Meeting Between Federal Reserve Board Staff and Representatives of Prudential Financial, Inc.

May 8, 2013

Participants: Anna Lee Hewko, Mona Elliot, Sviatlana Phelan, Joanne Wakim, Linda Duzick, Anthony Sampson (Federal Reserve Board)


Summary: Representatives of Prudential Financial, Inc. met by phone with Board staff to discuss the regulatory capital treatment of guaranteed separate accounts. The discussion included a description of guarantees in separate accounts; the risk management practices of insurance companies; and the calculation of the regulatory capital reserves for certain insurance products.

The representatives also provided the attached material.
Discussion with Federal Reserve Regarding Separate Accounts with Guarantees

May 7, 2013
Agenda

• Description of guarantees on GAAP separate accounts
• Prudential’s approach to measuring and managing risks
  – Product design
  – Asset liability management/hedging
  – Reserves
  – Capital
• Appendix
Insurance Company GAAP Balance Sheet*

<table>
<thead>
<tr>
<th>Separate Account Assets</th>
<th>Separate Account Liability</th>
</tr>
</thead>
<tbody>
<tr>
<td>$100</td>
<td>$100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General Account Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>$40</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reserves</th>
<th>Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>$30</td>
<td>$10</td>
</tr>
</tbody>
</table>

- Investment risks associated with market value changes for separate accounts are borne by the customer. Accordingly, there is an equal and corresponding liability on the balance sheet.
- Any guarantee associated with a separate account is reserved for separately, and assets in the insurance company general account support this reserve.

*Simplified balance sheet
Product Guarantees Defined

• An **annuity purchase option** provides the insured with the right to convert the value of their Separate Account assets to a stream of annuity payments from the issuing insurer at guaranteed minimum annuity rates which are specified in the contract at the time the contract is issued.

• **Guaranteed minimum death benefits** provide a benefit payable in the event of death that, together with the existing contractholder’s account balance, is equal to a return of cumulative deposits less any partial withdrawals, or the greater of the minimum return on the contract value or an enhanced value.

---

1. This list of guarantees associated with separate accounts is not all inclusive. Additional information on types of separate account products can be found in the appendix.

2. Prudential retains the risk that the total amount of death benefit payable may be greater than the contractholder account value. However, a substantial portion of the account values associated with GMDBs are subject to an automatic rebalancing element because the contractholder also selected a living benefit feature which includes an automatic rebalancing element. All of the variable annuity account values with living benefit features also contain GMDBs. The living and death benefit features for these contracts cover the same insured life, and we have insured both the mortality and longevity risk on these lives.
Product Guarantees Defined: Variable Annuity Living Benefits

- Provide a guaranteed minimum amount payable to the insured while the insured is living and certain other criteria are met.
- Payments commence only after the cumulative withdrawals have first exhausted the policy account value in the separate account.
- Due to the age of the block, no such claims payments have occurred to date, nor are they expected to occur within the next five years. The timing and amount of actual future claims depend on actual returns on contactholder account value and actual policyholder behavior relative to our assumptions. Living benefits generally come in the form of accumulation guarantees and withdrawal benefit guarantees.
  - An accumulation-based guaranteed living benefit guarantees a minimum account value upon a specified maturity date, regardless of the performance of the underlying Separate Account assets.
  - A withdrawal-based guaranteed living benefit provides the insured with a guaranteed minimum level of income which can be drawn from the Separate Account assets for as long as the insured lives regardless of the performance of the assets. If the Separate Account assets are exhausted through compliant withdrawals, the income payments continue through payment from the insurance company.
Current Federal Reserve Proposed Rules Do Not Address the Distinctions Between Risks of Guarantees
<table>
<thead>
<tr>
<th>Product</th>
<th>Market Risk</th>
<th>Credit Risk</th>
<th>Operational Risk</th>
<th>Liquidity Risk</th>
<th>Insurance Risk</th>
<th>Risk Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annuity Purchase Option</td>
<td>Green - Minimal</td>
<td>Green - Minimal</td>
<td>Green - Minimal</td>
<td>Green - Minimal</td>
<td>Green - Minimal</td>
<td>Product Design; Asset Liability Management; Capital</td>
</tr>
<tr>
<td>Death Benefit Guarantee (Variable Annuity and Variable Life)</td>
<td>Yellow - Moderate</td>
<td>Green - Minimal</td>
<td>Green - Minimal</td>
<td>Yellow - Moderate</td>
<td>Green - Minimal</td>
<td>Product Design; Asset Liability Management; Reserves; Conservatism in Reserves; Capital</td>
</tr>
<tr>
<td>Living Benefit Guarantee (Variable Annuity)</td>
<td>Red - Material</td>
<td>Yellow - Moderate</td>
<td>Green - Minimal</td>
<td>Yellow - Moderate</td>
<td>Red - Material</td>
<td>Product Design; Asset Liability Management; Hedging; Reserves; Conservatism in Reserves; Capital</td>
</tr>
</tbody>
</table>

