Universität St.Gallen

Securitization of Life Settlements: Challenges and Opportunities

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Securitization (Structured Finance)

Definition

- Financial technique of pooling assets/risks and repackaging the cash flows into securities
- Default risk is decoupled from the originator/sponsor by a special purpose vehicle (SPV)
- Typically involves tranching of the securities to address different risk appetites
- Allows financial institutions to shed assets/risks off their balance sheets

Common types of securitizations and their asset/risk pools

- Asset-Backed Securities (ABS): mortgages, consumer loans, credit card receivables
- Collateralized Debt Obligations (CDOs): corporate bonds/loans, credit default swaps, ABS

Life settlement-backed securities (LSBS)

Why securitization?

- Offer longevity risk exposure in an attractive fixed-income format
- Increased liquidity through tradable securities (+ price information)
- Ratings theoretically possible (although difficult due to cash flow pattern)
- Fixed maturity alleviates liquidity issues associated with open-end funds

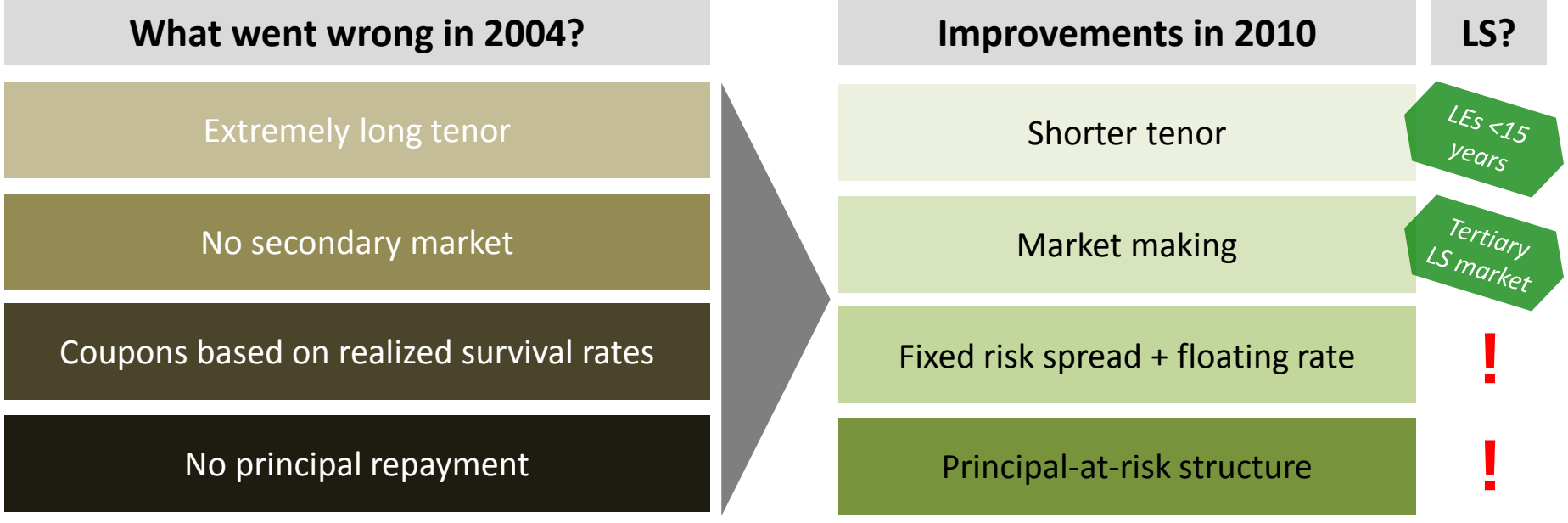
LS characteristics are inherited by the new asset class

- Risk-return profile: attractive expected returns, low volatility
- Correlation profile: substantial diversification potential (low cross-asset correlations)

Which structural features are important for success?

