Public Pension Reform in the United States and Japan

July 18, 2000
(revised by OSM 10-20-00)
Pension Forum/NLI Research Institute

10:15 am Olivia Mitchell, University of Pennsylvania

In my discussion today, I would like to offer a few perspectives on global challenges for pension design. In talking about these challenges, my views come partly from the developed world – and Japan as a key player in the developed world – and also from my experiences in developing countries, because I've done a lot of work in Latin America and Southeast Asia.

Three Waves of Pension Growth

My first point has to do with what I see as an evolution in the structure and design of pension systems around the world. I will delineate three generations of pensions, each of which I will tell you about in a minute. Let me explain start by defining terms, in particular what I mean by defined benefit and defined contribution pensions. In a defined contribution plan, the notion is that the sponsor of the plan tells you the contribution amount into the fund. For example, it might be a percent of pay, or it might be a flat money amount. The funds are invested; the participant bears capital market risk; and the benefits are not specified. Usually you only find out how much money you have only at retirement.

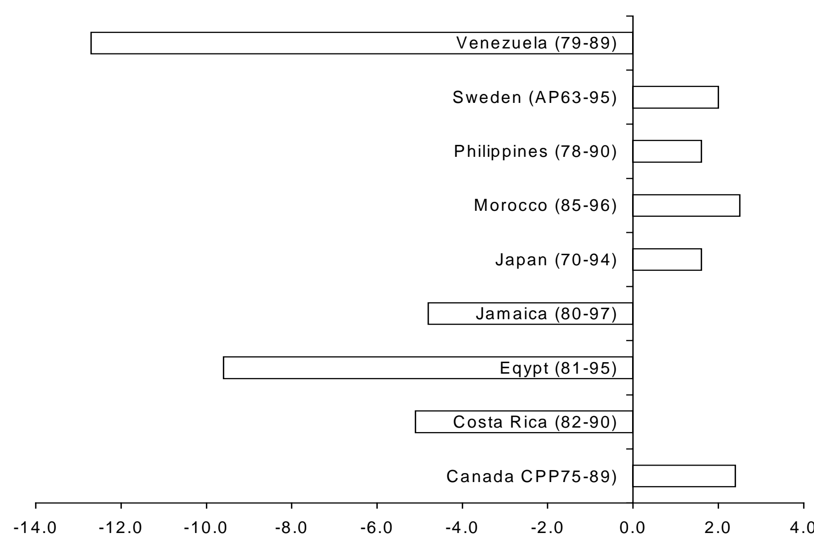
By contrast, in the defined benefit plan the benefit formula is specified. Typically, the contributions must be evaluated by actuaries, who tell the plan sponsor how much money must be set aside to hit the benefit target. This is a function of plan liabilities and investment performance. The sponsor of the plan bears capital market risk. So, if the assets go up in value, the sponsor pays less; if the assets go down, the sponsor pays more.

What has been the problem with this first generation of pension plans? One big problem is that many defined benefit systems have lost credibility. In many cases they are in terrible financial problems, and they face the difficulty that contributions cannot easily be increased much more. Many of these plans are underfunded, which means that promised benefits are very high, but the assets fall short. Frequently, too, these plans have very poor investment results. A related problem

is has had to do with poor "governance", where pension trustees may have conflicts of interest and don't necessarily invest in the best interests of the pension participants. So these are some of the problems with the defined benefit model.

To offer some concrete examples, I show annual real returns earned on defined benefit plans across a range of countries. If we examine the vertical line at zero real returns per annum, we note that Venezuela experienced minus 12% per annum real returns; and Jamaica, Egypt and Costa Rica also had very poor investment performance. Part of the explanation for such abysmal returns includes inflation and administrative costs that have devastated pension fund in many nations.

