Privatization of Public Pension Systems in Developing Nations: A Call for International Standards

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INTRODUCTION

The sustainability of public pension systems in many OECD and non-OECD nations is at a critical junction. After years of maturation and purported financial stability, many OECD nations are implementing or considering the implementation of major reforms to their public pension systems, and many non-OECD nations are addressing fundamental legisla-
tion reform in this area. The principal factor which dominates pension reform considerations is the effects of systematic ageing of national populations on public pension systems. For example, most OECD nations are facing rapid increases in the proportion of retired persons to the worker population, reflecting a combination of the post-war "baby boom" generation, increasing longevity, and declining birth rates. Most public pension systems were designed many years ago when people did not live as long and pension obligations were generally not as high as in modern times, and there was much less likelihood of pension system imbalances between contributions received from the worker population and payouts to the retired population. Although the same pattern of changing demographics in ageing populations generally holds across most OECD nations, there are clear differences among nations in terms of the speed with which such changes are likely to occur.

The ageing patterns in OECD nations are somewhat different from those of most non-OECD nations, which will typically experience accelerating ageing of populations in the form of falling dependency ratios over later decades. In attempting to sustain current public pension systems, the OECD nations inevitably face considerable pressures on tax and spending systems, and declining national savings, resulting in upward pressure on real interest rates and reduced capital accumula-

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2 The populations of many OECD and non-OECD nations have been ageing gradually for some time, and the ageing trend is widely expected to accelerate over the next several decades, as shown by the continuously increasing proportion of retired persons to the working age population in most nations (the "dependency ratio"). The acceleration of ageing is a function of falling and/or low birth rates coupled with increased longevity (longer life expectancy) for retired persons. This trend underscores the fact that challenges regarding the ageing population will be the dominant issue motivating pension reform. See, e.g., ORGANIZATION FOR ECON. CO-OPERATION AND DEV. ("OECD"), AGEING IN OECD COUNTRIES (1996) [hereinafter AGEING].

3 See Dave Turner et al., The Macroeconomic Implications of Ageing in a Global Context, in AGEING WORKING PAPERS: MAINTAINING PROSPERITY IN AN AGEING SOCIETY: THE OECD STUDY ON THE POLICY IMPLICATIONS OF AGEING, Ageing Working Paper 1.2, at 6 (1998) (examining the likely domestic and international macroeconomic effects of varying degrees of ageing across OECD nations and the implications on international flows between OECD and non-OECD regions). The term "dependency ratio" is generally defined to be the ratio of the population not beyond working age (young and old) to those who are beyond working age. Id. at 6 n.2.
tion and growth. The predictable policy responses necessarily include fiscal consolidation, reductions in public spending, incentives to increase national savings, and other necessary changes to existing social safety net systems to reduce or avoid expected increases in public debt from increasing public pension obligations during the 2010-2030 period.

The consequences of universally ageing populations in OECD nations are not necessarily confined to the OECD nations themselves, however, as many of the largest and most productive non-OECD nations are undergoing similar transitions. Moreover, the growth prospects of other non-OECD nations with slower ageing populations will depend on the conditions of OECD nations and international trade in world financial markets. Similarly, the consequences of ageing effects on OECD and non-OECD nations are not necessarily limited to the national economies of the respective nations. The differential changes in national savings and investment balances will have significant implications for international capital flows of goods and financial services between nations and regions, and these implications will likely become apparent in exchange rates and balance of payments dispositions. The degree of such changes will also have significant implications for global savings and investment balances and, by implication, on global interest rates. Notwithstanding the chronic underfunding problems generated by ageing populations, there are other factors influencing the necessity for public pension system reform. These other factors include the following: (1) globalization of financial markets and economies; (2) changes in labor market conditions, family structures, and other so-

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4 See id. at 20.
5 The pension systems having a greater range of adequate funding for future pension commitments resulting from the acceleration in ageing populations will have an easier time meeting such commitments, as opposed to the more expansive pension systems and/or systems that are not quite mature that will experience ballooning pension expenditures.
6 Examining the macroeconomic consequences of ageing populations for a single economy is inherently problematic as the evidence shows that most of the major economies will experience major demographic changes in the next several decades. Thus, the process for adjustment of any single economy must depend on the extent to which ageing is occurring relative to other nations and regions. See Turner et al., supra note 3, at 19.
7 Labor market conditions have changed dramatically over the past several decades, and high or otherwise persistent unemployment is a common characteristic
cial safety net costs into global challenges to pension arrangements; and (3) the growth of population and economic sectors that are largely uncovered by existing pension schemes.9

Thus, the ageing of populations will have significant effects on both OECD and non-OECD nations alike.10 The OECD and non-OECD nations must act to limit exposures to future public pension obligations which exceed contributions and thereby obtain increased capacity to direct funds to other social safety net problems that could develop in the future.11 These policy actions should parallel other regulatory and supervisory reforms which promote greater efficiency and productivity growth, increased transparency, competition, and macroeconomic stability. The dynamic gains from these actions should have a positive effect on the ability to counter losses from the ageing crisis. The timing of relevant pension reforms is critical, as fiscal measures such as reducing pension benefits or increasing the age of pension eligibility will necessarily cause political debate and difficulties in reaching consensus, especially in nations with higher levels of unemployment.12

among OECD and non-OECD nations. Notably, widespread unemployment is creating serious pension funding difficulties in many of the Eastern European nations in transition where many participants are accessing pension benefits simultaneously as unemployment has been increasing and thereby reducing pension contributions. In addition to unemployment, the average employment tenure is generally becoming less robust, and increasing proportions of working populations are expected to encounter periods of unemployment which can affect the accumulation of pension rights, particularly for older men. See David W. Kalisch & Tetsuya Aman, Retirement Income Systems: The Reform Process Across OECD Countries, in AGEING WORKING PAPERS: MAINTAINING PROSPERITY IN AN AGEING SOCIETY: THE OECD STUDY ON THE POLICY IMPLICATIONS OF AGEING, Ageing Working Paper 3.4, at 3 (1998).

There are various sociodemographic trends existing in OECD nations involving changes to family structures. These trends include, but are not limited to, the economic independence and increasing participation of women in the labor force and pension systems and the extent to which children care for their parents and thus enter the labor force at increasingly younger ages. See id. at 21.


10 See Turner et al., supra note 3, at 6.

11 The OECD nations likely to experience the greatest pressures first include Japan, where the ageing process is most advanced, and thereafter include the European Union and the United States over the next 50 years. See id. at 8.

12 See id. at 25.
The postponement of policy action because of political uncertainties or otherwise risks the necessity of introducing more dramatic but otherwise inevitable reforms in later years. Thus, the commencement of early dialogue is essential to carry through the inevitable political debate and otherwise give citizens sufficient time to adjust to forthcoming changes in public pension schemes.\(^{13}\)

In 1994, the pension reform options available were set forth in an analysis of ageing populations by the World Bank.\(^{14}\) The World Bank personnel argued that income security in retirement should reside in a combination of three distinct "pillars" to include traditional pay-as-you-go ("PAYG") public pension systems (first pillar); compulsory funded schemes premised on defined contributions (second pillar); and voluntary defined benefit schemes (third pillar). The current or planned public pension system reforms generally envision new distributions of duties and responsibilities between the respective national government and its citizens as part of an integrated economic and social approach to the "social safety net" system. Such envisioning is viewed in the context of increased competition in the global markets, deregulation in labor markets, and the desire for maximizing value for pension participant benefits juxtaposed against minimizing fiscal pressures to the nation.

Many reform strategies in the leading OECD nations concentrate on the first pillar: changes to current public pension systems to render them financially sustainable over the medium- or long-term by reducing pension benefits or increasing contributions without altering the overall structure. The more dramatic reforms generally attempt to add the second and/or third pillars to currently existing PAYG systems, or otherwise abolish the PAYG system and implement the second and/or third pillar(s), respectively, in order to strengthen the

\(^{13}\) The internal consistency of the chosen reform method and the consistency of the method to the overall economic and social policy framework in the individual nation is critical to sustain reform and implement adopted strategies. The building of consensus, with particular focus remaining on income security, must remain as the key focus of political debate. The other effects of pension reform on capital markets, financial sector infrastructure, or privatization should be maintained as subordinated but nonetheless important objectives of pension reform.

\(^{14}\) See generally WORLD BANK, AVERTING THE OLD AGE CRISIS (1994).
linkages between private contributions and prospective benefits of currently existing public pension systems.\textsuperscript{15} Thus, the policy implications include ensuring a closer relationship between pension systems and social needs, strengthening the relationship between social costs and economic efficiency, and expanding pension participant choice in selecting the investment vehicle for their retirement.\textsuperscript{16}

The public pension system reforms implemented over the past decade represent a diverse mixture of principles, reflecting the desire to achieve greater levels of protection than under the old systems, the increasing dominance of economic concerns over social concerns, the promotion of individual selection, and the enhancement of benefits. These principles generally resulted in the emergence of favorable OECD trends such as (1) the growth of private sector influence in pension schemes; (2) the decline of the role of government coupled with privatization of pension systems; (3) the increased share of benefits in public pension systems coupled with more stringent conditions for entitlement; (4) the relative decline of the income replacement element and relative increase in individual savings elements; and (5) the emergence of supplementary employer-sponsored pension schemes.\textsuperscript{17}

Nonetheless, the issue at the forefront of the public pension reform is unquestionably the medium- and long-term financial viability of currently existing public pension systems. This issue is one of the greatest economic and political dilemmas faced by OECD nations at this time. There exists a global concern among many OECD nations that they should prepare now for the impact of universal population ageing on public pension obligations.\textsuperscript{18} This concern is directly linked to expect-


\textsuperscript{16} See Gruat, \textit{supra} note 9, at 3.

\textsuperscript{17} See id. at 5.

