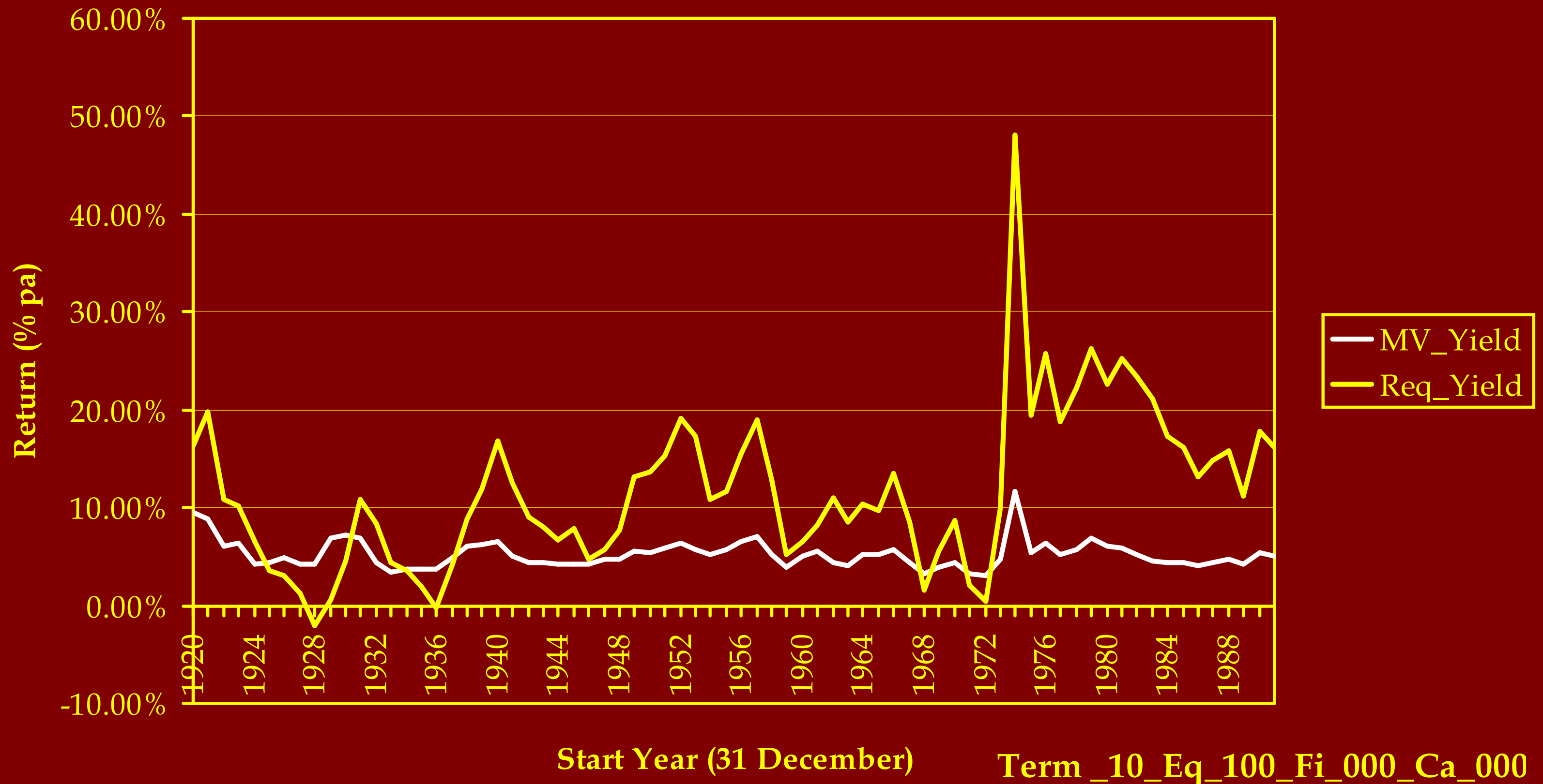
- market values are not stable
- we KNOW that future will be different
  - don't know how far
  - don't know which direction