Lessons learned from past longevity bonds

- BNP Paribas/EIB (2004): first ever attempt (failed due to insufficient investor interest)
- Kortis capital (2010): successfully launched by Swiss Re



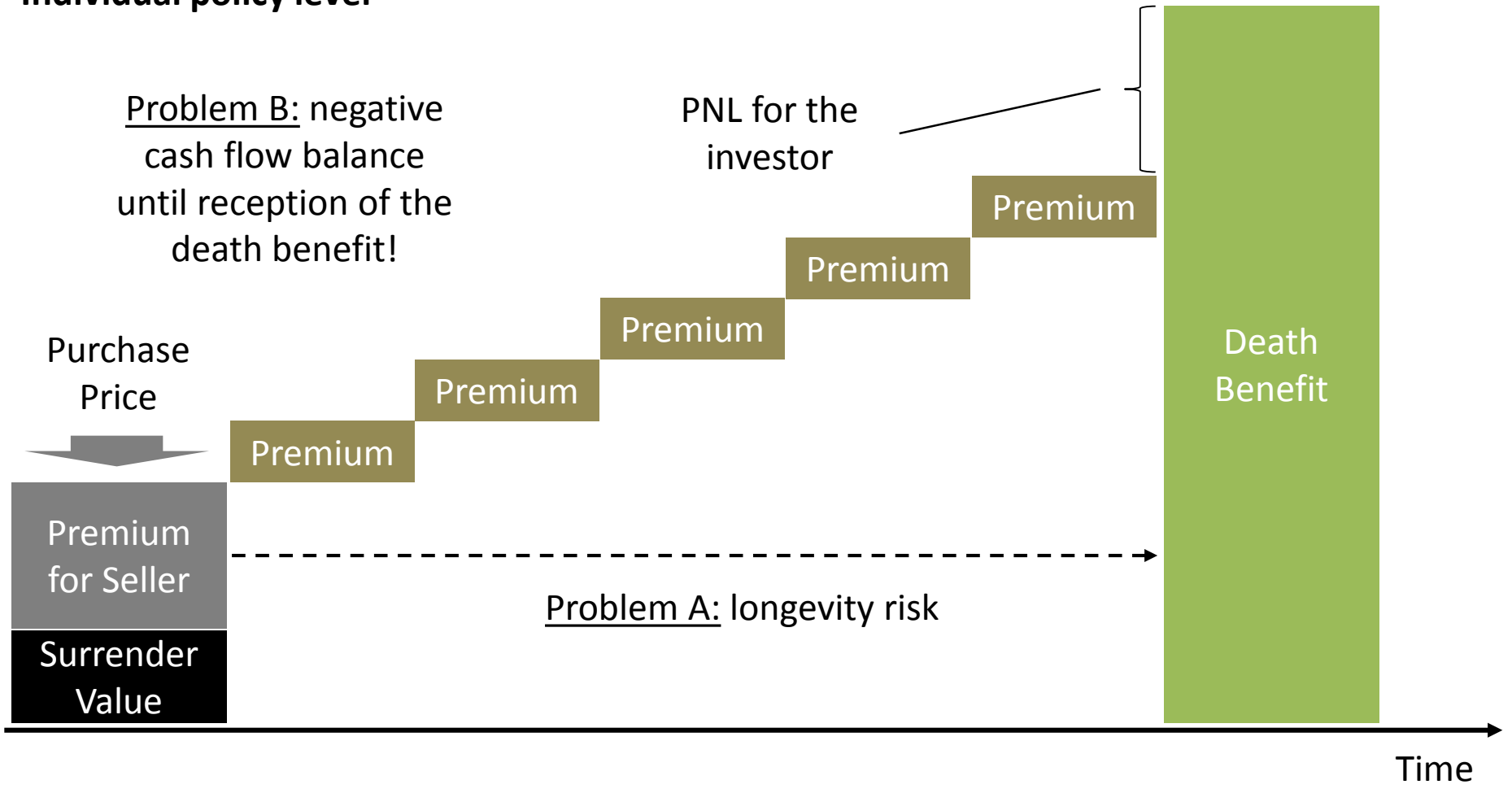
Key problem: LS portfolios are initially cash flow negative

Parallels and differences to other structured finance categories

Cash Flow Properties	ABS / MBS (and CDOs)	Insurance-Linked Securities	Life Settlement Securitizations
Timing	Random Prepayment Time	Random Trigger Time	Random Death Benefit Time
Riskiness	Consumer/Corporate Default Risk	Catastrophe Event Risk	Lapse Risk + Default Risk (Insurer)
Balance	Positive	Positive	Negative/Positive

