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Political-economy of pension plans: Impact of institutions, gender, and culture

Raj Aggarwal, John W. Goodell *

Department of Finance, University of Akron, Akron, USA

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ABSTRACT

National pension systems are an important part of financial intermediation and worker welfare in most countries, but how and why do they differ internationally? Controlling for important political, economic and social institutions, we document that international differences in pension progressivity, or how pensions reflect lifetime earnings, are negatively related to masculinity, uncertainty avoidance, individualism, long-term orientation, employment rights, average pension levels, social trust and economic inequality. We also find that pension progressivity is positively related to the economic and societal role of women, the extent of Catholicism; as well as political voice and accountability. These results provide important insights for both public policy and MNC managers.

1. Introduction

The nature of national pensions is of great interest not just for public policy in an age of declining fiscal flexibility and ageing populations, but also for the corporate design of private pension plans for their employees. Besides, pension assets are a large and important part of national financial systems. Indeed, it is estimated that 2009 global pension assets amounted to over $23 trillion.[1] So, the nature of national pensions and the determinants of their international differences are of great concern in money management, financial intermediation, and capital markets; in addition to their importance for pension reforms and national fiscal policies.

In addition, the nature of public pensions is of vital concern to corporate human resource management. As described by Samwick (2004) and others (e.g., Willmore, 2000), traditionally pensions have been regarded as consisting of three components: public pensions, occupational pensions, and private pensions. Public pension design is very important for private human resource managers, especially if we consider that most public pensions are likely to be somewhat flat and not earnings related compared to private pensions that are generally earnings-related. Indeed, the design of private pensions is particularly impacted by the earnings-related portion (even if small) of the national pension system. Consequently, well-designed private pension plans are generally responsive to the design of the national pension system and it is reasonable to expect that the resource value of private pensions to both the employee and to the firm to be affected by the design of public pensions. Similarly, employee attachment to the firm is likely to be affected by the impact of public pensions on private pension design (Schiller and Weiss, 1979).

However, in spite of the importance of pension plans, very little is known, even in this age of increasing globalization, about why they differ internationally. With rising global interest in pension plan reforms, such knowledge could provide critical and useful insights. In this paper we investigate the determinants of the international variations in pension plan progressivity, one of the most significant aspects of national pension designs. Progressivity of national pensions reflects how public pensions are related to lifetime earnings; with more progressive pension systems having flatter benefits that are less related to lifetime earnings. The principle question we ask in this study is: how do the national political-economy, institutions, and cultural characteristics influence the progressivity of national pensions?

In this paper we document that international differences in pension progressivity are significantly impacted by national culture even when controlling for important political, institutional and social factors. We find pension progressivity negatively related

* Corresponding author. Tel.: +1 330 972 5361; fax: +1 330 972 5970.
E-mail addresses: aggarwa@uakron.edu (R. Aggarwal), johngoo@uakron.edu (J.W. Goodell).

[1] Importance of these assets is rising, with the ten largest national pension systems having grown an average of 6.6% per year for the last decade (R. Sullivan, "Global Pension assets up 15%" *Financial Times* 1 February 2010, p. 2).

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to masculinity, uncertainty avoidance, individualism, and social trust. We also find it is positively related to the economic and societal role of women, a more feminine cultural environment, the extent of Catholicism, as well as overall political voice and accountability. We also find that national pension progressivity is negatively related to employment rights, average pension levels, and economic inequality. Further, these results are robust to alternative variable measurements and different estimation techniques. We contend that these robust results regarding the institutional impact on pension plans provides important insights not just for the feasibility of various pension system reforms, but also for money managers and financial intermediation and particularly for MNCs and pension plan managers as they engage with respective external institutional environments.

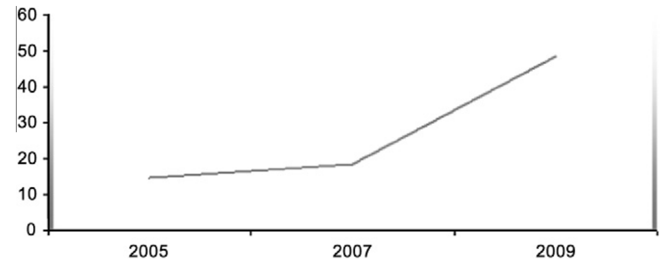

Fig. 1. Importance of pensions assets in financial intermediation. This figure shows the ratio of pension wealth to financial system deposits for the sample of this study. This ratio is formed from data on national pension wealth from OECD *Pensions at a Glance*, GDP per capita from World Development Indicators, and financial system deposits to GDP from Beck et al. (2000).