  - don't know how long
- contemporary conditions very poor indicator of future reality
- investment returns considered on www.dvr.org.uk
- simplified annuity-certain initial pricing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



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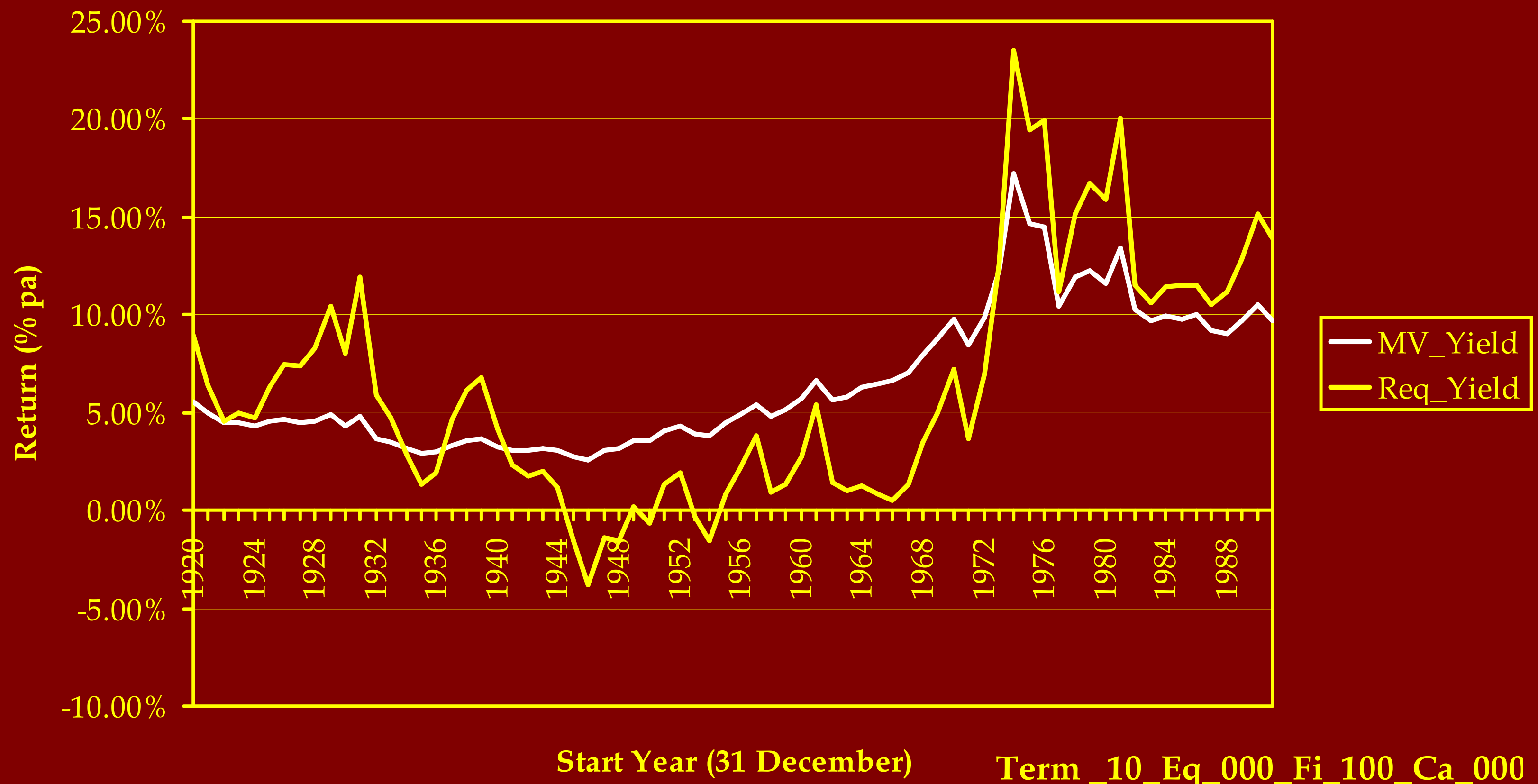