\textsuperscript{18} The United States is no exception, as Social Security reform is now at the forefront of the political agenda given the widely recognized understanding that
ed changes in the financial condition of public pensions funded on a PAYG basis and other fiscal pressures, including fiscal consolidation and the incentive not to overtly restrict government budgets in the future in order to meet increasing public pension obligations. The global concern is also indirectly linked to issues of how the potential burden of providing funds to meet increasing public pension obligations should be placed on future working generations.\(^{19}\) Other concerns generally raised by OECD nations include (1) the appropriate effective age for retirement;\(^{20}\) (2) the adequacy of public pension benefit levels, particularly with respect to Eastern European nations; (3) the size of the population covered by pension schemes;\(^{21}\) and (4) the effectiveness of financial incentives inherent in pension systems for people to work.\(^{22}\) The collective policy approaches utilized by OECD nations, and otherwise available to address these concerns, include reducing pension generosity to reduce the financing pressures associated with the future ageing of the population; increasing pension benefit levels; increasing the level of funding for public pension schemes; and adopting policies to change the effective age of retirement.\(^{23}\)

The alternative approach to modifying the currently existing public pension systems is transitioning from public pension systems to publicly-regulated, privately-managed defined contribution systems through a gradual or immediate quasi-privatization process. The process would be supplemented by establishing or expanding coverage of employer-based or individually-based private savings arrangements. The key region in the world addressing transition to, or wholesale adoption of, a "private" pension system is Latin America.

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\(^{19}\) See Kalisch & Aman, supra note 7, at 22.

\(^{20}\) The long-term trends for declining participation in the labor force of older men, high displacement of older workers from employment, public benefits encouraging early retirement, and greater personal wealth approaching retirement support this concern. See id.

\(^{21}\) The size enhancements would include extending pension coverage to new industries or sectors and increased convergence between public pension schemes and private pension arrangements. See id. at 23.

\(^{22}\) See id.

\(^{23}\) Id. at 24-26.
Beginning with Chile in 1980-1981 and, thereafter, in Argentina, Columbia, Peru, Uruguay, Bolivia, and Mexico in the 1990s, the "private pension system" approaches have been or are otherwise currently being considered or implemented in a number of OECD nations. For instance, the Eastern European transition nations, such as Hungary, the Czech Republic, Kazakhstan, Bulgaria, and Croatia, will use private pension systems to supplement public pension benefits without expanding the public schemes. In addition, Poland will rely on the privately-managed investment earnings of retirement funds to finance the earnings-related portion of the public pension scheme and encourage the development of third level retirement benefits through private pensions and voluntary retirement savings accounts. The People's Republic of China, India, and Russia have also long studied the Chilean model for piecemeal or wholesale adoption to replace or supplement currently existing public pension systems. In addition, many nations have adopted employer-sponsored or industry-sponsored private pension systems, and individual retirement savings accounts with tax incentives, to supplement currently existing PAYG public pension systems.

As a general proposition, most OECD and non-OECD nations support the concept of establishing publicly-regulated, privately-managed private pension systems to either replace or supplement public pension systems. Of course, the political and economic realities of respective nations may simply not permit wholesale adoption of such private pension systems at this time, and the wholesale transition from existing PAYG systems to private pension systems as an OECD "call to arms" may be inappropriate. The policies supporting privatization

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24 Under employer-sponsored pension systems, workers are usually protected through labor laws and regulations whereby affected employers are required to provide specified payments or services directly to their employees, such as payment of lump-sum annuities to the aged or disabled; provision of medical care, paid sick leave, or both; payment of maternity benefits or family allowances; provision of temporary or long-term cash benefits and medical care in the case of work injury; or payment of severance indemnities in the case of dismissal or changing jobs. This approach does not necessarily involve any direct pooling of risk, as liability for payment is placed directly with the employer without government guarantee.

25 Notably, the political and economic circumstances in Chile in 1980 clearly supported the immediate wholesale adoption of the Chilean private pension system
of public pension systems are necessarily dependent on the development of a suitable regulatory and supervisory framework for privately-managed funds and fund operators to establish and improve safeguards of retirement funds for contributing participants. The necessity of establishing a regulatory and supervisory framework for privately-managed pension systems is directly related to the perception or reality that such systems would achieve higher investment earnings using investment techniques that may involve greater degrees of risk, as compared to schemes using risk-averse investment techniques resulting in lower (or perhaps negative) investment returns.26

The development of public pension reform strategies that are politically, economically, and socially acceptable is a leading global dilemma, and discussion of the social and political principles are beyond the scope of this Article. The developing and transition nations should understand the issues faced by leading OECD nations with respect to their public pension systems, and pursue policy actions in advance to preclude or mitigate these issues from dominating the development of their own social safety net systems. In particular, this Article advocates for the privatization of public pension systems through gradual reform and transition of financially unsustainable public pension systems to (and/or the adoption of) publicly-regulated, privately-managed defined contribution schemes as both a moral responsibility to supplant ageing populations and a necessary component of financial sector reform and development.27 The modern global economy is defined by volatile cap-

without democratic debate and acceptance by consensus. During the transition from the military government to "democracy," the economic crisis produced under the government of Salvador Allende still lingered over the economy. There was a legitimate fear that the return to elected government could bring about the return of demagoguery, populism, Marxism, and economic collapse. In this climate of doubt, the Chilean model was one of the elements that served to diffuse these concerns. The new reality in Chile was abundantly clear: the economic future was not at risk in the election, as no government could resume the role of controlling the economy because that role was assumed by the Chilean worker population through their private pension accounts. See Political and Social Effects in Chile of that Country's Pension System Before the Subcomm. on Sec. of the Senate Comm. on Banking, Hous., and Urban Affairs, 105th Cong. 2 (1997) (statement of Mark M. Klugmann, Director, Int'l Ctr. for Pension Reform).

26 See Kalisch & Aman, supra note 7, at 25.

27 Of course, developing and transition nations that do not have public pension systems but instead rely on social insurance or provident fund arrangements may
itial flows, exchange rate instability, and increasing dominance of developed nation monetary and exchange rate policies on developing and transition economies. The establishment of viable private pension systems with limited direct government involvement as a supplement to, or in replacement of, financially unsustainable public pension systems is simply critical to avoid breakdowns in the overall social safety net system. In other words, developed and developing nations must either establish or transition to viable and modern private pension systems to protect both their ageing populations and fiscal balances from the effects of global financial instability and periodic banking and currency crises that will likely continue to plague financial markets and developing nations into the indefinite future. The revision or elimination of public pension systems given these global trends should be considered a matter of national security and a policy objective to approach with vigor and intellect. The important concept is that governments recognize that income security of ageing populations is a key moral and political objective. The guaranteed provision of income security to the elderly cannot be jeopardized by banking crises, currency crises, and other financial crises that dramatically affect the monetary and fiscal policies of governments.

This Article provides a limited introduction to the various issues and concepts that should be recognized by developing and transition nations in considering pension reforms. In particular, this Article advocates for the establishment of private pension systems premised on the Chilean model and the development of international regulatory and supervisory standards to facilitate this transition. Part I of this Article reviews the OECD public pension schemes funded by payroll taxes and emphasizes that the larger, mature PAYG pension systems are generally becoming financially unsustainable. The PAYG pension system as a matter of policy is simply becoming less desirable in the modern global economy characterized by financial instability and developing capital markets. Part II reviews the Chilean experience and urges developing and transition nations with currently existing PAYG systems to establish a privatization process and transition from the old PAYG sys-

undertake a more immediate transition to publicly-regulated privately-managed private pension systems.
tems to, or supplement such systems with, publicly-regulated, privately-managed defined contribution systems. Such systems would permit workers the option of participating in the economic development of their own nation and the global economy in general. For developing and transition nations that do not have PAYG systems, the wholesale adoption of private pension systems is urged as the appropriate course of action. Part III of this Article reviews guiding principles in conducting the transition process but emphasizes that the path selected to finance the inevitable fiscal deficits resulting from transition must be individually tailored to the economic and political environment situation of each nation with respect to its position in the global economy. Finally, Part IV of this Article advocates for the development of international regulatory and supervisory standards for publicly-regulated, privately-managed pension systems along the lines of standards developed primarily by the International Organisation of Securities Commissions ("IOSCO").

I. OECD TRENDS IN PUBLIC PENSION SYSTEMS

A. Public Pension Systems: An Overview

The public pension systems in OECD nations play a significant role in their respective economies. In general, nearly all OECD nations, and many other non-OECD nations, have public pension systems to provide income security for ageing populations, although the historical development of these systems are quite different. Since the inception of public pension systems, most nations developed their systems by increasing the degree of benefits and scope of coverage. These general trends continued in OECD member nations until the oil price shocks in the early 1970s.

28 In Section I of this Article, the author relies principally on the extensive research and review of public pension system principles set forth in Kalisch & Aman, supra note 7.

29 See Kalisch & Aman, supra note 7, at 5.

30 See id.
The public pension system is generally the single largest social safety net benefit in most OECD nations, notwithstanding those nations compromised by significant labor market issues and high unemployment benefit costs. This observation is underscored by the larger number of retired persons compared to unemployed persons, the long average duration of pension payouts per participant, and, in some instances, the generous benefits compared to other "social safety net" benefits. The public pension schemes also significantly contribute to OECD economies, consisting of between 6 and 10 percent of gross domestic product ("GDP") in most OECD nations. The implementation of sudden changes in public pension expenditures would likely have a significant impact on domestic consumption and economic activity, notwithstanding the direct impact on pension participants. Moreover, the public pension systems are generally complex, with multiple tiers of obligations, rules, and regulations attached to both public and private tiers and interconnections between these tiers. The OECD pension systems are faced with a number of economic, demographic, and social challenges in modern times. The principal issue facing most OECD nations is ensuring the medium- to long-term viability of currently existing public pension systems. The related concerns include the adequacy of pension benefits, improving the coverage of pension schemes, and improving work-related incentives in pension schemes.