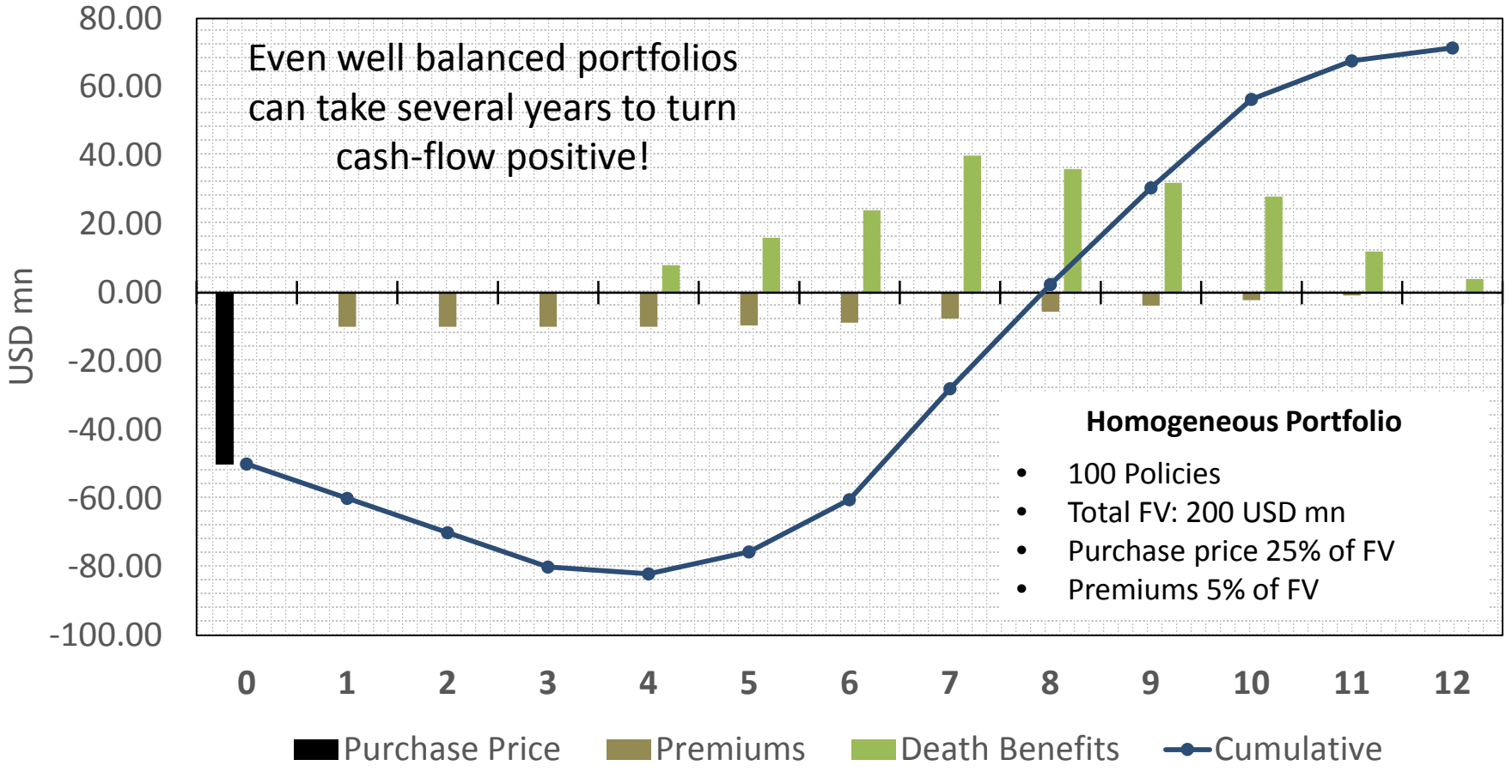
Life settlement cash flows (I)

Individual policy level



Life settlement cash flows (II)

Portfolio level



What solutions are available to solve the cash flow issue?

Credit and liquidity enhancements

Cash Collateral

- Investors provide more capital than required to purchase the policies
- The excess capital is held in a liquidity account to finance expected premiums

Liquidity Facility

- A bank provides a stand-by credit line with emergency funds to pay premiums
- Can be drawn upon when the initial cash collateral is exhausted

Longevity Insurance

- After a preset point in time, an insurer steps in to pay the premiums
- Safety layer in addition to the revolving credit facility and the liquidity account