Ref.1 Poor real returns pa: int'l DB

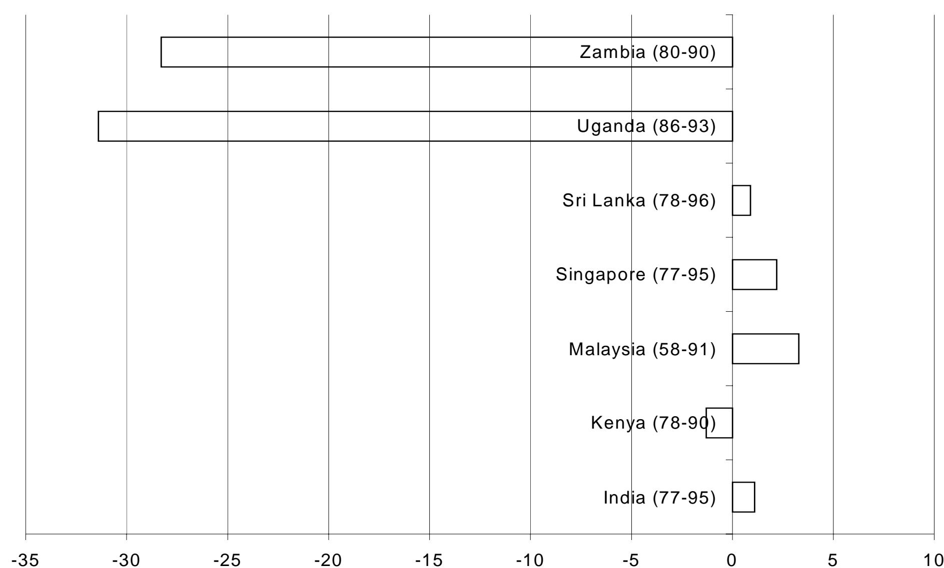


That was the defined benefit model. What about the defined contribution model? There has been a second generation of pension plans that I call "mastery plans," defined contribution systems known as "provident funds". These provident funds have been popular in parts of Asia and Africa, as well as in the Caribbean. They are defined contribution systems, typically operated by the government, and they also have a number of problems.

The main element in these provident funds is that they are centrally run and organized. "One size fits all" has been the theme: that is, one plan for everybody, lacking flexibility and diversity.

They also have labored under a great deal of regulation: contributions are fixed by law, investments are fixed by regulation. These plans have grown but most participants don't really understand them. I was in Singapore a couple of weeks ago, which has one of the most famous provident funds in the world. But very few participants understand what this provident fund is doing, where their funds are being invested, and they're not much engaged in the accumulation process. To illustrate the investment performance of some of these provident funds, once again the results are less than stellar. In Africa, for instance, they've done spectacularly badly, and even in Singapore, Malaysia, and Sri Lanka the evidence indicates quite small annual real returns. I also note that the end dates in the chart are before the Asian crisis; if one included the Asian crisis, the performance would be even less good than this.

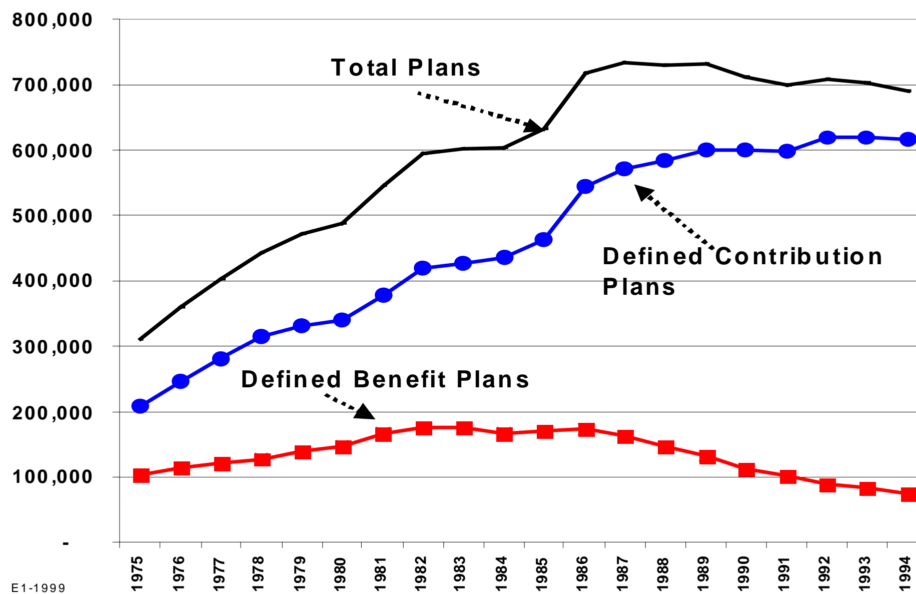
Ref 2 Poor real returns pa : global DC



That brings us to what I call the third generation of pensions, and this is the area in which we're all interested: 401(k) plans, the newest model for defined contribution pensions. These are wildly popular but bring a new set of challenges, which I summarize as: new standards for performance; new challenges about reporting and disclosure, information; and new roles for stakeholders who now need to take on much broader responsibilities.

