

The Role of Governance in Retirement Investments: Evidence from Variable Annuities

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Board Governance & Mutual Funds: The SEC's Perspective

- SEC Board Regulation Timeline
 - January 2004 – SEC proposes fund governance changes
 - Independent chair
 - Board comprised of 75% independent directors
 - June 2004 – SEC adopts rule on 3 to 2 vote
 - June 2005 – SEC re-adopts the rule on 3 to 2 vote
 - April 2006 – Federal appellate court requires SEC to reexamine the rule (cost-benefit analysis)
 - June 2006 – The SEC reiterated its desire to address the issue, albeit in a different form than the previous regulation
- SEC actually recommended eliminating fee-setting authority of the board in 1992

Board Governance & Mutual Funds: An Academic Perspective

- Market Governance/Board Governance Substitution
 - Separation of Ownership and Control – Fama, Jensen (1983)
 - Mutual funds have “residual claims...redeemable on demand”...
 - Redemptions at NAV → partial firm liquidation
 - Shareholders can remove control from management

- What role remains for board governance?

“Because of the strong form of diffuse decision control inherent in the redeemable residual claims of financial mutuals, however, their boards are less important in the control process than the boards of open nonfinancial corporations...The role of the board, especially in the less complex mutuals, is largely limited to monitoring agency problems against which redemption of residual claims offers little protection, for example, fraud or outright theft of assets by internal agents.”

- Fama and Jensen (1983)

Market Governance & Retirement Investments

Does market governance work for variable annuities and other retirement investments?

- Longer investment horizon
- Higher switching costs
 - Larger rear-end loads (surrender fee)
 - Fund transfer fees
 - Withdrawal penalty
 - Tax penalties/complexities (1035 exchange)
- Investor sophistication

Research Objective and Conclusions

- Objective: Examine the roles of market and board governance in variable annuities
- Market Governance → Fund Flow Sensitivity
 - Matched MF-VA sample design (Twins)
 - MF flows more sensitive to performance (+)/ fees (-)
 - Consistent w/ stronger mutual fund market governance
- Board Governance → Add Subaccount/Replace Advisor
 - Examine the determinants of:
 - Firing an advisor (fund of funds structure)
 - Adding a new investment option (supermarket structure)
 - Unaffiliated advisor - poor performance/high fees increase prob.
 - Affiliated advisor - performance irrel. & low fees increase prob.

Outline

- Variable Annuities
- Market Governance Results
- Board Governance Results
- Conclusion

Variable Annuities

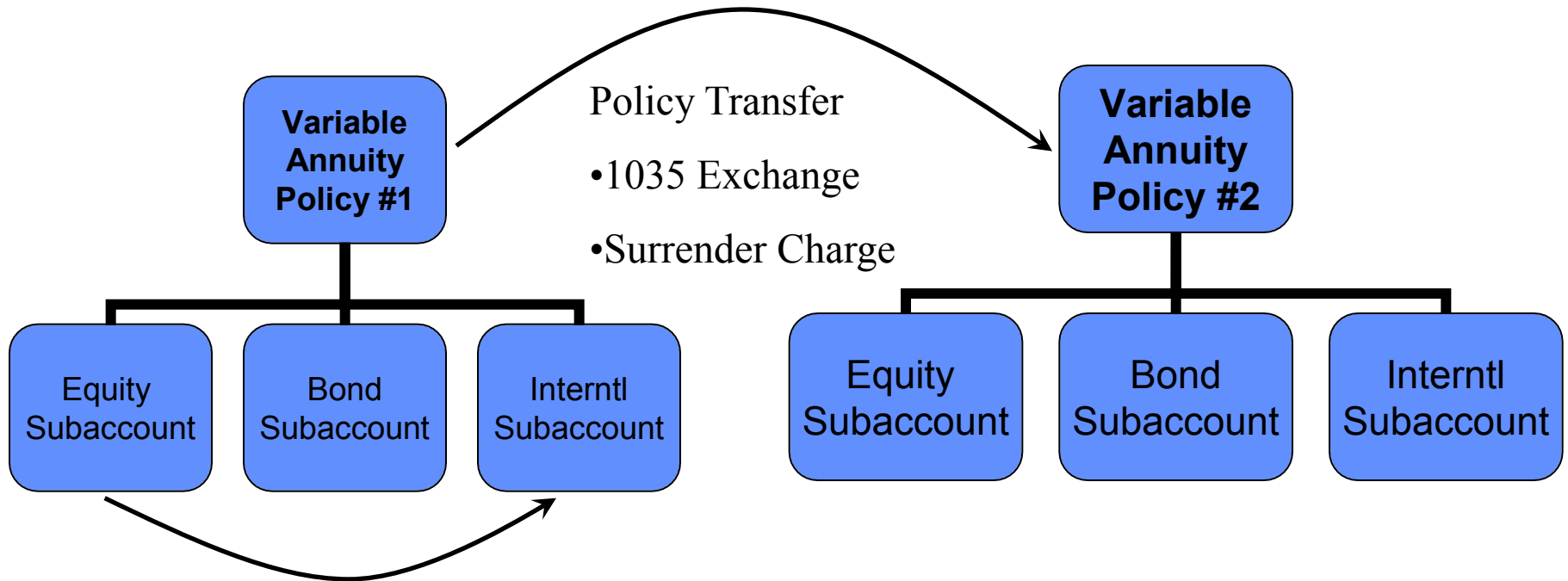
- Why do investors buy variable annuities?
 - Additional tax-deferred investment vehicle
 - Similar to IRAs, 401(k)
 - Reinvested capital gains, income not taxed
 - Withdrawals treated as ordinary income
 - Death Benefit
 - MAX(Current Value, Total Contributed)
 - Cost built into insurance expenses
 - Option to annuitize – (Age > 59 ½)
- Excellent review in Brown and Poterba (2006)