2. Importance and role of national pension plans

2.1. Business importance of pension plans

Pension systems are important for most companies as they represent an important part of employee benefits and are generally a significant expense. Popkin (2005) notes that, according to 2004 data from the U.S. Bureau of Labor Statistics, businesses paid an average of $7.40 in benefits for each hour their employees worked so that private pensions are 14% of these benefit costs. Many traditional companies with defined benefit pension plans have faced bankruptcy, with their unfilled pension obligations a major contributor to the bankruptcy. While a large number of such pension plans have been replaced by defined contribution plans that do not have related deferred pension obligations, pension contributions continue to be a significant part of employee compensation and a major current expense. Munnell et al. (2006) offer several possible explanations why employers are stopping their defined benefit plans. They suggest that companies are cutting pensions to reduce workers' total compensation because of global competition or because of growing health or because of the market risk, longevity risk, and regulatory risk inherent in defined benefit pension plans.

Pensions are also a major part of national financial intermediation. Pensions systems are very important in most countries for many reasons not the least of which is their sheer size. Just US state pension liabilities as of June 2009 equaled $2.3 trillion, with the average annual costs of managing these funds running about 23 billion (about 1%). As another perspective, according to Fund Management 2010 of *TheCityUK*, global pension assets under management in 2009 amounted to $28 trillion compared with $23 trillion in all mutual fund assets under management out of $105 trillion in total funds under management in the money management industry globally. According to the 2010 Global Pension Asset Study by Towers Watson, among developed countries public pension assets as a percent of total funds under management varied from 11% in the UK, 30% in the USA, to 70% in Japan. Clearly, national pensions are a very large part of the financial intermediation industry. Given projected demographic changes, future pension entitlements will most likely be even more important. This is indicated by Fig. 1, which shows the recent growth in pension wealth (the present value of future entitlements) as a proportion of the total funds under intermediation for the countries in our sample.

Additionally, pension systems generally contribute significantly to the development of national financial systems (e.g., King and Levine, 1993; Bekaert et al., 2005; and Rajan and Zingales, 1998). Pension investments have long-term horizons and pension systems are often the largest and earliest institutional investors in a country, helping create demand for equities. In other words, the need and ability to make long-horizon equity investments for pension funds is an important factor in the development of national capital markets (Gale, 1998; Walker and Lefort, 2002). This contribution of pension funds is particularly important as financial development has been seen as contributing significantly to economic growth (e.g., Demirguc-Kunt and Maksimovic, 2002; Levine and Zervos, 1998). Recently, there has been increasing interest in investigating the causalities and correlations between financial development and changes in economic inequality. Of particular interest, Gimet and Lagoarde-Segot (2011) find that financial development, particularly development of the banking sector, raises economic inequality. As national pensions reflect and change income redistributions and significantly influence financial development, national pensions are an important and potent lynchpin affecting the relationship between financial development and inequality. Thus, understanding pension systems is important as they influence economic inequality and contribute both to financial development and to economic growth.

As pensions are an important part of financial intermediation in most countries, they generally directly influence much corporate financial behavior, for example with regard to capital structure and risk management (e.g., Franzoni and Marin, 2006; Jin et al., 2006). However, the influence of the nature and design of national pensions extends much further into corporate management. One of the major reasons for corporate managers to consider the nature of national pension provisions is that they effect the nature, extent, and utility of private pension benefits (Samwick, 2004).

In most countries, public and private pensions are highly interrelated. Public pensions, private pensions, and additional private savings are often depicted as the three legs of the same stool so that "Changing any one of the legs likely necessitate changes in the other legs if the stool is to remain stable" (Samwick, 2004).[2] As most private pensions are generally earnings-related, public pension design is very important for MNC managers, especially if we consider that most public pensions are basically flat and not earnings related. We consider that earnings related private pensions are likely more valuable in environments with flat public pension, as an earnings-related component of pensions is not being publicly supplied. Thus, a well-designed private pension plan should reflect the degree of progressivity of the national pension system. Consequently, MNC managers need to understand national pension progressivity and its determinants to better design the private pension systems for their national subsidiaries.

Further, previous literature has noted that added cultural distance is typically an impediment to MNC profitability (e.g., Hutzschenreuter and Voll, 2008). Additionally, it has also been noted

[2] The three-leg illustration of Samwick (2004) is closely analogous to the theoretical pension taxonomy of the World Bank (World Bank, 1994). Pillar 1 is described by the World Bank as a universal flat pension; Pillar 2 is earnings-related pensions; and Pillar 3 is voluntary individual savings. The theoretical taxonomies of Samwick and the World Bank are clearly similar.