As you probably know, all the growth in pensions in the U.S. is in the defined contribution arena. Defined benefit plans are seen by many as dinosaurs, and no one is starting new defined benefit plans. One reason the 401(k) model has been called the “engine of growth” is that it permits individual workers to defer salary—to take some of their salary and put it into the plan, pre-tax, up to a limit. Last year, the government permitted employers to automatically take part of the salary of employees and put it in the pension plan automatically. Employees are permitted to opt out if they do not want their salary automatically deposited, but the psychology of automatic withdrawal has proved to be a powerful way to get people into the plan.

Ref 3 : DC pension market in US



Another reason why these new-wave plans are popular is that employers will typically match employee contributions. So from the employee’s perspective, a dollar-for-dollar match is a 100% rate of return in the first year. We do have some tax qualification limits. Right now, the limit is around US$10,500, though there are proposals to raise this cap on tax-protected limits. I mention the US limits because I know in Japan, the proposed limits are much lower. If the 401(k) model is to be a strong one, the limits will have to be raised.

The defined contribution 401(k) model is also appealing because it offers participants multiple investment options. Three are required by law at a minimum, but it is very common to

have more. For instance in my own pension plan, we have around 76 investment options – which may be too many, but it certainly provides a great deal of choice! The trend is toward more flexibility, and more options over time. Another reason these plans are appealing is that they have relatively short vesting periods; five years is the legal maximum, and immediate vesting is also possible. Early vesting is appealing because it permits mobile workers to take their money with them when you change jobs. If a country is seeking to encourage more labor market flexibility, easier vesting is useful.

An additional point regarding 401(k) plans is that people are currently allowed to take their money out in a couple of ways prior to retirement. One way is that they can take a loan, of up to half the cash value; about one-fifth of participants have taken a loan. The problem is that people use the loan to buy a house or to do other things, but they are not preserving it for retirement. This is a problem if the goal is retirement saving. Another aspect of leakage is that when workers change jobs, they can roll the funds into a new pension, or they can take the case as a lump sum and spend it. The lump sum cashout does not preserve the funds for retirement.

Still focusing on 401(k) plan design issues, questions come up about investment options, administrative costs and liability. Currently in the US, the employer selects which investment options the participant may choose between and then, typically, the employer outsources money management. This is related to both costs and liability. When an employer selects investment options that turn out to be very expensive, the question arises as to who bears the responsibility for the money not being well invested. Another possibility is that employees may seek to sue the employer for choosing the wrong money manager. So far, in the US, such suits have not been successful, but if the stock market goes down for a long period of time, people may push harder on this front.

In addition to selecting investment choices, employers have realized they also need to help employees learn more about investing. In particularly, they need to teach participants about risk and return, because employees don’t really understand the issues of the trade-off. For example, when it comes to performance evaluation, one question is how often do plans need to report to participants? A related issue is to whom do they need to report—to the employers, to the

employees, to the government? What kinds of things must be reported—risk and return, actual performance, and/or expenses? Should this information be converted into retirement accumulations and targets? Clearly the whole area of employee education has become a new and very important industry. It is interesting and perhaps ironic that when employers give plan participants a choice about where to invest their retirement funds in a DC environment, they often end up investing much as the DB plans did. I find this somewhat of surprising. So the evidence shows that DC participants hold 60% to 70% in equities; maybe 30% in fixed income; and very little in real estate and cash.

A related concern is that of plan administrative expenses. Recent data from Vanguard shows some of the lowest management fees in the business. The chart indicates that the funds above the line are retail funds, while the last two items are institutional funds, oriented toward pension plans. Expenses are expressed in basis points, or a hundredths of a percent of assets. The table indicates some very low numbers: always less than 100 basis points, and as low as 12 or 15 basis points. Numbers like these are becoming the "gold standard" for index fund administrative costs in pension plans around the world.

Ref 4 : Annual Vanguard Expenses

(in hundredths of a percent or basis pts, 1999)

Account Type	Expenses (BP)	Fund Size
Int'l Growth (1981)	58	$9.7B
Windsor II (1985)	39	19.1
Wellington (1929)	30	26.9
Windsor (1958)	28	17
Growth Index (1992)	22	15.2
Bond Mkt index (1986)	20	9.5
Prime MM fund: Inst (1989)	15	1.7
Value Index:Inst (1998)	12	32.5

Before moving on, I would like to briefly touch on cash balance plans, now becoming a major topic of conversation in the US. Cash balance plans are an intermediate, or a hybrid, type of a plan, in that they look like a defined contribution pension, but at least in the U.S., they are treated like a defined benefit plan. About 40% of the big companies have adopted them, some of whom see cash

balance as an intermediate position on a road to defined contribution. Let me explain how they work, in case you're not familiar with them. In a cash balance plan, the employer promises to deposit some amount— say, 6% of your pay—per year into an account. So that sounds like DC. But, then the employer guarantees a rate of return on the performance of the investment in that account. It's the guarantee that makes it a defined benefit plan under U.S. law.