**Term _10_Eq_000_Fi_100_Ca_000**

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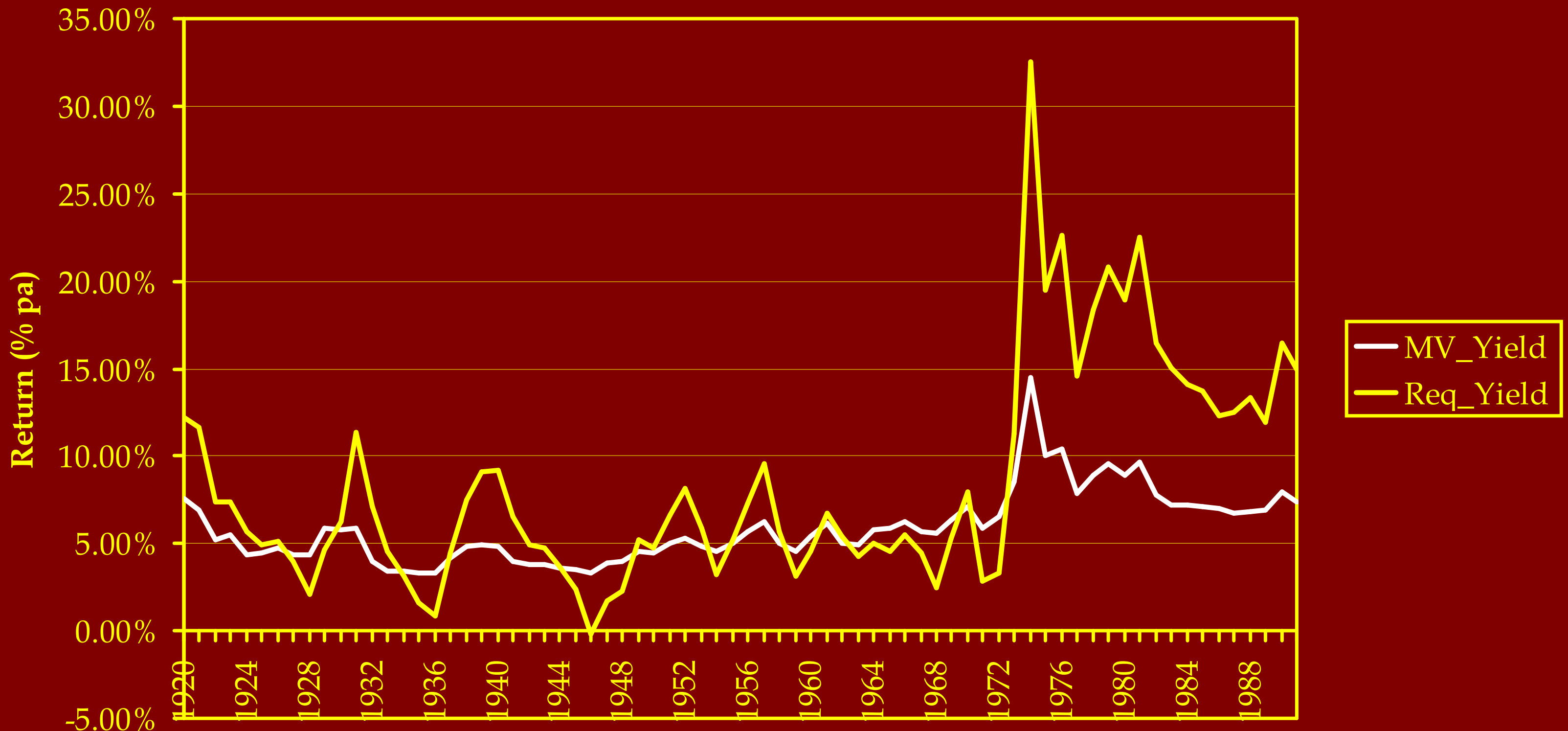


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