In the OECD, it is generally accepted given the ageing populations that most existing PAYG public pension systems are financially unsustainable over the long-term. As the ageing process accelerates in given populations, they will require substantial reform to prevent large public sector deficits and reductions in national aggregate savings rates. The problems of income security are primarily due to changing demographics and structural unemployment. Many OECD nations are actively pursuing pension reform agendas, but these agendas generally focus on tinkering with the public pension model by increasing the level of contributions and/or employment

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31 See id.
32 See id.
33 See id.
history required to generate given levels of benefits and changes to qualifying retirement ages. Many OECD nations are also reducing or eliminating existing financial incentives for early retirement. Perhaps most importantly, greater emphasis is being placed on private pension arrangements to diversify away from public pension schemes and otherwise supplement public benefits. The common theme of these efforts is that pension reform is generally phased in over a substantial period of years.\(^35\) Thus, OECD nations must continually and adequately respond to arising challenges to their pension systems.

Public pension systems are generally either managed entirely by government entities or with significant national coordination. The public pension systems with significant national coordination based on PAYG principles may be considered “public pension systems” even though actual pension funds may be privately managed.\(^36\) The concept inherent in nearly all PAYG pension systems is that current pension revenue (either current tax revenues or current contributions) from the working population are expected to finance current pension benefits to the retired population. The national payroll tax is the standard source of financing for PAYG systems.\(^37\) The rate of the payroll tax is adjusted occasionally to ensure that revenues and expenditures balance, and reserves are maintained generally to finance temporary or cyclical decreases in revenue. Any prior contributions of the current retired population are generally not recycled as benefits at a later date.\(^38\) With respect to fully mature PAYG systems with a long payment history, the contributions of the current retired population funded the retirement pensions of the previous generations of retired persons. With respect to relatively immature PAYG schemes (that have been recently developed or augmented), the current

\(^{35}\) See Kalisch & Aman, supra note 7, at 4.

\(^{36}\) The pension systems, managed by private employer corporations with the role of a public institution generally limited to regulation and supervision, and individually-managed personal retirement savings accounts are generally known as “private pensions.” These systems are separate and distinct from the privatized pension systems that represent the focus of this Article, such as the publicly-regulated privately-managed defined contribution scheme adopted by Chile in 1980 and those systems adopted in various forms by other nations.

\(^{37}\) See Kalisch & Aman, supra note 7, at 11.

retired population may be receiving higher benefits without the burden of funding during their employment more generous benefits to the previously retired population. Thus, in PAYG systems, the worker population contributions generally support the pension payments of the current retired population and establish the future pension rights of the contributors.

Notably, these contributions do not fund the pensions of contributors, although contributors may mistakenly believe they have entered into a contract for future delivery of pension benefit payouts under given conditions. In many OECD nations, the worker contributions, in and of themselves, already do not cover the full cost of current public pension obligations, such as in Germany, Canada, Spain, Sweden, and Belgium; this trend is expected to increase given the acceleration of ageing in populations of other OECD nations. The worker contributions generally resemble taxes collected for a defined purpose, such as for flat-rate pensions or health care assessments. However, the resulting revenues collected are not necessarily limited for use only for that purpose, which is supplemented by general sources of revenue to pay the entire set of pension obligations. In other OECD nations, such as Australia and New Zealand, there are no individual contributions to the public pension system, and all pension payouts are generated from general tax revenues. The vast majority of PAYG systems are defined benefit systems, which generally define plan participant benefits as a function of salary and work history.

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39 See Kalisch & Aman, supra note 7, at 12.
40 See id.
41 See id.
42 See id.
43 See id.
44 Defined contribution systems generally do not define the benefit, as plan participants obtain their contributions upon retirement plus an accumulated return, with the pension benefit represented by one lump-sum payment or a series of lump-sum payments (an annuity). The Chilean model and provident fund model represent notable defined contribution systems. The defined contribution plan is per se fully funded, and the eventual pension benefit is a function of the performance of contribution investments.
B. Funding of Public Pension Systems

Public pension systems may be categorized as either unfunded, partially funded, or fully funded PAYG systems. Most OECD nations maintain public pension systems that are either unfunded or partially funded PAYG systems (such as Japan), but a number of nations such as Canada and Sweden maintain fully funded PAYG systems. The partially funded and fully funded PAYG systems are generally intended to enhance retirement income security. The increased reliance on partially or fully funded PAYG systems has become necessary as nations have expanded their retirement income provisions without financing the expanded pension obligations from the national budgets during the initial phases of the newly expanded systems. These new provisions are premised on the basis that future pension obligations will be matched by available contributions through funded pension schemes. The notion that partially or fully funded PAYG systems necessarily contribute to higher national savings and economic growth are subject to competing conclusions, however. Nonetheless, other nations perceive the continuation of PAYG funding as important and adjust benefits and/or contributions to achieve greater balance in funding, such as in Germany and Japan.

In partially or fully funded PAYG pension systems, there is a direct relationship between pension payments and participant contributions. Many funded PAYG systems render payments which rely on the long-term investment performance of the specific contributions. The directness of the relationship between pension payouts and contributions, coupled with the general absence of additional liability for the government in question, may augment the attractiveness of this option. This option generally imposes all risks on the contributors them-

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45 See Mackenzie et al., supra note 38, at 6.
46 See Kalisch & Aman, supra note 7, at 12.
47 In "funded PAYG systems", the payroll tax rate is generally set at a beginning level to ensure that the plan will always be self-financing and no increase in the rate is required.
48 See Kalisch & Aman, supra note 7, at 12.
49 See id. at 12 n.16.
50 See id. at 12-13.
selves and, indirectly, on the fund managers; however, and the
government effectively does not share in the risk of providing
future pension payments.\textsuperscript{51}

C. Flat-Rate versus Earnings-Related Public Pension Systems

Public pension benefits may also be either flat-rate or
earnings-related, or flat-rate with an earnings-related element,
such as in Japan and the United Kingdom.\textsuperscript{52} At least twenty-
five OECD member nations have flat-rate public pension sys-
tems which vary widely in terms of design and parameters\textsuperscript{53}
and are generally intended to provide minimum income securi-
ty. The flat-rate public pension system funding is based on
either payroll taxes\textsuperscript{54} or contributions,\textsuperscript{55} and eligibility re-
quirements are generally premised on parameters such as age,
length of in-country residence, and other objective and subject-
ive means tests.\textsuperscript{56} While OECD nations demonstrate a wide
variety of features respecting the funding and entitlement
schemes, the age of pension recognition is generally 65 years,
and most eligibility requirements are linked to residence peri-
ods and other means tests. In most OECD nations, the respec-

\textsuperscript{51} See id. at 13. The fully or partially funded pension option is far more com-
mon to private pension systems, where opportunities to utilize alternative financ-
ing sources, if contributions do not cover payments at later dates, are more limit-
ed. See id.

\textsuperscript{52} Japan and the United Kingdom have vastly different flat-rate pension
schemes than other nations. The flat-rate schemes are considered the primary
pension, but elderly persons cannot receive this benefit if they do not accumulate
contributions before reaching the age of retirement. See id. at 8.

\textsuperscript{53} See Kalisch & Aman, supra note 7, at 8.

\textsuperscript{54} Some nations have flat-rate basic pension schemes funded by general tax-
ation but separate from other social safety net schemes, such as Canada, Denmark,
and New Zealand. See id.

\textsuperscript{55} The Nordic nations (except for Denmark) and the Netherlands have flat-rate
pension schemes that accept contributions but do not require prior contributions in
providing benefits to participants. While this scheme is different from pension
schemes that do require contributions, similar in that there is no actual linkage
between the contribution and benefit. These schemes generally require a length of
residence in the respective nation but do not impose other means tests for receipt
of benefits. Denmark has a contribution-based pension scheme that provides bene-
fits linked to the participant's history of contributions rather than earning as a
supplementary pension to that of the basic flat-rate pension scheme. See id. at 8.

\textsuperscript{56} See id. at 7.
tive government is responsible for the entire cost of the pension scheme, and in contributory schemes the government generally covers funding deficits.\textsuperscript{57}

The entire range of OECD nations (except for Australia, Ireland, the Netherlands, and New Zealand) utilize some form of earnings-related public pension system.\textsuperscript{58} The earnings-related public pension system is generally intended to raise income security to a higher level.\textsuperscript{59} In nations with flat-rate public pension systems, earnings-related systems often serve as a second tier to the overall structure of the respective pension programs. The benefits are related to income earned before retirement, and the funding is contribution-based and/or augmented by subsidies from the national government.\textsuperscript{60} The eligibility requirements are generally premised on the length of employment or vesting period in which the participant renders contributions.\textsuperscript{61} The methodologies utilized to determine final benefit payouts according to previous earnings vary widely. The benefits formulae are generally complex but normally include the amount of average earnings, length of coverage, and level of contributions rendered by the participant as dominant variables therein.\textsuperscript{62} Many earnings-related pension

\begin{itemize}
\item \textsuperscript{57} *See* id. at 9.
\item \textsuperscript{58} *See* Kalisch & Aman, *supra* note 7, at 9. The majority of these nations set the age of retirement at 65 years for men, while in some transitional nations the age is lower than 65, and a significant minority of nations set different ages between men and women. *See* id. at 9.
\item \textsuperscript{59} "Defined contribution systems" are only indirectly earnings-related, as the contributions and return on investments determine the benefits, not the earnings histories of the participants. As contributions are generally a function of participant earnings, however, defined contribution systems are generally included as earnings-related pension schemes.
\item \textsuperscript{60} *See* Kalisch & Aman, *supra* note 7, at 7. Some nations require full or partial retirement before benefit payouts commence. Other nations, such as the Czech Republic, Finland, and Spain, permit ongoing employment coupled with receipt of pension payout after reaching the age of retirement (although the benefit may be reduced to reflect the increased level of earned income, as it is in the United States). *See* id. at 9.
\item \textsuperscript{61} *See* id. at 7. All OECD nations require a minimum vesting period, represented either by duration of employment or contribution or coverage in other nations. *See* id. at 10.
\item \textsuperscript{62} *See* id. at 10. There are earnings-related pension schemes which premise the final payment on a percentage of average earnings over the entire history of contributions, as in Japan, while other nations account for average earnings over part of the coverage period, as in France (10 year period), and the United Kingdom (20 year period). Other nations, such as Greece, Hungary, Portugal, and Turkey, use
schemes also have an income redistribution element in the benefit determination, except for those schemes that maintain solely earnings-related benefits, unless the replacement ratio (ratio of pension to salary) has an inverse relationship to income level, as most have some combination of minimum and maximum pensions and contribution levels. The income redistribution elements generally skew the benefit amounts to provide increased replacement rates for prior lower-income earning participants and further limit the level of public earnings-related benefits available to participants earning higher levels of income.63

