Empirical Determinants of Adopting Defined-Contribution Corporate Pension Plans in Japan

Kazuo Yoshida¹ and Yutaka Horiba²*

¹Nagoya City University, Japan
²Tulane University, USA

Abstract

Traditional Japanese corporate pension plans with defined benefits (DB) for their retiring employees have been saddled with serious underfunding difficulties since the major stock market crash of the early 1990s. Partly in response to the deteriorating corporate pension conditions, the Japanese parliament passed new laws in 2001 allowing the establishment of defined contribution (DC) pension plans by corporations. The DC plan circumvents the underfunding problem by linking the benefit payout to the actual market valuation of the accumulated pension assets which are managed by individual employees in collaboration with an independent financial contractor of the plan.

This paper is based on a detailed examination of the comprehensive set of Japanese corporations listed on the Tokyo Stock Exchange as to the factors that led to their decision to adopt a DC plan during the period 2001-2015. The covariates examined are a mix of financial and labor organizational factors including the employment size, the extent of the existing DB underfunding liabilities, overall debt exposure, operational profit and its variability, stock market valuation of the firm, firm-wide average age of the employees, job turn-over rate, the strength of the enterprise union representing the employees, and the cross-share holdings of the corporation’s equity by financial institutions.

Rigorous statistical testing is performed with the use of the multivariate, time-varying Cox proportional hazard model to explain the relevance of each proffered hypothesis. The result reveals a starkly different outcome in contrast with empirical findings reported in the literature focusing mainly on U.S. corporate behavior. Our findings point to the relevance of several unique aspects and features of Japanese regulations as well as business practices in explaining the Japanese corporate DC adoption decision.

Keywords: pension, defined-contribution, Japanese corporations