

Fast Facts Defined Benefit Risk Phase 1: Literature Search Report



SUMMARY

Pension risk is a concern for many organizations, given volatile economic and changing demographic conditions.

A Google search on "pension risk" yields 200 million "hits." To assist practitioners in navigating the multitude of available resources on pension risk, the SOA Research Institute sponsored a formal literature search on the topic by David Pitts of Independent Actuarial Services.

This report presents the results of the literature search and review. Of the thousands of articles and reports on pension risk that the research team identified, this report highlights 40 representative publications.

An addendum to the report provides citations for several thousand additional articles and reports on the subject.

HIGHLIGHTS

- Articles on pension risk tend to focus on different components of managing pension risk, which are categorized as follows:
 - Risk Management how pension risks are managed within an organization
 - Includes examples on governance, communications and policy development from outside the US pension sector (financial sector, foreign plans)
 - The CERN and ABN-AMRO examples illustrate the shift in strategic asset allocation development from a static to a dynamic process
 - o Risk Measurement addresses the "how?" of risk analysis
 - Holistic Balance Sheet and Corporate Finance methodology
 - Risk metrics, Simulation Techniques, Stress Tests, and Assumptions
 - Risk *Mitigation* refers to techniques to mitigate all or a portion of pension risk
 - Capital market and insured risk transfer
 - Plan Design and Longevity Risk Transfer
 - Representative Surveys

Caveat and Disclaimer

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GET THE FULL REPORT

Defined Benefit Risk, Phase 1: Literature Search Report <u>https://www.soa.org/globalassets/assets/files/resources/research-report/2020/def-benefit-risk-lit-search-report.pdf</u>

METHODOLOGY

- Google search primarily used for published white papers, research reports, content-based marketing from service providers
- Journal of Financial Management reviewed 15 years' worth of published articles
- Pension Risk Management eJournal of SSRN performed database search on relevant topics within SSRN
- Focus on private and public sector defined benefit plans, excluding Social Security, PBGC, and defined contribution risk

REPORT SPECS

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- Authors: David G. Pitts, FSA, MAAA of Independent Actuarial Services
- Contents: Introduction, Risk Management (Lessons from Outside U.S. Pension Sector, Developing an Integrated Risk Management Process, Sample Communications and Policy Statements, Anecdotal Risk Governance Structures), Risk Measurement (Framework, Metrics, Methods, Assumptions), Risk Mitigation (Capital Market Solutions, Plan Design, Longevity Risk, Surveys)
- Data source: Journal of Financial Management (CFA), Pension Risk Management eJournal (SSRN), Google, provider websites



Predictive Analytics: A Primer for Pension Actuaries

https://www.soa.org/resources/researchreports/2021/predictive-analytics-primer/

RPEC 2022 Mortality Improvement Update https://www.soa.org/resources/researchreports/2022/rpec-mortality-improvement/

Benefit at Risk for Lifetime Pension Pools https://www.soa.org/resources/researchreports/2023/benefit-risk-lifetime-pension/



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