Green – Minimal
Yellow – Moderate
Red – Material
Layers of Risk Management for Insurance Products Including Separate Accounts with Guarantees

- **Product Design**
- **Capital** *(Tail Risk)*
- **Asset Liability Management/Hedging**
- **Conservatism in Reserves** *(Unexpected Loss)*
- **Reserves** *(Expected Loss)*
Product Design
VA Living Benefit Guarantee is principally funded by policyholder’s separate account value.

- Policyholder will receive a stream of income payments calculated as a percentage of the Notional Protected Value.
- Notional Protected Value is not available in a lump sum and withdrawals are first funded by the policyholder’s Account Value.
- Policyholder’s can surrender at anytime, give up the guarantee, and receive account value after liquidation net of surrender charges (Liquidation Value).

Notional Protected Value

Source of withdrawals

E elective Withdrawals begin based on Notional Protected Value

Policyholder Account Funding

Insurance Company Potential Funding

Client Deposit

Policyholder’s Separate Account Value

Years

$
Product Risk Mitigation Actions In Annuities
Asset Liability Management and Hedging
Asset Liability Management and Hedging

- Prudential closely matches the key rate duration of assets to the expected key rate duration of the liabilities
Reserves
Prudential Balance Sheet at 3/31/13*

Separate Account Assets
$266

Separate Account Liability
$266

General Account Assets
$339

Deferred Policy Acquisition Costs $14
Other Assets $35

Insurance Reserves
$293

Other Liabilities $55
GAAP Equity (inc. AOCI) $39

*Simplified balance sheet with actual Prudential figures as reported in QFS. Any deviations from reported figures can be attributed to rounding.
### GAAP Reserves Include A Provision for Unexpected Losses

<table>
<thead>
<tr>
<th>Element of Reserves</th>
<th>Description of Element</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expected Losses on Insurance Contracts</td>
<td>Present value of future benefits and expenses, less future gross premiums, using best estimate assumption</td>
</tr>
<tr>
<td>Margins in Insurance Assumptions</td>
<td>Impact of using conservative assumptions rather than best estimate assumptions when considering the present value of future benefits, expenses and premiums</td>
</tr>
<tr>
<td>Deferred Profit</td>
<td>Present value of expected profits in excess of margins in insurance assumptions</td>
</tr>
</tbody>
</table>
Capital
Prudential Holds Capital To Protect Against Tail Risks

• For VA living benefit guarantees, Prudential uses CTE97 as a measure of required capital
• CTE97 is calculated using stochastic runs of future fees and claims, which are discounted to the present
• Mathematically, CTE 97 uses the worst 3% of stochastically determined scenarios, thus capturing and measuring the severity of a tail event at a given confidence level
• CTE 97 capital is sensitive to changes in interest rates and equity markets, since both impact the size of the future claim and/or the discount rate
• CTE 97 is generally accepted by regulators and rating agencies as a "AA" level of capital
Prudential Capital Protection Framework
Sources of Capital and Liquidity Protection 12/31/12
Appendix
Types of Separate Account Products

