Do Funded Pensions Contribute to Higher Aggregate Savings? 
A Cross-Country Analysis

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I. Introduction

Although quite diverse in scope and nature, pension reforms world-wide share a common aim in that the majority of them strive to move towards a system that would rely more heavily on funded pensions. An important motivation underlying this policy objective is the notion that the accumulation of pension assets contributes to stimulating aggregate savings. In industrialized countries, the recognition that population aging requires increased savings for retirement is the main factor driving policy makers to promote higher saving rates. In emerging markets, on the other hand, the desire to raise savings is motivated by the belief that higher levels of domestic savings are necessary in order to finance higher levels of investment, which – together with the externalities on productivity that they entail – are thought to be central to the growth process.

Empirical support for the premise that an increase in funded pensions would positively impact savings is largely based on the results of

Remark: We would like to thank Robert Holzmann, William Gale, Ken Kletzer, Mike Dooley, Menzie Chinn, Klaus Schmidt-Hebbel, Richard Kohl, Sébastien Dessus, Monica Queisser, Julia von Maltzan and an anonymous referee for helpful comments and suggestions. Any remaining errors or omissions remain ours.

1 A funded pension plan is one in which pension obligations are covered, either partially or fully, by assets.
2 In theory, domestic investment can also be financed by external savings, and hence low levels of domestic savings, ceteris paribus, need not necessarily lead to lower growth. In practice, however, few countries have been able to rely on substantial amounts of foreign capital to finance domestic investment over a considerable period of time (see Reisen 1996 for more details).
household-level studies that have been conducted for a few industrialized countries. Although informative in assessing how a household’s savings will be affected by an increase in its pension wealth, this body of empirical work cannot directly address the issue of how aggregate savings will behave in response to a national buildup of pension assets. A few studies – based on the experiences of Chile, Malaysia and Singapore – have examined this question from an aggregate perspective but have failed to produce conclusive evidence.

In addition to yielding mixed outcomes, these aggregate-level studies also suffer from an important shortcoming in that their econometric analysis is based on a relatively small number of degrees of freedom. Indeed, the time series employed are relatively short because annual figures related to funded pensions are, in general, not available for a very long time period. One way to overcome this problem would be to pool data across a group of countries. To the best of our knowledge, no existing study has empirically investigated the role of funded pension wealth in the determination of aggregate savings in a cross-country context.

The purpose of our paper is to test the hypothesis that increases in funded pension wealth contribute to higher aggregate savings by employing a panel data set of ten countries (both industrialized and emerging-market) over the 1982-1993 period. In doing so, we are able to draw on a variety of country experiences and hence to utilize a richer set of information in estimating the impact of increases in funded pension wealth on aggregate savings than would be available with any individual country. We develop a proxy for changes in funded pension wealth for this sample of countries based on pension fund asset data. Using this constructed measure and controlling for other determinants of savings, we estimate the relationship between aggregate saving rates and changes in funded pension wealth. Our results suggest that the buildup of pension assets does indeed exert a positive and statistically significant

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3 See Gale (1995), OECD (1997a) and Schmidt-Hebbel (1997) for a discussion of these studies.
4 In their analysis of the Chilean experience, Corsetti and Schmidt-Hebbel (1996) and Morandé (1996) provide some support for the idea that the 1981 pension reform – and the subsequent growth in private pension funds – contributed to increasing private savings over the 1980s and early 1990s. Faruqee and Husain (1994) find evidence that provident fund saving had impacted the private savings rate over the 1970–1992 period in Singapore but not in Malaysia. And finally, Husain (1995) found provident fund saving to be a statistically insignificant determinant of private consumption in Singapore, thus contradicting the results in Faruqee and Husain (1994).