D. Indexation of Public Pension Benefits

The indexation of public pension benefits generally varies among OECD nations between two separate methods, either by changes in price inflation or wage growth. The OECD nations generally increase benefit payout rates according to (1) changes in inflation to maintain pension purchasing power, such as the United States and Sweden; (2) changes in wage movements, such as Germany and Austria; or (3) both, such as Finland and multiple steps to determine payout benefits. Initially, average earnings drawn from the latest and/or best 5-10 years of earnings history are used; then a separate step accounts for all or a part of the remaining number of coverage and/or contributory years. Other nations first utilize a base amount determined by the government which is then multiplied by a scheme of “pension points” for each individual calculated on the basis of earnings, length of coverage, contributions and other factors, as done in Germany and Sweden. Finally, some nations, such as Canada, deliberately exclude a number of low or no earnings periods from the benefits calculation, or otherwise include certain periods spent unemployed or otherwise caring for children or family members for purposes of determining pension payouts, as in Finland, Belgium, and Switzerland. See id. 62 See MACKENZIE ET AL., supra note 38, at 6; Kalisch & Aman, supra note 7, at 10. For instance, some nations impose a maximum limit on final benefits, such as Canada and Italy; a maximum limit on earnings in the determination of final benefits without limitation on prior contributions based on earnings, such as the Czech Republic; a minimum benefit amount or fixed variable in the determination added together with an earnings-related variable, such as Switzerland and Luxembourg; a minimum wage level for accepting contributions while taking such periods into account for the determination of benefits, such as Canada; supplementing the pension benefit up to a minimum level for all participants meeting the qualifying contributory period, such as Italy; and differential weightings allocated to prior earnings in the middle to low income ranges compared to higher earnings, such as the United States. See Kalisch & Aman, supra note 7, at 10.
Austria. The United States and several other nations offer full indexation to the consumer price index ("CPI"). Additionally, flat-rate public pension schemes may also have an indexation component, such as in Australia and the Netherlands.

E. Replacement Ratio

The replacement ratio (ratio of pension to some measure of income earned during the contribution period) should be established in a defined benefits plan as a promise to be honored by the public sector, while in the defined contributions plan the ratio by definition cannot be guaranteed as it is solely earnings-related. The International Labor Organization ("ILO") Convention No. 102, established in 1952, recommends that public pension schemes ensure a replacement ratio of at least 40 percent, and the Council of Europe adopted a similar standard in the European Code of Social Security. Most OECD nations generally meet the ILO Convention recommendation, and many nations provide replacement ratios far above the recommendation level in the range of 60-80 percent, such as in Germany, Italy, Sweden, Norway, Denmark, and Korea. Notably, many OECD nations with low public pension replacement ratios in fact have significant replacement ratios upon inclusion of private pension schemes that are not otherwise reflected in the aforementioned percentages.

F. Taxation of Retirement Income

Most OECD nations provide tax incentives and concessions for public pension participants from liability for income tax, property tax, capital gains taxes, and other taxes. The tax

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64 See Kalisch & Aman, supra note 7, at 11.
65 See MACKENZIE ET AL., supra note 38, at 6.
66 See Kalisch & Aman, supra note 7, at 11 n.11.
67 See MACKENZIE ET AL., supra note 38, at 6.
68 See Kalisch & Aman, supra note 7, at 11.
69 See id.
70 See id.
benefits generally include pension benefits as excluded from income taxation, the provision of income tax credits, and special tax deductions and tax exemptions.\textsuperscript{71}

G. Macroeconomic Implications

The macroeconomic implications of public pension systems generally depend upon the size of the system, which in turn depends upon the extent of the coverage (such as the share of the working age population eligible to contribute) and the maturity of the system. The maturity of the system is defined by the degree to which the system has reached its full size or the long-term dependency ratio (ratio of pensioners to contributors) premised on whether the current population of retired persons has contributed long enough, or at all, to qualify for full pension benefits. The plans of most developed nations generally maintain universal coverage and are already fully mature plans.\textsuperscript{72}

One of the most important macroeconomic implications is the impact of the public pension system on national aggregate savings. Studies of the U.S. economy, on which most research has been conducted, provide evidence that the introduction and development of the public pension systems has generally decreased private aggregate savings, although the extent of this decrease is difficult to quantify. The studies of other economies, however, tend to be inconclusive.\textsuperscript{73} Studies of the U.S. economy and other economies suggest that the growth and development of private pension schemes, on the other hand, increase private sector savings, in that savings decrease by less than contractual pension plan savings increase.\textsuperscript{74} The studies also indicate that replacing the PAYG pension schemes with a Chilean-type ("DCP") scheme may increase aggregate savings, but the critical components are the contribution rates of such plans and the method used to finance the increase in public sector deficits that generally emerge during the transition period in which the PAYG scheme is phased out.\textsuperscript{75}

\textsuperscript{71} See id. at 15.
\textsuperscript{72} See MACKENZIE ET AL., supra note 38, at 6.
\textsuperscript{73} See id. at 1.
\textsuperscript{74} See id. at 2.
\textsuperscript{75} See id.
To maximize the impact on savings, the public sector deficit established as workers cease rendering payroll taxes and begin rendering private sector contributions should be financed through high contribution rates and tax increases or the temporary maintenance of payroll taxes.76

H. Regional Trends in Developing Nation Public Pension Systems

The global trend of pension reform is manifest in OECD and non-OECD developing nations alike. As a general proposition, the traditional PAYG systems in developing nations have been managed far more inefficiently and are closer to financial insolvency than in developed nations. The relatively more advanced nations of East Asia and Latin America are about to experience, and the nations of Central and Eastern Europe have already experienced, the same ageing population, changing demographics problems and chronic underfunding problems inherent to the developed nations. In Latin America, notwithstanding the extensive public pension system reforms that have occurred throughout that region in the past decade, there is great concern about the budgetary costs of enormously generous public benefits, the erosion of the payroll tax base, bureaucratic waste, and inequitable coverage and treatment among sectors of the population in nations that have not adopted reforms to date.

The OECD and non-OECD nations have, through various means, effectively increased contribution rates in their PAYG plans, which have resulted in unsustainable levels of payroll taxes, increased government subsidies to stabilize the systems, and gradual reductions in benefit levels. The use of high payroll taxes to fund PAYG pension systems is unfortunately quite common in the OECD and acutely problematic in Eastern Europe, the Baltics, Russia, and other nations of the former Soviet Union (collectively referred to herein as "transition nations"). In Central and Eastern Europe, transition nations are struggling with the combination of high western European rates of ageing and with low post-Communist incomes. In addition, early retirement following the collapse of communist

76 See id.
regimes has pushed the pension burden to problematic levels. The reform of public pension systems is a critical function of social safety net reform for such nations in transition, which are largely based on the PAYG defined benefits scheme in place before transition.

The PAYG systems in transition nations are largely financed through payroll tax contributions, as supplemented by budgetary transfers, and administered by quasi-government pension funds. The contribution methods are generally redistributive in nature, defined by high contribution rates, small employment bases, and increasing dependency ratios relative to other OECD nations. Moreover, the benefits eligibility frameworks are generally wide-ranging, with special schemes for specified occupations, complex benefits formulae, broad eligibility criteria, low retirement ages, and indirect linkages to contributions (at best). The transition process has generally resulted in the pension systems of transition nations coming under increased pressure due to increases in the ratio of participants to contributors and systematically reduced tax compliance. The initial attempts at reform through reduction in benefits and raising of payroll taxes has resulted in significant labor market distortions and otherwise harmed the ability to maintain adequate social safety net structures. Thus, the concepts of early retirement (and disability pensions) have been used in certain central and eastern European transition nations to augment the social safety net and mitigate unemployment.

With respect to East Asia, compulsory retirement savings programs (known generally as “provident funds”) were introduced by Singapore and Malaysia and are representative

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78 See WORLD OUTLOOK, supra note 77, at 114, Box 10.

79 See WORLD OUTLOOK, supra note 77, at 114, Box 10.

80 For instance, the Government of Singapore established the Central Provident Fund (“CPF”) in 1955. The CPF is a fully funded individual account system with both lump-sum and annuity payouts and without a redistributive element. The CPF covers nearly 75% of the population. The contribution rates in 1994 were 20% for employers and employees and capped at a monthly salary level of U.S. $6,000
throughout the region. These programs have unfortunately largely resulted in government monopolies that continue to invest the majority of fund participant assets in government instruments and otherwise exert firm control over their respective national economies. Currently, the Singapore/Malaysia example is being followed by the new government in Thailand, which recently announced plans to introduce a compulsory 10 percent pension fund tax on civil servants, employees of state-owned enterprises (“SOEs”), and workers in large corporations.

Moreover, in China, the need to shift the public pension burden from already financially distressed SOEs and the desire to improve the banking and financial systems has made pension reform an important issue. China faces a serious combination of interrelated and potentially disastrous problems. The nation's state-owned banks are largely insolvent, leaving them unable to fund the restructuring of SOEs which cannot uphold promises of lifetime welfare support for its citizens, and the ratio of workers to pensioners is projected to decline seriously in the next century. The primary task is to mobilize the nation's household savings of more than $110 billion or 13 percent of GDP into institutional investment vehicles that can

(about U.S. $4,000). The government does not provide contributions, except in the capacity as an employer. Singapore law requires that nearly all of the assets of the CPF are invested in government bonds, and the proceeds of government bond sales are invested in foreign financial assets. Upon reaching the retirement age of 55, participants may withdraw as a lump sum all but a fixed amount which is used to finance a fixed monthly pension payable at age 60. The starting amount of this pension is indexed to the CPI; the pension for the participant is not indexed once it begins and ceases once the individual receives the fixed sum and accumulated interest. The withdrawal privileges have been increasingly expanded since 1968 for housing, medical, education, and insurance purposes and investing in certain types of assets. The employee contributions and withdrawals, and interest earnings on participant balances, are excluded from income taxation. See MACKENZIE ET AL., supra note 38, at 13, Box 2; see also Aasim M. Husain, Determinants of Private Saving in Singapore, in SINGAPORE: A CASE STUDY IN RAPID DEVELOPMENT (IMF Occasional Paper No. 119, 1995).