Separate accounts (as defined under GAAP) are commonly used with the following product types:

Retail Products:
Variable Life and Annuities:
- Premiums are allocated to one or more separate accounts, each with a distinct investment strategy (usually equities and/or fixed income assets).
- All separate account investment performance is passed through to the policyholder.
- Many products include a guaranteed minimum death benefit or living benefit. (An example of a living benefit for annuities is a guaranteed lifetime withdrawal benefit.) These are not available if the policy is surrendered. The reserves for these guarantees are held in the general account.

Institutional Products:
Group Annuities
- Separate account provides insulation of retirement plan assets; may also provide investment flexibility.

Defined contribution plans
- Provides investment options to defined contribution plan participants.
- Investment performance is ultimately passed through to participant.
- Often no guarantees, or guarantees are de minimis.

Defined benefit plans
- Transfers pension risk while providing investment flexibility if account is sufficiently overcollateralized.
- Contracts cannot be surrendered until last covered life dies.
- Department of Labor guidance requires pension plan fiduciaries to consider the use of separate accounts when purchasing an annuity.

Group Life
- Separate account provides investment flexibility.
- Group Variable Universal Life provides group members with life insurance coverage and investment flexibility.
- Trust Owned Life Insurance (also BOLI and COLI) allows institutional clients to purchase life insurance coverage on employees while providing investment flexibility.
- No guarantees provided, unless surrender value of TOLI is “wrapped” (Prudential “wraps” only $0.5 billion of TOLI).
Background on Separate Accounts

- Separate account assets represent segregated funds recognized under state insurance laws that are invested for certain retail and institutional customers.

Why separate accounts are established:
1. Allows contractholder assets to be invested in a manner different from how Prudential manages its general account;
2. Provides insulation of contractholder funds from the claims of Prudential’s general creditors in the event of insolvency;
3. This is similar in purpose to assets held in trust by a bank, although the insurance company legally owns the assets.

To qualify for separate account treatment under GAAP, the account must be:
1. Legally recognized,
2. Insulated from the general account,
3. Assets must be invested as directed by the contractholder or according to specific investment guidelines, and
4. All investment performance must be passed through to the contractholder (though minimum guarantees are allowed).
Background on Separate Accounts - II

Investment risks associated with market value changes are borne by the customers.

- Accordingly, there is an equal and corresponding liability on the balance sheet.

Prudential or its subsidiaries may provide minimum guarantees of return or account value under certain conditions.

- Guarantees are backed by the general account of the issuing entity.
- Any liabilities required to provide for those guarantees and the corresponding assets are held in the general account.
- The nature of the guarantees will affect the range of permissible separate account investments.

There can be legal separate accounts that are not reported as separate accounts under GAAP.

- Example: Separate account group terminal funding annuities, such as those used for the recently announced GM and Verizon Pension Risk Transfer transactions.
- Contracts are accounted for at “book value” like general account products, but still receive the benefit of insulation.¹

¹ Prudential does not have any non-insulated separate accounts in the U.S., although they do exist.
Insurance Reserves – Unique Accounting

• **US GAAP accounting for most contingencies** is to only recognize a liability if both:
  • Loss is probable (likely to occur)
  • Amount is reasonably estimable

• **Any other “appropriation of retained earnings”** for loss contingencies is considered part of stockholders’ equity (FAS 5)

• **Special rules apply to life insurance under US GAAP (FAS 60)**
  • Objective is match revenues (premiums) and expense (claim costs, administrative expenses) over the life of the contract (usually many years)
  • Reserves are based on assumptions at time of issue and are not changed (“locked in”) unless reserves become inadequate
  • Assumptions have a Provision for risk of Adverse Deviation (PAD)
  • Acquisition costs are deferred and amortized
  • Premium deficiency recognized if a probable loss

