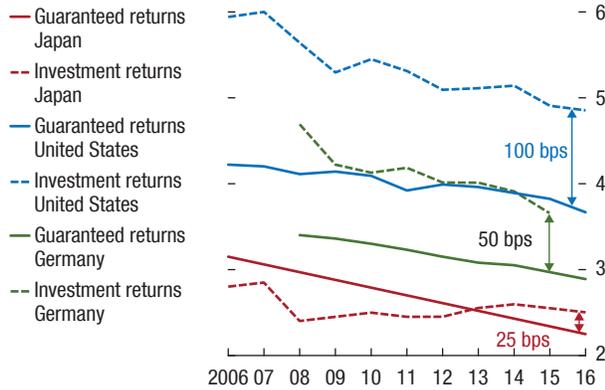


Figure 1.10. Changes in Life Insurance Companies' Business Models

Facing investment spread compression, life insurers in Germany, Japan, and the United States have reduced guaranteed returns ...

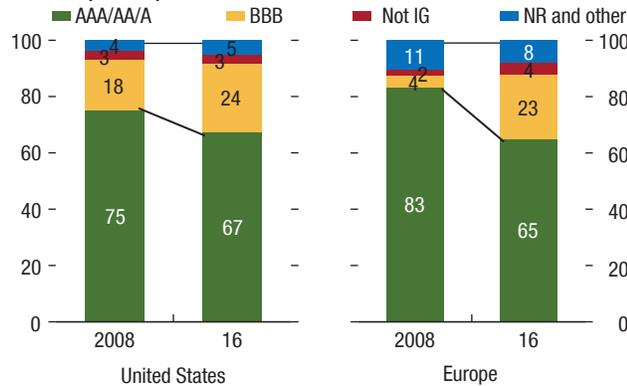
1. Average Investment Returns and Guaranteed Returns (Percent, on existing portfolios)



Sources: Bundesbank; NLI Research Institute; and Office of Financial Research. Note: bps = basis points.

Searching for yield, US and European life insurers have invested more in lower-rated bonds ...

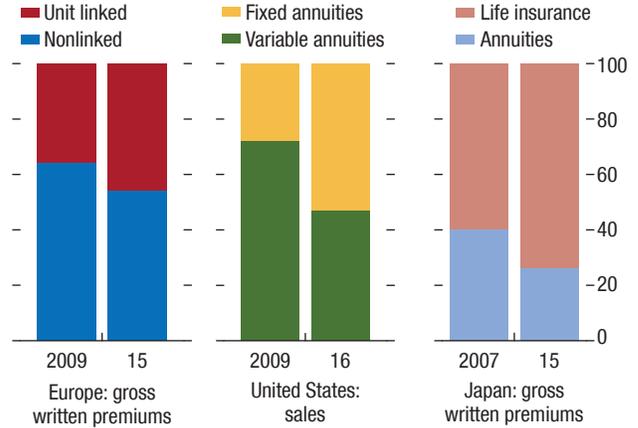
3. European and US Life Insurers: Bond Asset Allocation (Percent)



Sources: SNL Financial; and IMF staff estimates. Note: Not IG = noninvestment grade: bonds with ratings lower than BBB-; NR = not rated. NR and other may include some loans.

... and have been gradually changing their product mix.

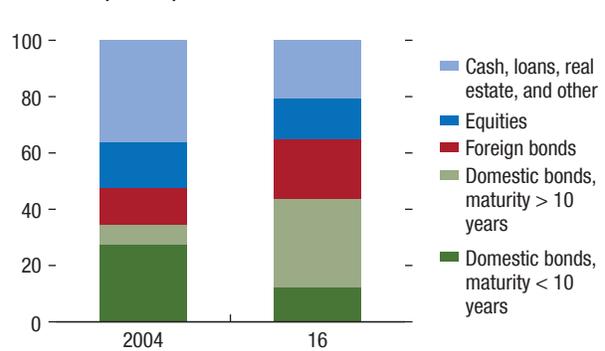
2. Changes in Insurance Product Mix (Percent)



Sources: European Insurance and Occupational Pension Authority; Life Insurance Association of Japan; and Life Insurance and Market Research Association.

... and Japanese life insurers have increased duration and holdings of foreign bonds.

4. Japanese Life Insurers' Investment Portfolio (Percent)



Source: Bank of Japan.