Public provident funds exist primarily in developing nations as compulsory savings programs in which regular contributions withheld from employees' wages are matched by their employers. These contributions are set aside for each employee in a special fund for later repayment to the worker (generally in a single lump sum with interest) when defined contingencies occur, although in a few instances the beneficiary may select a pension payout or pensions are otherwise provided for survivors.

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provide for retirements by investing some of these funds into restructuring or privatized SOEs. In other words, social safety net reform is closely linked to SOE reform.

The State Commission for Restructuring the Economy is currently spearheading pension reform. At the IMF/World Bank annual meeting in Hong Kong in September 1997, China disclosed its plan for a new pension system, consisting of individually funded accounts and supplementary corporate pensions. The private initiatives are to be coupled with a national mandatory Social Security system administered by local, municipal, and provincial government authorities and SOEs. The World Bank's review of pension reform in China, released in September 1997, observes that the fragmented public pension system consists of widely different contribution rates and pooling schemes across the nation. In the private sector, very few Chinese-owned conglomerates and foreign multinational corporations offer well-managed supplementary pension schemes for their employees. The World Bank, therefore, recommended that China implement a three pillar pension system: (1) a basic pension to keep retirees above the poverty line; (2) large mandatory individual accounts; and (3) supplementary voluntary accounts. The supplementary pension schemes must become the focal point of pension reform, providing market models for state-sector asset managers to follow and enhancing both the fund management capabilities and the capital markets of China. Thus, with the emergence of pension and medical care system reforms, fund management will undoubtedly become quite important to China in the near future.
II. THE CHILEAN MODEL: STATE-REGULATED PRIVATELY-MANAGED DEFINED CONTRIBUTIONS SYSTEMS

A. Introduction

In 1980, Chile replaced its PAYG pension system with a mandatory privately-managed system of Pension Savings Accounts ("PSAs"). The new system went into operation in May 1981. Upon sixteen years of operation, the pensions in the new private system are 50 to 100 percent higher than under the PAYG system, depending on the type of pension (old age, disability, survivor pensions). The resources administered under the private pension system amount to nearly 42 percent of Chilean GNP. The pension privatization is a key initiative that, in connection with other financial sector reforms, has increased Chilean economic growth rates from 3 percent per year to over 7 percent per year over the last twelve years.

The Chilean model advocates the complete removal of public pension funds from government control in order to be privately managed by smaller fund managers but regulated and supervised by the government within appropriate guidelines. Thus, the pension funds act as quasi-mutual funds and provide participants with higher rates of return.

B. Participants and Contributions

The participant's pension level is determined by the amount of money accumulated during the working years. The participant and the employer do not pay a Social Security tax to the state, and the worker does not collect a government-funded pension. The participant has 10 percent of wages automatically deposited by the employer each month into an indi-

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82 The text of Section II of this Article is drawn largely from the writings and testimony of Dr. Jose Pinera, architect of the Chilean privately-managed defined contribution scheme and the leading advocate of privatization of PAYG pension systems. See, e.g., Jose Pinera, Empowering Workers: The Privatization of Social Security in Chile, 15 CATO J. (1995/1996); Empowering People Before the Subcomm. on Sec. of the Senate Comm. on Banking, Hous., and Urban Affairs, 105th Cong. (June 25, 1997) (LEXIS, Legis Library, Cngtst File) (statement of Jose Pinera, President, Int'l Ctr. for Pension Reform; Co-Chairman, Cato Project on Soc. Sec. Privatization) [hereinafter Testimony of Jose Pinera].

83 See Testimony of Jose Pinera, supra note 82, at *3.
vidual PSA. The participant may contribute an additional 10 percent of wages per month as a form of voluntary savings, which is also deductible from taxable income. Further, the participant has the option to choose one of several privately-managed pension fund administration companies ("AFPs") to manage his or her PSA. Chile's PSA system covers both public and private sector employees, except for police and military forces, while pensions are built into their pay and working conditions system. Finally, not only are all employees legally required to have a PSA, but self-employed individuals are permitted to join the system as well.

C. Pension Fund Administration Companies

The AFPs are regulated and supervised by the Superintendency of Pension Fund Administrators, with one administrator acting as a regulatory authority for each pension fund. The AFPs are subject to government regulation intended to guarantee a diversified and low-risk portfolio and to prevent fraud or embezzlement. The AFPs each operate the equivalent of a mutual fund that invests pension funds in stocks, bonds, and government debt obligations. The government regulations establish only maximum percentage limits for specific types of instruments and the overall asset mix of the portfolio, the intent being that such regulations will be scaled back over time as the AFPs gain experience. The AFPs are not required to invest any funds in government bonds or other types of debt instruments. The AFPs may also invest in relatively less risky and liquid financial instruments in the international markets, which in part serves as a buffer if there are sudden outflows of dollars when foreign institutional investors operating in Chile dispose of Chilean financial assets. In addition to the above, the AFP entity and the mutual fund it administers are legally required to be separate entities, so failure of the AFP does not affect the assets of the mutual fund. Participants may change from one AFP to another, which stimulates competition among companies to provide higher returns, better customer service,

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84 See Testimony of Jose Pinera, supra note 82, at *3.
85 See Testimony of Jose Pinera, supra note 82, at *4-5.
86 See Testimony of Jose Pinera, supra note 82, at *4.
and lower fees and commissions. Moreover, participants receive a passbook from the respective AFP detailing the amount accumulated in their accounts and statements every three months presenting detailed information on their retirement accounts. Finally, the returns on PSAs are tax free, and when the amount is withdrawn upon retirement, the participant must pay a lower tax depending upon the income tax bracket at the time of withdrawal.87

D. Government Guarantee

The PSA system also includes a limited government guarantee for minimum pensions. Participants contributing to the PSA for at least twenty years, but whose pension funds at retirement age are below a legally defined "minimum pension," receive that pension from the government once the PSA is depleted. The Chilean government also stands as a "guarantor of last resort" in case fraud occurs in any of the respective funds.88

E. Supplemental Benefits

The PSA system further includes benefits such as insurance against premature death or permanent disability. The AFP provides these services to participants by taking out life and disability coverage from private life insurance companies. The coverage is paid for by additional participant contributions of approximately 2.9 percent of salary, including commissions to the AFP.89

F. Retirement Benefits

Upon retirement, a participant may choose from two general payout options. In the first option, the participant may use the PSA capital to purchase an annuity from a private life insurance company. The annuity guarantees a constant monthly income for life, indexed for inflation (indexed bonds exist in

87 See Testimony of Jose Pinera, supra note 82, at *4.
88 See Testimony of Jose Pinera, supra note 82, at *5.
89 See Testimony of Jose Pinera, supra note 82, at *5.
Chilean capital markets for such investments), and survivors benefits for the participant's dependents. In the second option, the participant leaves the PSA capital invested and makes scheduled withdrawals, subject to limits premised on the life expectancy of the participant and his or her dependents. If the participant dies, the remaining funds in the PSA account become part of the participant's estate. In both the first and second options, the participant may withdraw as a lump sum the capital in excess of the amount necessary to obtain an annuity or scheduled withdrawal, up to 70 percent of the participant's last wages.90

G. Observations

The Chilean PSA system eliminates common problems under the PAYG public pension schemes, particularly with respect to changing demographics and ageing populations. Under the PSA system, the working population does not pay for the retired population. The potential for political conflict and eventual bankruptcy of the PAYG trust funds is avoided, and the problem of unfunded pension liabilities is similarly avoided. In addition, the PSA system is completely independent of the company employing the participant, as the PSA is tied to the participant and not the employer. This contrasts to company-based private pension systems which generally impose costs on participant employees who leave the company before a given number of years and sometimes results in the bankruptcy of the participant's pension funds. Moreover, the AFPs must invest pension funds in marketable liquid securities, the PSAs always have a determinable daily value, and it is easy to transfer between AFPs. Thus, the PSA system does not infringe on employment mobility, which may enhance labor market stability. Finally, the PSA system does not discriminate between full-time and part-time employees, and many part-time employees participate in the system.91

90 Thus, upon retirement, Chilean pension funds provide a lump sum to the participants (similar to many "provident funds", such as those in East Asia), but also offer added incentives for retention of part of the funds to be distributed as pension in later years. See Testimony of Jose Pinera, supra note 82, at *5.

91 See Testimony of Jose Pinera, supra note 82, at *6.
III. TRANSITION FROM PAYG TO CHILEAN MODEL PENSION SYSTEMS

A. Guidelines for Transition to Private Pension Systems

The transition from PAYG to publicly-regulated, privately-managed defined contribution systems is becoming a global trend. Notably, the transition from PAYG to publicly-regulated, privately-managed pension systems is separate and distinct from the concept of having the government, itself, managing investments of pension trust funds in private capital markets. This proposal, which is currently being debated in the United States, is clearly problematic on many fronts and is not representative of the true privatization process in this respect. The components of transition may be somewhat difficult to implement, however. If the PAYG system is terminated on a wholesale basis, the implicit pension liabilities of the system must be made transparent and transferred to the new private system, which creates a large increase in visible public debt as a percentage of GDP. If the PAYG system is terminated on a gradual basis, current pension contributors may have to pay the pensions of retirees under the PAYG system while making contributions to their own privately funded system. These problems may be addressed by reducing the benefits of the PAYG system at the outset. Thus, although the global shift from PAYG systems to privately funded systems is very recent, it has profound implications. The results will include not only a transformation in pension arrangements but also, more importantly, a revolution in capital markets and corporate governance.