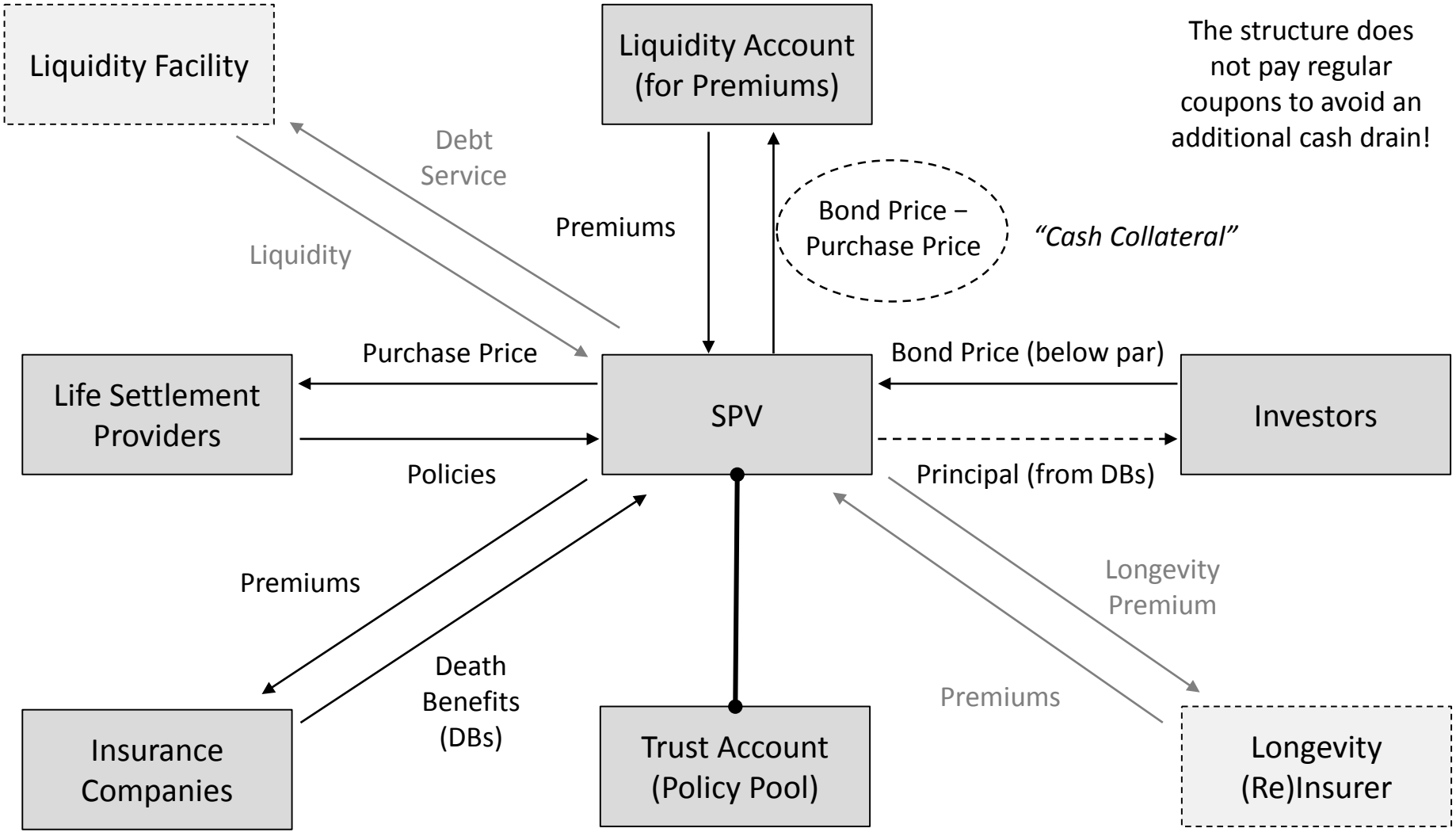
Excess Death Benefits

- Death benefits after meeting expenses on the LSBS
- Can be trapped in the structure to prop up liquidity
- Replenish liquidity account and repay credit facility

