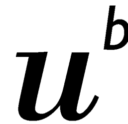

b
UNIVERSITÄT BERN

Wirtschafts- und
Sozialwissenschaftliche Fakultät

Departement Betriebswirtschaft

Institut für Finanzmanagement

Pension plans: Risk and governance

Inaugural dissertation submitted by Oliver Dichter in fulfillment of the requirements for the degree of Doctor rerum oeconomicarum at the Faculty of Business, Economics and Social Sciences of the University of Bern.

Submitted by
Oliver Dichter
from Wangen bei Olten, Solothurn

2016

Paper I:
Pension Risk and Corporate Investment

This paper studies the relation of systematic pension risk (pension beta) and corporate investment in a large sample of U.S. firms. We present evidence of a negative impact of pension risk on investment, which is consistent with the view that firms forego valuable investment opportunities because they fail to notice that systematic pension risk causes an upward bias in the discount rates they use in capital budgeting decisions. The pension risk bias in investment is economically relevant and not limited to financially constrained firms. The study can be generalized to all firms that base their investment decisions on a firm-wide discount rate without noticing the different sources of systematic risk.

Paper II:
The Duration Gap Matters: How Pension Duration Affects Equity Returns

This paper empirically studies whether equity returns of U.S. nonfinancial firms reflect the systematic interest rate risk of the sponsored defined benefit pension plans. It is not obvious that they should. Pension accounting rules are complex and pension assets and liabilities are held separately from the firm's operating assets. We find that the gap between the duration of pension assets and pension liabilities affects the interest rate exposure of the sponsoring firm without bias. This is consistent with the hypothesis of informationally efficient capital markets. Our results are robust to a wide range of assumptions regarding the duration of pension liabilities and pension asset classes and are not driven by firms with negligibly small pension plans or firms in financial distress. Besides, our results are neither caused by the recent financial crisis nor explained by the subsequent years of historically low interest rates.

Paper III:
How the Chairman's Personal Preferences Affect Public Pension Risk

Based on the analysis of 343 changes of chairpersons in 110 U.S. state and local government pension boards of trustees, this paper shows that the risk from the mismatch between pension assets and liabilities reflects the personal risk preferences of the chairman of the board (COB). We find that pension risk is negatively affected by an increase in COB age, and that it is lower if the COB is a woman. We also find that pension risk is higher if the COB is an annuitant of the plan, consistent with an incentive of retirees to gamble for higher benefits. Finally, we observe that the risk of public pension plans is higher if the COB is an ex officio trustee, possibly because reporting rules enable politicians to avoid tax increases or spending cuts by boosting the risk of the fund's assets. The current underfunding problems faced by public pension plans are hence partially a consequence of past decisions of pension COBs. Our results are robust to different definitions of pension risk, economically relevant, and particularly strong for more poorly governed pension plans. We find no evidence of an endogenous selection of COBs to pension plans that match their risk preferences.