The method selected to finance the transition to partially or fully funded pension systems generally depends on the financing requirements and the fiscal and macroeconomic situations in each nation, including debt of the old PAYG systems to GDP. The ongoing pension reforms in Latin America and other

nations illustrate that governments have wide flexibility in the development of the transition methodology, and that choices exist as to the distribution of the fiscal burden of reform. The methods generally used to cover fiscal deficits resulting from transition and parameters established in the reforms include changing the mandatory age for eligible participants, integrating or excluding specified occupational groups recognized as having more generous pension schemes, and recognizing benefits acquired under the old PAYG system. The other critical parameters to facilitate transition include streamlining existing pension programs by increasing the retirement age, reducing benefit entitlements, and narrowing eligibility conditions for old age and disability pensions.

The Chilean approach to transition is instructive and is set forth below.

B. The Chilean Approach to Transition

1. Principles of Transition

The Chilean approach to transition incorporated four distinct principles. First, for participants already receiving public pensions at the time of transition, the government guaranteed the continuance of those pensions. Second, the participants already contributing to a PAYG pension system were given the option of staying in that system or transferring to the new PSA system. The participants electing to transfer were given a “recognition bond” deposited into their new PSAs that pays when the participant reaches retirement. Third, all new entrants to the labor market were required to enter the PSA system, and the government effectively closed the door to new entrants to the PAYG system. Fourth, since financing the transition is a complex undertaking, each nation must address this issue according to its own circumstances.93 Thus, the Chilean method for financing set forth below may not necessarily represent the best method; however, given its success, it is certainly worth reviewing.

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93 See Testimony of Jose Pinera, supra note 82, at *7.
2. Financing the Transition

With respect to financing the transition, the Chilean transition from PAYG to its current model was premised on five interrelated stages of financing the inevitable funding deficits during the initial stages of transition. First, as the contribution needed to finance adequate pension levels is generally lower than the current payroll taxes, a fraction of the difference between them was used as a temporary transition payroll tax without reducing net wages or increasing the cost of labor to the employer (the gradual elimination of that tax was considered in the original law and, in fact, that happened so that today it does not exist in Chile). Second, using debt, the transition cost was shared by future generations. In Chile, nearly 40 percent of the cost has been financed by issuing government bonds. The government bonds were purchased mainly by AFPs as part of their portfolios and should be completely redeemed when the PAYG system participants no longer exist. Third, the need to finance the transition was a powerful incentive to reduce unnecessary government spending. Fourth, the increased economic growth that the PSA system engendered substantially increased tax revenues, resulting in fiscal budget surpluses in current years. Fifth, in many national fiscal situations, the public pension obligations may be offset to some extent by the value of SOEs and other types of assets. In Chile, privatizations represented one means of financing the transition and also increased efficiency and depoliticized the economy. Finally, with respect to the government's implicit liability to former participants under the old PAYG system who presently transferred to the new DCP system, the Chilean government issued so-called "recognition bonds." The value of these recognition bonds was an approximation of the present value of the expected pension benefits participants earned while contributing to the old PAYG system.

94 See Testimony of Jose Pinera, supra note 82, at *7-8.
95 See MACKENZIE ET AL., supra note 38, at 13-14.
3. Fiscal Implications of Financing the Transition

The fiscal requirements and future cash flows required to sustain pension reform approaches are quite difficult to estimate in modern times. In general, the fiscal implications are complicated in various nations by the ability of participants to switch between the new and old systems; the status of the new system as an alternative and not mandatory system; and legal limitations imposing ceilings on overall government spending. In Chile, transition financing through recognition bonds was facilitated during periods of strict budgetary discipline and overall budget surplus. The pension reform process, coupled with the onset of severe recession, caused an increase in the public sector deficit as the payroll tax contributions to the PAYG system decreased when contributors shifted to the new privately-managed defined contribution pension system; the losses were not necessarily netted out by the contributions made to the private pension system. If the contribution rate to the new system was set equal to the combined payroll tax, however, the surplus of the pension plans would arguably have netted out the increase in public sector deficit.  

The precise identification of financial resources used to finance the transition are not inherently cognizable, however, as Chile simultaneously initiated other significant reforms, such as privatization, trade and tax reforms, labor market and financial sector reforms, which impacted the government budget. Thus, it is difficult to determine whether the transition deficit was financed using budget surpluses, taxes, or government debt. This same observation may be true for other nations that introduce pension reform simultaneously with other significant reforms that impact the fiscal condition. Specifically, Argentina's use of compensatory pensions as opposed to recognition bonds provides little evidence for identifying the source of financing its transition given that the government may issue debt obligations to obtain revenue for transfers to the new system.

Notably, the impact of a transition from a PAYG system to a defined contribution privately-managed pension system similar to that of Chile on a country's national savings depends

\[\text{id. at 14.}\]
upon the method selected to finance the increase in the deficit that may result from the reforms. If the deficit is financed through borrowing and the contribution rate of the new system is set equal to the combined payroll tax rate of the old PAYG system, the income of the new system contributors will not be affected, and their savings will remain unchanged. The increased deficit is generally offset by the increased private sector surplus in the form of pension plan surpluses (tax payments become private sector savings). If the deficit is financed through fiscal consolidation programs, the resulting increase in public sector savings should result in increased national savings because the netting effect of private savings would be less than 100 percent. This method should increase national savings, although the source of this increase would be the fiscal consolidation, not necessarily the pension reforms themselves.

C. Cumulative Results of the Chilean System

As of 1997, the PSA system had accumulated AFP funds in excess of U.S. $30 billion for a nation of 14 million people and GDP of U.S. $70 billion. More than 90 percent of Chilean workers are affiliated with the PSA system. In addition, the structural impediments are removed, as the pension system no longer depends on the political process. The removal of politics from the pension system has essentially resulted in the depoliticization of the economy, as electoral candidates are permanently aware that Chilean workers/voters will instantly feel the impact of policy on the PSA system, which creates a significant political counterbalance to special interest group pressures. The system has therefore ceased to be a redistributionist program where different groups compete against each other in the political arena to determine which group benefits at the expense of the other. Moreover, the pension system is not affected by demographic trends, and Chilean workers have property rights over their pension contributions. As the World Bank recognized in 1994, the Chilean

See Testimony of Jose Pinera, supra note 82, at *8.


model has funded economic growth and stimulated the development of efficient capital markets and institutions. The policy sequencing decisions of establishing the PSA system first, and then privatizing large SOEs thereafter, resulted in greater benefits for the employee-participants who received larger shares of the wealth created by the privatization process. Since the PSA system went into effect in 1981, the average real return on investment among AFPs has been 12 percent per year, notwithstanding variations in the annual yield of individual AFPs. The participants, therefore, receive pensions significantly higher than under the PAYG system, which required an extensive payroll tax of approximately 25 percent.100

The Chilean system has undoubtedly enhanced the development of domestic capital markets because it generates a surplus of funds that must be invested. If pension participant contributions are a substitute for PAYG payroll taxes, then new markets for financial assets, particularly government debt obligations, are established. The funds of the private pension plans that manage contributor accounts are invested in a wide variety of financial assets, including government debt obligations.101 The critical demonstration of capital market development and public acceptance of the PSA system came in 1995, when all Latin American financial markets suffered from contagion generated by Mexico’s de facto devaluation in December 1994-January 1995 ("Tequila Effect"). The decline in the Chilean stock market that year produced the only period where the PSA system suffered a net negative return, declining 2.5 percent. The experience of 1995 demonstrated the resilience of the Chilean system and illustrated the macroeconomic stability generated by the system. The then-finance minister of Argentina, Domingo Cavallo, articulated that the only reason that Chilean financial markets did not suffer dramatic negative returns during the Tequila Effect period was because of the private pension system.102 Finally, the Chilean system demonstrates that private pension schemes may raise the aggre-

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100 See Testimony of Jose Pinera, supra note 82, at *8.
101 See MACKENZIE ET AL., supra note 38, at 13.
102 See Political and Social Effects in Chile of that Country's Pension System Before the Subcomm. on Sec. of the Senate Comm. on Banking, Hous., and Urban Affairs, 105th Cong. 3 (1997) (statement of Mark M. Klugmann, Director, Int'l Ctr. for Pension Reform).
gate national savings rate. Thus, the resulting success of the Chilean model is the linkage of pension funds to the capital markets, creating a market driven as much by domestic funds as by foreign institutional investors.

D. Pension Reform in Latin America

Latin America is generally recognized as the leading region in pension reform. After the perceived success of the Chilean transition from a PAYG system to a publicly-regulated, privately-managed defined contribution pension system, seven other nations in Latin America reformed their pension systems. Although none of these pension reform methodologies were exactly alike, the common principle underlying all of them was the expanded role for partially or fully funded privately managed pension plans. The design of the parameters of these new systems generally depended upon notable differentials between nations, such as the political climate for reform, the fiscal and monetary conditions, and the financial viability of the respective pension systems. The reform efforts and results differ as per the size and maturity of the public pension systems.

Specifically, in 1993 through 1994, Peru and Colombia introduced privately-managed defined contribution systems as alternatives to the existing public pension systems. The structure of the new private systems in Peru and Colombia includes decentralized private fund management companies with the single purpose of managing retirement funds. The design and structure of these systems closely follow the Chilean model. The new pension models introduced in Argentina and Uruguay in 1994 and 1996, respectively, are combinations of the PAYG system supplemented by mandatory funded second pillars that closely follow the Chilean model, consisting of a

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104 See id. at 26 & Annexes 1 (Peru) & 2 (Colombia).
system of privately-managed individual pension accounts. Mexico enacted pension reform laws in 1996 and the new defined contribution pension system similar to the Chilean model was initiated in September 1997 with mandatory affiliation of all dependent private sector workers. The new system consists of fully funded individual pension accounts, and the old PAYG system is closed to new entrants. Bolivia enacted pension reforms in November 1996, and the new system consists of fully funded individual defined contribution accounts. The Bolivian system incorporates many of the components of the Chilean model but combines privatization (the "capitalisation" scheme) and pension reform to transfer SOEs to private investors. Finally, El Salvador introduced pension reform legislation in December 1996, but financial sector crises delayed introduction of the new system until the end of 1997. Upon consideration of all Latin American pension reforms in the 1990s, the system adopted in El Salvador most closely resembles the Chilean model. By March 1998, five fund management companies were authorized to conduct pension investments.