Subordination

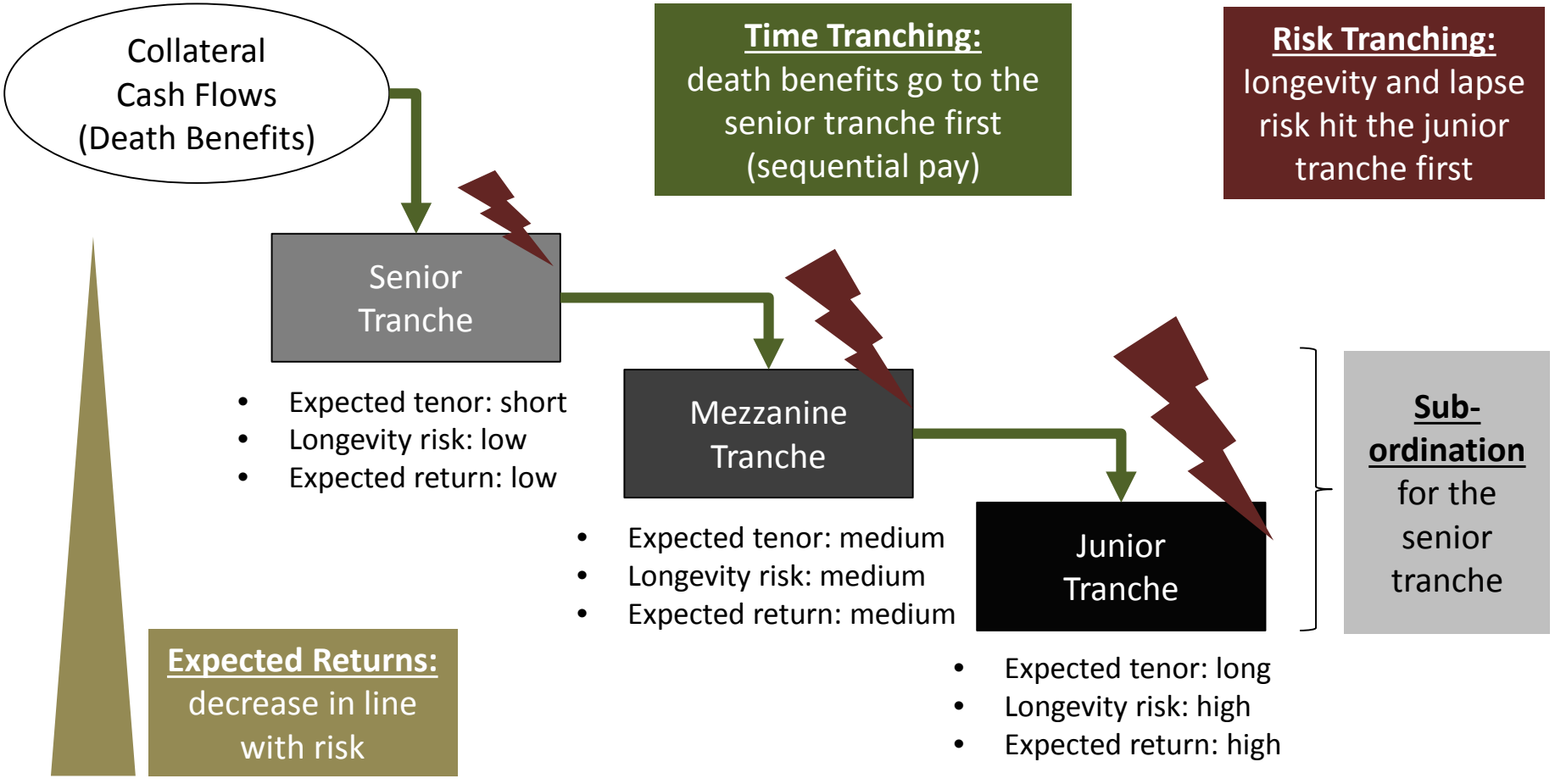
- Issue various bond classes
- Lower classes are credit enhanced by higher ones

Zero-coupon life settlement bonds could be a start



Creating securities for different risk appetites

The cash flow waterfall



Are life insurance policies suitable for securitization?

Advantages

- Systematic longevity risk, e.g., through medical breakthroughs is small
- Cash flows are well predictable for a large no. of similar policies (diversified portfolios)

Challenges

Known LS Issues	Supply of Policies	Structural Enhancements	Interest Rate Risk	Credit Default Risk
E.g., incentives with regard to purchase price and life expectancy estimates	Is it possible to ramp up large policy pools for an active securitization market?	Needed to mitigate liquidity issues. Costs may change the risk-return profile of the asset class	Zero bonds have a high duration, but floating rate notes create an additional cash drain	Can get hit by default of insurance companies through the backdoor

Summary and outlook

Summary

- Securitization of life insurance portfolios theoretically possible
- Negative cash flow pattern in the first years after inception causes main difficulties
- Could be overcome by credit and liquidity enhancements known from the ABS markets
- But: resulting LSBS will be a different asset class (lower return proposition)

Outlook

- Need to further investigate feasibility of illiquidity and risk mitigation mechanisms
- Quantitative simulation studies based on realistic portfolios desirable

Thank you for your attention!