PPOs: An increasing challenge for insurers
ALM perspective

Current Issues in General Insurance
GSAM Insurance Asset Management
May 2013
The impact of inflation on the insurance industry

Inflation vs. Insurance Combined Ratio

Source: AM Best
This information discusses general market activity, industry or sector trends, or other broad-based economic, market or political conditions and should not be construed as research or investment advice. Please see additional disclosures.
Inflation affects both the asset & liability side of the balance sheet.

**Assets**
- Erodes real asset return

**Liabilities**
- Decreases profitability, higher strain on Solvency ratios
- Particularly affects long-tail business lines

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Periodic Payment Orders (PPOs)...
...from an ALM perspective

- What indexation method is employed for PPO payments
  - ASHE survey
  - Earnings Index
  - Retail Price Index (RPI)

- How does inflation impact PPOs?

- How does that influence the optimal investment strategy?
  - Credit
  - Equity exposure

ASHE – Annual Survey of Hours and Earnings
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Indexation Method

ASHE vs. Average weekly earnings

- Survey vs. Index
- Not “hedgeable”
- Short history, annual data points

Rising inflation will impact PPO Claims
- Close link to RPI but basis risk emerges

Source: ONS.
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Measuring RPI inflation sensitivities

Average earnings change conditional on RPI

- Correlation is stronger in the tail of the distribution
- It is possible to adapt the investment strategy to make it more efficient

Source: ONS.

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Hedging

- Regime switching nature of inflation

Historical and projected Sterling inflation

Hedging solutions available:
- Inflation linked bonds
- Inflation swaps
- Limited price indexation (LPI) swaps

Source: GSAM, as of 21 March 2013
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Impact on economic variables

- Rising inflation would lead to an immediate rise in interest rates

- Investments in FRNs (e.g. Bank loans, FRNs) would provide a medium term solution

Source: GSAM

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Adapting the long-term investment strategy

Correlation between inflation and assets under different regimes

Some assets exhibit a natural link to inflation

- Average earnings linked to both inflation and economic growth.
- Investments in assets whose performance follows the state of the economy:
  - **Equities**: Tend to outperform in periods of high economic growth.
  - **Real assets**

Source: GSAM, Barclays. Deflation/Low inflation is defined as inflation below the 10th percentile of the distribution, High inflation is defined as above the 80th percentile of the distribution. Past correlations are not indicative of future correlations, which may vary. There is no guarantee that these objectives will be met. The portfolio risk management process includes an effort to monitor and manage risk, but does not imply low risk.
Key takeaways

- **Use of inflation hedge overlays**
- **Dynamic approach - hedge ratio is adjusted to market conditions**

**Short term**

*Hedging*

- Rising inflation will impact rates
- Floating rate products would mitigate the risk of rising rates

**Medium term**

*Floating rate investments*

**Long term**

*Inflation resilient investments*

- Long-term cash flow matching specific asset classes may be considered:
  - Certain equity sectors, high dividend equities
  - Real assets

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