Employees like a cash balance plan because they get an annual (or sometimes quarterly) report and they feel a sense of ownership. Employers like it, because the plan has a smooth accrual path. That is, people gain access to a benefit smoothly with time on the job. In a defined benefit plan, by contrast, benefits were back-loaded, so the accrual was quite low early in life and went up late in life. Mobile employees like the smoother accrual path better. Companies like cash balance plan because they can promise employees a guaranteed bond rate of return on the cash balance investment, but meanwhile invest in equities. In fact, at present they appear to be making money on these portfolios. In some cases today, firms may be making more money in their pensions than in the main business of the company.

To sum up the US experience, the state of pensions is mixed at present. Positive developments are that people feel they own their pension assets, especially in the 401(k) model. They believe they can design their portfolio to meet their risk preferences, especially if they're young and they want a large fraction of their money in the stock market. They feel like they have some choice, some flexibility, and some access. There are also concerns, particularly about participant education. The fact that people don't really understand risk and return is a problem, when they come to allocate their assets. We also have the leakage problem I mentioned before. And there are continuing questions about employer liability in investment education. Finally, of course, there remains the ultimate question: are we putting enough into these pensions to achieve a good retirement?

Lessons From the International Experience

Let me briefly introduce some issues from the international experience. First, I will review the case of Chile, a country that instituted individual account pensions on a national mandatory basis in 1981. In that country, 10% of pay must be deposited into these DC accounts and the funds

are invested by private pension managers. A little known fact about the Chilean system is that the pension managers have virtually identical investment portfolios, mostly as a result of regulation requiring them all to have very similar portfolios. This is because early on, pension managers were prohibited from investing outside Chile; now these constraints are loser yet the international investment fraction is still small. More diversification would probably be better, but political and regulatory arguments have hampered this process.

Second, in the international sphere there is growing debate about administrative costs being quite high. In Chile they have been high because agents sell the pensions on a retail basis, worker by worker. Also, there is a lot of churning: people move their assets across pension funds. One pension fund director in Chile said that half of his assets turn over every year, because people are moving across funds. This is again partly because of regulation: participants pay only a one-time front-end load, worth three percentage points of salary (out of the 10% contribution). While it is a high fee, it is a one-time cost and nothing additional is charged to the plan assets thereafter.

Another point that many people do not realize is that the Chilean government continues to offer a safety net, a minimum pay-as-you-go pension worth one-quarter of the average wage. While it is not a high benefit, it is a safety net. This is probably related to another concern, which is low coverage by the system. Some people are working under the table, in the black or gray market. And then there remains the fact that the old social security system had a large unfunded liability, which is still there. This will require tax revenue over time; while the new system did not resolve the transition cost, it did make retirement promises more viable going forward.

To finish the whirlwind tour, I would like to mention developments elsewhere. I believe that Australia has a relatively well-developed individual account system which is mandatory, and privately managed. Currently a point of controversy is that the government seeks to permit what they call "employee choice of fund". This would mean that, instead of having the employer select fund options, individual employees would be able to select any fund in the country. This links up with the administrative cost issue, and also the U.K. controversy about so-called pension "misselling." Some insurers offered DC plans to workers and people apparently didn't know what they were buying. Nonetheless, individual account models are growing and becoming more

popular throughout Europe. Spain and Italy are currently establishing them, and in the next five to 10 years, the whole European Union will move toward this model, to encourage labor mobility.