Thus, the nations of Uruguay, Bolivia, El Salvador, and Mexico have adopted laws that will reform their public pension systems on par with the Chilean model. Mexico, Bolivia, and El Salvador closed their PAYG systems and replaced them with mandatory private funded systems. Peru, Colombia, Argentina, and Uruguay, along with Hungary and Poland, have added voluntary private funded systems to their PAYG systems. In addition to the accumulation of capital, the new privately managed/funded systems have achieved higher rates of return, have been widely accepted by younger workers, and have had a powerful impact on the development of capital markets.

Latin American pension reforms were not implemented without controversy and compromise, however. Notwithstanding Chilean reforms in 1981, Argentina and Uruguay by the 1990s had highly mature PAYG systems with increasing de-
Pendancy ratios and deteriorating ratios of contributors to affiliates, resulting in growing deficits in the existing pension systems. These nations also experienced budget deficits at the time of transition; therefore, transition to a fully funded system was unfeasible. The political opposition to transition, such as trade unions and pension associations favoring the PAYG system, resulted in much political compromise in adopting new systems.

Peru, Colombia, and Mexico, conversely, had less mature pension systems originally established as partially funded systems, the reserves of which were decreasing rapidly due to generous benefit eligibility conditionality, high expenditures, and evasion of contributions, not ageing populations. These nations each established new funded pension systems with individual accounts managed by the private sector and possessed various similarities to the Chilean system. The political opposition in implementing pension reform in these nations, however, was significant. Thus, due to resistance of trade unions, the social insurance bureaucracy and other special interests, the new pension schemes adopted in Peru and Colombia were adopted only as voluntary alternatives, not mandatory replacements, for the existing PAYG public pension systems. Moreover, while Mexico managed to adopt a mandatory system for all private sector workers, the reforms are incomplete as public sector workers still enjoy the older, more generous, benefits system.

Interestingly, Bolivia implemented a scheme combining pension reform with the privatization and capitalization of state-owned enterprises. Specifically, the PAYG system was terminated, and all affiliates were automatically transferred to a privately-managed system with individual pension accounts. Simultaneously, a universal pension was established and all persons 21 years of age or older receive entitlements upon reaching the age of 65. The pension is financed using a “collective capitalization fund” containing proceeds from the government’s sale of 50 percent of SOE shares for capitalization purposes. The fund is managed by management companies.

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109 See id. at 9-10 & Annexes 3, 4.
110 See id. at 10 & Annexes 1, 2, & 5.
111 See id. at 10 & Annex 5.
and is subject to the same investment regulations as pension funds, thus purportedly reducing opportunities for abusive discretionary investment decisions by the government.  

With respect to financing the transition from PAYG systems, the Chilean approach in issuing recognition bonds to facilitate the financing of the transition was also used in Colombia and Peru. Argentina selected a compensatory approach for recognition of past contributions to the old PAYG system, with benefit payouts made by the public PAYG element and financed from current contributions and budgetary transfers represented by specially established taxes. The approach used by Argentina represents the desire to avoid undertaking additional public debt as well as to reduce cash flow pressures on the government. In rendering monthly payouts instead of redeeming recognition bonds as participants retire, the financial burden is extended over a longer period which reduces cash flow pressures. In Uruguay, there is no de facto compensation for acquired rights, but all old benefit entitlements are rendered through payouts from the PAYG element. This arrangement will continue to provide the majority of pension payments, as the new system is limited in size and coverage. In Mexico, there is no compensation for acquired rights, but workers obtain an option to switch, in that workers approaching retirement are permitted to compare their benefit entitlements under the new and old PAYG systems and select the option with more advantageous consequences. If the option for public benefits is selected, the balance accumulated in the individual pension account is transferred to the public system.

E. Overview of Private Pension Systems

The advantages of private pension systems generally include (1) empowering the individual to make greater provision for their retirement in savings vehicles; (2) encouraging long-term savings in vehicles that have restrictions on early access;

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112 See id. at 10 & Annex 6.
113 See Queisser, supra note 103, at 11 & Annex 3.
114 See id. at 11 & Annex 4.
115 See id. at 11 & Annex 5.
116 See id. at 11 & Annex 5.
(3) introducing retirement income provisions where the benefits are generally fully funded and the level of benefits is primarily determined by the earnings on prior contributions; and (4) raising the level of national savings and the capacity of the nation to provide investment capital for continuing economic growth.117

While there are a number of OECD nations where private pension systems represent important components of the total retirement payout system, the form of private pension system components and their relationship to public pension systems varies widely. For example, the private pension system components may be limited to particular occupational groups, mandated for mostly all employees, or may supplement public pension schemes or otherwise serve as a substitute therefor. Private pension system components usually involve some form of government tax subsidy and regulatory protection.118 In addition, the majority of private pension system components, which are generally defined benefit rather than defined contribution plans, in effect have the following characteristics: (1) they are generally premised on voluntary and not mandatory contributions; (2) the age of eligibility for final benefits is generally lower than for public pensions; (3) they are generally fully funded; (4) they are mixed between defined benefit and defined contribution schemes; (5) the respective governments provide tax incentives; and (6) they generally serve as supplements to public pension schemes.119

Although private pension system components vary tremendously among nations, the common framework is that the second tier of most national pension systems is the occupational or employer-sponsored pension plan. In some nations, these plans are established on an industry-wide basis (France). In other nations, they are established with active government involvement in regulation and supervision of investment procedures and in parameters such as benefits and rates (Israel). In

117 See Kalisch & Aman, supra note 7, at 13.
118 See id.
119 See id. at 14.
many nations the employer-sponsored pensions are maintained through the government's role in acting as implicit or explicit guarantor of the contributors' rights and benefits.  

In addition to the above, the legal and regulatory frameworks and insurance requirements of private pension systems also differ considerably among OECD nations. The issue of pension plan governance has critical implications for participant confidence in their plan and for the plan's utilization as an alternative to private savings. The regulations establishing the parameters of private pension system components, particularly those governing vesting or portability, also differ widely among nations. The vesting requirement is a critical feature of private pension schemes, and in many nations the time period for partial or full vesting is quite long. Finally, funding requirements for private pension systems vary widely among nations. For instance, some classes of employers are not required to account for likely future wage increases in determining the required pension reserves. The degree of funding is also determined using the same degree of flexibility permitted in the selection of actuarial assumptions. Lastly, the tax treatment of private pension components is critically important with respect to their design and size. The standard practice is to exempt contributions from taxation up to a certain level, and some nations provide similar treatment to contributions made to certain individual retirement plans (e.g., U.S.-IRA and Canada-registered retirement savings plan (“RRSP”)). Some nations provide a limited tax exemption to pension income (Australia), but most pensions are subject to taxation. In the U.S., changes in the tax treatment of certain individual retirement accounts permit both accrued tax deferral treatment and exempt realized withdrawals from income taxation upon retirement.

120 See id. at 14.
121 See MACKENZIE ET AL., supra note 38, at 15-16.
122 See id. at 16.
123 See id. at 30-32.
IV. INTERNATIONAL STANDARDS: NECESSARY AND APPROPRIATE?

The OECD and other multilateral organizations have endeavored to measure the results of recent pension reforms in Latin America and other global regions, and the results for both governments and pension participants have been generally positive. The most significant reform/endeavor in this respect would be the facilitation of market-driven investing by private sector entities of publicly-regulated, privately-managed private defined contribution funds in financial instruments other than government debt obligations. The primary means by which to facilitate and justify wholesale transition from PAYG systems, investing in government debt obligations by government trust funds or simply funded from tax revenues, to the investment of pension funds in non-government financial instruments by private sector entities is to facilitate the development and implementation of international regulatory and supervisory standards for private pension systems. The international standards may be developed and implemented in similar format to the “best practices” and “core principles” adopted over the past decade for international banks and securities firms by the Basle Committee and the IOSCO Technical Committee and Working Groups, respectively. The Basle Committee and IOSCO are multilateral organizations of regulatory and supervisory authorities from various nations that have established best practices and core principles in many areas through a consensus process primarily influenced by the G-7 nations. The participant nations generally recognize the consensus documents as “soft law” and thereafter adopt them in some form as legislation or regulations in their respective legal frameworks. The Basle Committee and IOSCO only recently issued a formal decree to “join forces” in certain respects to address institutions and practices that necessarily involved the “soft law jurisdictions” of each set of constituencies, such as derivatives instruments, disclosure of trading practices, and the like. The Basle Committee-IOSCO consensus process has generally reached positive results, coupled with the development of guidance in several areas of technical expertise by committees of the Bank for International Settlements. This “soft law” process has gained relative strength in the midst of
several major banking and currency crises, particularly with respect to East Asia. Specifically, the International Monetary Fund ("IMF") has formally incorporated as part of the "conditionality" attaching to IMF credit and guarantee facilities, the requirement that borrowing nations agree to pursue and adopt certain of the "best practices" and "core principles" into their respective legal framework. Although not perfect, the Basle Committee-IOSCO consensus process has been highly successful in bringing difficult financial law issues that often go to the heart of powerful political interests into the open forum for debate and guidance.

The consensus process may be extended to the pension reform arena, particularly with respect to nations that do not have large, mature PAYG systems already in place and are on the verge of financial unsustainability, although certain of the international standards would certainly be applicable to the large G-7 nations themselves. The consensus process would necessarily focus on developing international regulatory and supervisory standards for the investment of defined contribution funds by private sector entities, similar to the Chilean model. The issues of appropriate transition approaches and methods to finance the inevitable deficits arising from transition are better left to the nations themselves. However, it should be emphasized that given the macroeconomic implications of one or more larger nations undertaking a gradual or immediate transition, such transition would certainly have uncertain economic repercussions on both the global economy and individual nations. Therefore, these issues should certainly be addressed in larger political or macroeconomic forums such as the G-7 or multilateral committee involving the World Bank and IMF, respectively.