• **Statutory accounting has similar but not identical concepts**

• **Both US GAAP and statutory insurance reserves include an element of conservatism that would normally be considered part of equity under US GAAP accounting**
Reserve Adequacy Tests

**US GAAP**
- Formula Reserves
- Assumptions are company best estimate with PAD
- Assumptions locked in at issue

\[ \text{Reserve} = PV(\text{future benefits and expenses}) - PV(\text{future \textquotedbl}net premiums\textquotecode{\textquotedbl})) \]

**Statutory**
- Formula Reserves
- Prescribed (conservative) assumptions for mortality and interest rates
- Assumptions locked in at issue

\[ \text{Reserve} = PV(\text{future benefits}) - PV(\text{future \textquotedbl}net premiums\textquotecode{\textquotedbl}) \]

**Adequacy Test**

**US GAAP**
- Loss Recognition
  - Current best estimate assumptions, no PAD
  - Reflect full premium, not just net premium
  - No overhead expenses
  - Can only increase reserves
- Current best estimate assumptions, no PAD
- Reflect full premium, not just net premium
- No overhead expenses
- Can only increase reserves

**Statutory**
- Asset Adequacy Testing (AAT)
- Moderately adverse assumptions (current best estimate with PAD)
- Reflect full premium, not just net premium
- Test range of economic scenarios
- Amount of additional reserves, if any, can increase or decrease each year
GAAP Accounting for Living Benefit Embedded Derivative

- An insurance liability accounted for as a “swap,” with the policyholder paying fees (fixed) and Prudential paying claims (floating)
- Insurance claims are valued under fair value accounting standards (FAS 133 and FAS 157) and are defined as the price paid to transfer a liability (an exit price) in an orderly transaction between market participants
  - No Active Market
- Claims are valued using the following:
  - Option pricing (“risk neutral”) valuation as if a traded derivative
  - The fair value of the liability is marked-to-market each period
  - No active market to trade the liability, and liability is illiquid since the policyholder cannot demand future benefit payments in a lump sum
  - Valuation reflects the company's own credit risk
  - Only way to access liquidity is to either partially or fully surrender the contract for its Liquidation Value, which results in the policyholder losing either part or all of the contract guarantees and in certain cases paying surrender fees
- Some products with living benefit guarantees are accounted for as insurance liabilities instead of embedded derivatives even though risks are nearly identical
  - Accounting differences create challenges in comparing financial results across the VA insurance industry
- Not a derivative for Statutory and IFRS accounting standards
**Living Benefit (LB) is an Insurance Liability Accounted for as an Embedded Derivative under U.S. GAAP**

<table>
<thead>
<tr>
<th></th>
<th><strong>Real Derivative</strong></th>
<th><strong>Living Benefit - Economic Lens</strong></th>
<th><strong>Living Benefit – GAAP Accounting Lens</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Notional</strong></td>
<td>✓</td>
<td>✓ Notional Protected Withdrawal Value</td>
<td>Notional Protected Value is the Protected Withdrawal Value</td>
</tr>
<tr>
<td><strong>No Up-front Investment Required</strong></td>
<td>✓</td>
<td>✓ Policyholder must make premium deposit</td>
<td>GAAP bifurcates VA between base contract and LB embedded derivative, with the policyholder premium deposit considered part of base contract; Additional fee for living benefit feature is required</td>
</tr>
<tr>
<td><strong>Net Settlement</strong></td>
<td>✓</td>
<td>✓ Claims paid over time with no liquidity</td>
<td>GAAP categorizes claim payments made over time to be de-facto net settlement</td>
</tr>
<tr>
<td><strong>Active Market</strong></td>
<td>✓</td>
<td>✓ No market to trade liability-use option valuation</td>
<td></td>
</tr>
</tbody>
</table>