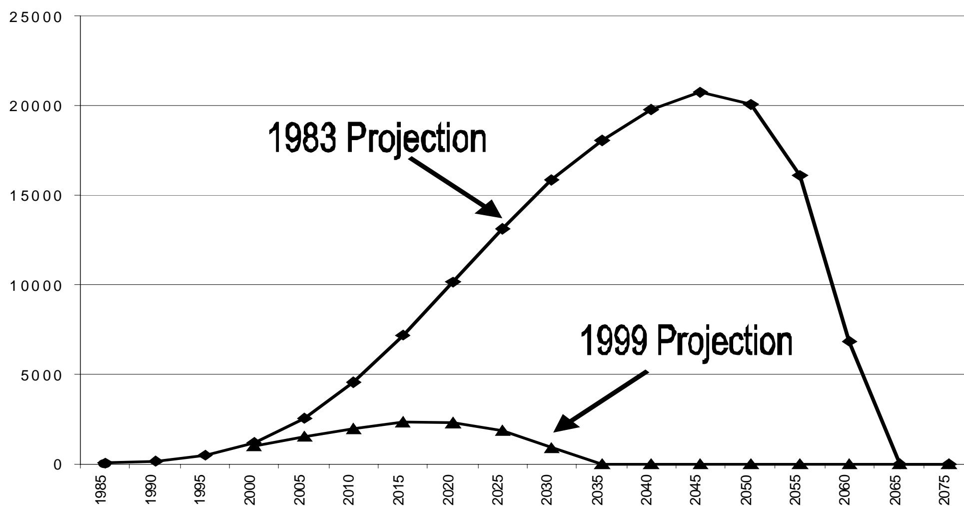
A few words about developments in the Asian and other countries. My perception is there's a great deal of discomfort about Asian provident funds, partly because they're not transparent, and specifically because few understand what really happened to them during the Asian financial crisis. In Malaysia the provident fund was asked to help support insurance companies that were having trouble during that period. Very promising is the Hong Kong mandatory DC system, which has apparently been well-designed according to plan documents. Initial discussions are underway in India and smaller countries in the region, though relatively important financial sector reforms will probably have to be implemented before China and Russia institute DC plans.

Relevance of Social Security Reform

I would like to close with a few words about the relative role of social security in the overall retirement scheme. In the US, government actuaries did a projection for the social security trust fund in 1983 and estimated that our system would become insolvent in 2065. Last year they redid the projection and found the date of insolvency has drawn nearer, now projected to about 2035. So things are getting worse – during our lifetime. And so, it's a big issue now in the political arena.

Ref 5 : US Social Security Trust Fund Going Broke

(Billions of Current Dollars by Year of Estimate)



The chart provides a picture of estimated gaps between projected tax revenue and benefits into the future for the US system. The projected shortfall makes it clear: there are really only a couple of options: raise taxes or cut benefits (or both). You have similar problems here: yesterday I was told that to keep the Japanese public pension system going until 2030, the payroll tax would have to go up to about 27%, whereas in the US it is estimated that the payroll tax would have to go up around 18%. The difference is partly due to the age structure of our two countries, and partly a difference in the benefit generosity.

The topic of Social Security reform has become a very hot political issue almost everywhere. What is most significant in the US context is that now, for the first time, both presidential candidates have embraced a form of individual accounts as part of the national retirement system. This marks a huge departure from tradition. Instead of always supporting the old defined benefit model, now both candidates have proposed an element of defined contribution.

Of course in a political race the candidates remain somewhat vague and their proposals lack detail. In any event, both of them have talked about something like 2% of payroll. Both propose that the plans be voluntary, because they don't want it to look like a tax. But, that has some problems. Both will give the contributions tax preference, and they want private investment management, because of a belief that private investors will do a better job. However, neither candidate has talked about some issues I think are important. One: when you reach retirement, will you be able to take the money as a lump sum or an annuity? I believe that some portion of it should be taken as an annuity. Second: what about inflation protection? I know in Japan you don't currently have inflation, but there was a time, and there will be a time again, when inflation comes back. The third issue is that neither of these plans completely or, in fact, at all, resolves the insolvency, the gap between Social Security revenue and benefits in the long run.

Concluding Comment

In sum, my assessment of developments in the world pension arena is that it is inevitable that there will be more disintermediation in the pension system, and this will bring new challenges. The DC model, in general, and the 401(k) model, in particular, requires participants to take on a bigger share of the burden to become informed, to make saving and investment decisions, and

during the accumulation phase, to focus on the retirement targets. It also requires them to learn about how to trade off risk and return, how to factor in administrative expenses and how to handle taxes. During the decumulation phase, there also remain many questions. Key among them is the fact that in most nations, the elderly have accumulated a great deal in assets, but accessing these assets is problematic. Innovations are required to help develop the financial instruments that people can use to convert these assets into consumption. And finally, in the background, transition costs from the old pay-as-you-go scheme remain and must inevitably shape the retirement system of the 21st century.