A. International Standards: The Starting Point

The best starting point for developing international regulatory and supervisory standards should begin with the true experts on investment funds and investment fund operators, which on the multilateral forum would be the IOSCO Technical Committee. The envisioned regulatory and supervisory framework could be initiated principally from guidance recently issued by IOSCO regarding the regulation and supervision
of collective investment schemes ("CIS"), or “mutual funds” in U.S. parlance, and their operational management, respectively. In particular, the IOSCO Technical Committee in September 1997 promulgated such guidance in a document entitled, Principles for the Supervision of Operators of Collective Investment Schemes. This document sets forth ten principles for the regulation and supervision of CIS operators and provides commentary on those principles.

In 1995, the IOSCO Technical Committee published the Principles for the Regulation of Collective Investment Schemes. There are two CIS principles in this document which address the regulation and supervision of CIS operators and set forth minimum standards for conduct and supervision of CIS. First, CIS principle 3, Eligibility to Act as an Operator, addresses the regulatory authority's role in imposing minimum eligibility standards of conduct that require approval by the authority prior to commencement of a CIS. The minimum standards include among other things (1) operator-specific powers and duties (administrative procedures and the duty to make decisions as to the investment portfolio structure) and (2) compliance with strictly defined standards set by the authority. Second, CIS principle 5, Supervision, provides that a regulatory and supervisory framework must provide for a regulatory authority to take overall responsibility for the supervision of CIS within its jurisdiction and addresses supervisory techniques including registration and authorization, inspections and investigations, and regulatory authority powers. Thus, the IOSCO Technical Committee issued the September 1997 guidance on the regulation and supervision of CIS operators to address these fundamental CIS principles. The fundamental objectives of the international standards for private pension funds under

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124 A CIS is defined by ("IOSCO") as “an open-ended collective investment scheme that issues redeemable units and invests primarily in transferable securities or money market instruments” and thus excludes schemes investing in real estate, mortgages, or venture capital. IOSCO TECHNICAL COMM., IOSCO, PRINCIPLES FOR THE REGULATION OF COLLECTIVE INVESTMENT SCHEMES (1995) (on file with author).

125 See IOSCO TECHNICAL COMMITTEE, IOSCO, PRINCIPLES FOR THE SUPERVISION OF OPERATORS OF COLLECTIVE INVESTMENT SCHEMES (1997) (on file with author) [hereinafter CIS OPERATOR PRINCIPLES].
the Chilean example should model the safeguards inherent in the objectives set forth in the IOSCO CIS guidance, principally investor protection and operator integrity.

The following sets forth a limited regulatory and supervisory framework through which international standards for fund operators could be adopted by a multilateral committee drawing upon expertise from various institutions, perhaps including the World Bank, IMF, and IOSCO, at the outset.

B. International Regulatory and Supervisory Standards for Chilean Model Private Pension Systems

1. Pension Fund Operator Standards

   a. Operator Eligibility

   Fund operators should be subject to minimum standards of eligibility qualifications prior to establishing and operating investment funds. Such standards should apply continuously to ensure that neither changes in the management, nor administrative organization of an operator, nor delegation of functions to third parties, lead to lesser degrees of investor protection than that which is presumed at the inception of the fund operator.

   b. Conduct of Business\textsuperscript{125}

   Fund operators should be subject to minimum standards to ensure that they meet high standards of competence, integrity, and fair dealing in their conduct with regard to pension investment business and that any investment transactions undertaken on behalf of the fund that present the operator with a conflict of interest are limited, properly disclosed, and not inconsistent with investor protection. These minimum standards should ensure that the fund has been treated fairly by the operator and that the operator has not unduly benefited from transactions to the detriment of the fund. These standards would address issues such as timely and best execution

\textsuperscript{125} See id. at 6-8.
of transactions; timely and fair allocation of transactions; avoidance of churning practices; avoidance of unauthorized rebates of commissions from transactions in dealings with other financial institutions; and other "soft dollar" practices (whereby operators enter into agreements with other counterparties to pay for services for the operator in return for brokering business that will generate an understood or agreed level of commission).

c. Connected Party Transactions

Fund operators should be subject to minimum standards to ensure that appropriate protective arrangements, including "Chinese Walls" and other firewall safeguards, are in place to limit and disclose any conflicts of interest between operator and fund and operator dealings with other fund operators, banks, securities firms and other financial and political institutions that may be "connected parties." The standards would also establish limitations on fund participation in certain events such as underwriting and participation in IPOs and procedures to ensure that operator employees do not make transactions for their own account, or for the account of the operator, that conflict with the operator's obligations to the fund. These minimum standards should collectively eliminate opportunities for conflicts of interest and unethical transactions not in the best interests of the pension participants. In addition, minimum standards should be developed for the disclosure of, and exercise of, rights acquired through fund investments, such as voting rights within equities and other financial instruments.

d. Valuation of Fund Assets

Fund operators should be subject to minimum standards to ensure that all property of the fund is fairly and accurately valued and that the fund's net asset value and the value of investor accounts are correctly determined. The minimum standards should require such accurate valuations on a daily

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127 See id. at 8-10.
128 See id. at 10-12.
basis, and the information should be freely available to the fund investors. The valuation methodology of investments should be disclosed to investors if operators are permitted to engage in off-exchange or OTC transactions. The accounting conventions for valuation of investments and collection of income therefrom should be subject to minimum standards, such as the international accounting standards set forth by the International Accounting Standards Committee ("IASC").

e. Safekeeping and Segregation of Investments\(^{129}\)

Fund operators should be subject to minimum standards to ensure that fund assets are properly held in safekeeping and segregated from the assets of management and other entities. In other words, investor assets must remain separate and distinct from the assets of the fund operator, and the investment fund entity itself must be separate and distinct from the fund operator. The standards should require the appointment of a custodian to hold the assets or be in a position to ensure their safekeeping. In addition, the minimum standards should require a supervisory function mandating that investment reconciliations are conducted to ensure that the fund assets held by the custodian reconcile with the portfolio managed by the operator.

f. Investment Standards\(^{130}\)

The fund operator should be subject to minimum standards to ensure that the investment policies of the fund are followed and that any restrictions on the type or level of investment are complied with. The investment policies of the fund, including the investment objectives and risk profile, are critical for the participant's decision to invest in a particular fund. In addition, the fund operator should be subject to minimum standards on investment and borrowing restrictions to ensure investment diversification, eliminate opportunities for undue leverage, and mitigate opportunities to purchase unusually risky securities and off-exchange financial instruments.

\(^{129}\) See id. at 12-13.

\(^{130}\) See CIS OPERATOR PRINCIPLES, supra note 125, at 13-14.
g. Fees and Administrative Expenses\textsuperscript{131}

The fund operator should be subject to minimum standards that ensure that investors are charged only for those fees and expenses that are agreed to by contract and that such expenses are made on reasonable terms fully disclosed to the participants. The nature and amount of such fees and expenses should be limited by law and charged on a fully transparent basis.

h. Internal Controls and Fund Compliance\textsuperscript{132}

The fund operator should be subject to minimum standards to ensure that internal controls are in force and that compliance arrangements exist that ensure sufficient diligence, effectiveness, fairness, and honest dealings. These minimum standards would require that internal audit and monitoring arrangements exist to mitigate opportunities for fraud, negligence, or policy failures. The supervisory functions would include routine on-site and off-site examinations and inspections by the supervisory authority to ensure compliance in this respect.

i. Transparency and Disclosure\textsuperscript{133}

Fund operators should be subject to minimum standards that ensure all documentation issued by the operator to fund investors and supervisory authorities (examinations and inspections) is transparent, comprehensible, consistent, and not otherwise misleading. These minimum standards should apply to fund offering documentation, financial statements, and continuing disclosures of material and nonmaterial information to investors and authorities.

\textsuperscript{131} See id. at 14-15.
\textsuperscript{132} See id. at 15.
\textsuperscript{133} See id. at 16.
j. Accounts and Recordkeeping\textsuperscript{134}

Fund operators should be subject to minimum standards to ensure that appropriate accounts and records are maintained regarding fund assets, transactions, relationships and investor accounts.

2. Private Pension System Design Standards.

In addition to international regulatory and supervisory standards for pension fund operators, additional standards could be developed regarding issues particular to private pension system design, such as the following categories:

a. Actuarial Valuation Procedures and Assumptions

Fund operators should be subject to minimum standards regarding their use of actuarial valuation procedures and assumptions regarding pension payouts to investors under different scenarios in order to provide investors with a clear and accurate real-time assessment as to their projected pension benefits upon reaching retirement age.

b. Insurance Requirements and Rights to Survivorship

Fund operators should be subject to minimum standards with respect to designing collective disability and health insurance provisions for fund participants. In addition, fund operators should be subject to minimum standards for delineation of rights of survivorship to the fund participant's pension plan.

c. Privately-Managed Pension System Parameters

Finally, international standards could also be designed regarding the parameters of the privately-managed defined contribution pension systems to ensure that pension participants are protected by government standards with limited opportunity for undue government interference and political conflict. Thus, international standards could be developed for

\textsuperscript{134} See id. at 17.
the system parameters to include (1) the provision of a limited
government guarantee against insolvency of private pension
funds; (2) standard categories of participant requirements,
such as retirement age and the like, to limit opportunities for
unfair distributions of entitlements and benefits; (3) in accor-
dance with the Chilean model, a minimum pension for pension
participants in the event of fund performance below a standard
benchmark; (4) standards for vesting requirements and porta-
bility of pension accounts between investments; (5) investment
of pension funds by private entities not subject to political
interference and influence; (6) guidelines for responsibility for
contributions (standard percentages of required contribution
for participants); (7) supplementary funding requirements by
the government coupled with capital adequacy requirements
for the fund to ensure liquidity and solvency in times of mar-
et distress; and (8) tax incentives to maximize investment
fund performance and retirement payouts, such as universal
tax deferral on investor gains within their respective portfolios.

CONCLUSION

Thus, developing and transition nations must take swift
action to remediate the financial deterioration of their pension
systems instead of waiting for their systems to disintegrate.
The key factor is that the longer nations wait to implement
reform, the more expensive becomes the transition to new
systems. The political debate of predictably special interest
groups must be rendered as secondary objectives to the main-
tenance of income security and safety of current pension par-
ticipants and the soundness of current pension systems.