Variable Annuity Structure: An Example



FUND	SUBADVISER
AZL AIM Basic Value Fund	A I M Capital Management, Inc.
AZL AIM International Equity Fund	
AZL Davis NY Venture Fund	Davis Selected Advisers, L.P.
AZL Dreyfus Founders Equity Growth Fund**	Founders Asset Management LLC (affiliated with The Dreyfus Corporation)
AZL Dreyfus Premier Small Cap Value Fund	The Dreyfus Corporation (affiliated with Founders Asset Management LLC)
AZL Franklin Small Cap Value Fund***	Franklin Advisory Services, LLC
AZL Jennison 20/20 Focus Fund	Jennison Associates LLC (affiliated with Prudential Investment Management, Inc.)
AZL Jennison Growth Fund	
AZL Legg Mason Growth Fund***	Legg Mason Capital Management, Inc.
AZL Legg Mason Value Fund****	
AZL Money Market Fund	Prudential Investment Management, Inc. (affiliated with Jennison Associates LLC)
AZL Neuberger Berman Regency Fund	Neuberger Berman Management Inc.
AZL OCC Renaissance Fund*	Oppenheimer Capital LLC
AZL OCC Value Fund*	(affiliated with the Manager)

Variable Annuity Structure: Flows



Transfer between subaccounts:

- First X transfers (per year) are free
- Each additional transfer costs \$Y

Market Governance

We examine the role of market governance

- Fund flows proxy for market governance
- Regress flows on performance, fund characteristics

For these regressions we use two samples:

- Aggregate Sample – Match VA with MF based on investment objective and fund age
- Twins Sample - Match AIM Basic Value with Allianz Aim Basic Value

Matched Sample Example: AIM Basic Value - Manager

AIM Basic Value Fund **AZL™ AIM Basic Value Fund**

Portfolio Management

Bret Stanley (lead), Canon Coleman,
Matt Seinsheimer, Michael Simon; assisted by the
Basic Value team

Portfolio manager

Bret W. Stanley
Lead Portfolio Manager
Responsible for the fund since
1998

Matthew W. Seinsheimer
Portfolio Manager
Responsible for the fund since
2000

Michael J. Simon
Portfolio Manager
Responsible for the fund since
2002

Cannon Coleman
Portfolio Manager
Responsible for the fund since
2003

Aggregate Flow-Performance Results

- MF-VA matched on investment objective and age (+/- 1 year)
- Other variables: Intercept, Fund Age, Year*InvObj Fixed effects
- Standard errors clustered by fund
- Twin sample gives comparable results

The Role of Board Governance

- Others focus on board characteristics
 - Number of Independent Directors
 - Director Compensation
 - Director Holdings in Funds
 - Independent Chairperson
- We focus on board responsibilities
 - Board monitors/hires/fires advisors
 - Insurance company may add new subaccounts
 - We examine the determinants of these decisions

Board Governance - Subadvisor Replacement

Fund of Funds Structure

- Offer one fund per investment objective
- Insurance advisor evaluates and replaces subadvisors:
“The Manager (US Allianz Advisors) does not provide investment advice with regard to selection of individual portfolio securities, but rather evaluates and selects Subadvisers for the Trust, subject to the oversight of the Board of the Trust. The Manager monitors and reviews the activities of each of the Subadvisers to the Trust. In addition, the Manager constantly evaluates possible additional or alternative subadvisers for the Trust. The Manager currently does not have any clients other than the Trust.”
-Excerpt from US Allianz VIP Trust SAI

Subadvisor Replacement

- Logit - dependent variable = 1 if subadvisor is replaced in the next year
 - Subadvisor is replaced in 7.7% of Fund-Year Observations
 - Tufano and Sevick document for MFs, 3 replacements in 30 years
 - Standard errors clustered by trust
 - Independent variables: fund size, fund turnover, fund age
-

Subadvisor Replacement – With Affiliation

- Multinomial Logit Model w/ 3 Outcomes:
 - Subadvisor replaced by affiliated subadvisor (relative to no replacement)
 - Subadvisor replaced by unaffiliated subadvisor (relative to no replacement)
- Standard errors clustered by trust and same independent variables as before

Board Governance – Subaccount Addition

Supermarket Structure

- Offers many funds per investment objective
- Continually adds new subaccounts/advisors
- Predominant structure in the insurance industry:
“Any change in the fund offerings is subject to the necessary regulatory approvals. The substitution of one fund for another or the combining of several investment options into a single fund is generally more complicated and time-consuming than adding a new option or closing an existing investment option to further allocation by contract holders. Substitution of one fund for another typically involves a substitution application to the SEC and possibly requires underlying variable annuity contractholder approval.”
-American Academy of Actuaries Revenue Sharing Report (2006)

Subaccount Addition

- Logit - for each year, each policy, each investment objective examine whether a new subaccount is added ($\text{DepVar} = 1$) or not ($\text{DepVar} = 0$)
 - Independent variables describe existing accounts
 - Standard errors are clustered by variable annuity policy
 - Yearly fixed effects included
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Conclusion

We study the roles of market and board governance in retirement investments

We find:

- MF investors are more sensitive than VA (market governance not as effective for VA)
- VA Subaccount Addition and Advisor Turnover
 - More likely when expenses are high
 - More likely then performance is poor
 - Advisor affiliation is important