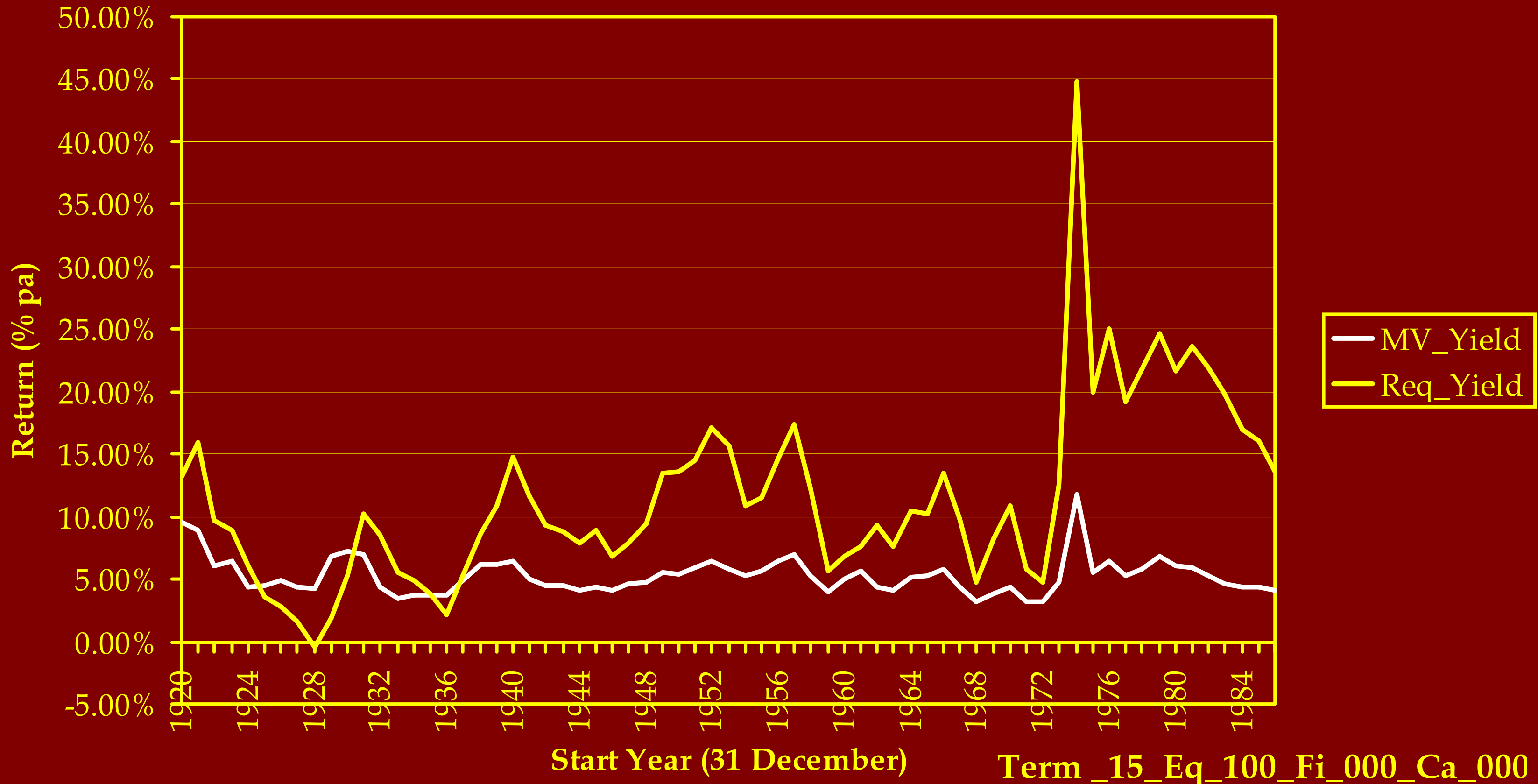

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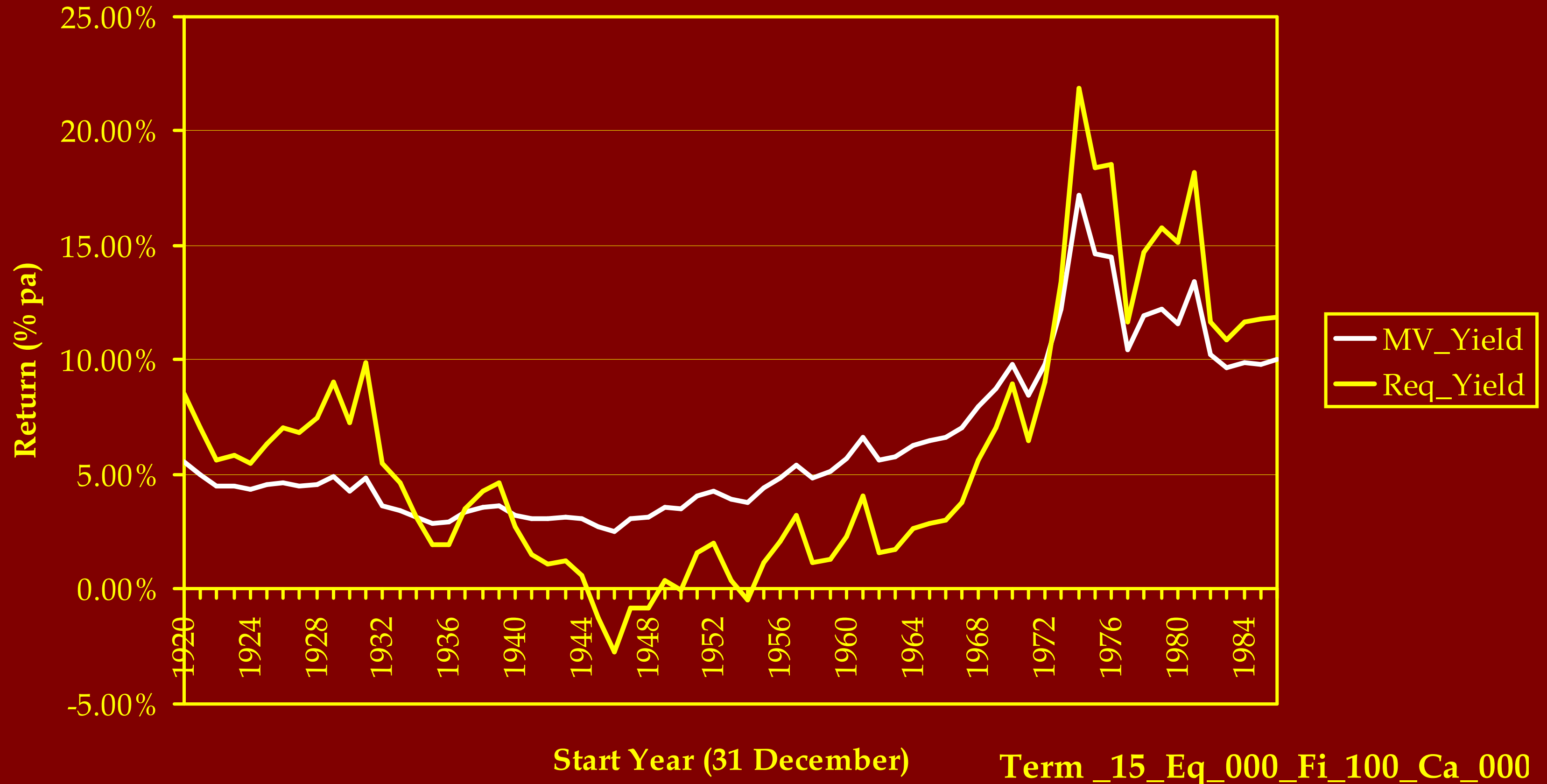

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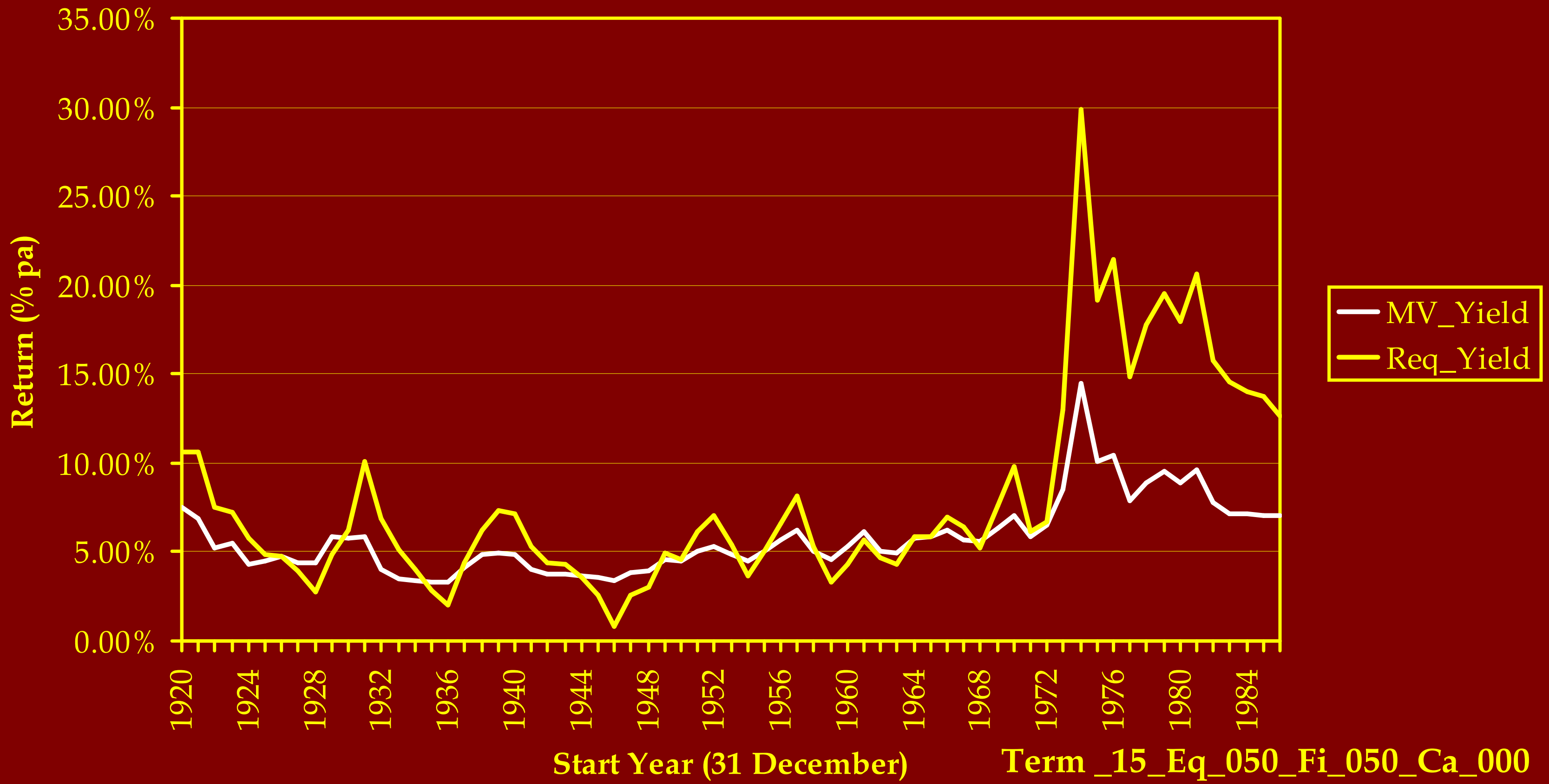

# IMPLICATIONS

- 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)