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Dossier: Brazilian System of Pension Funds in the context of the international environment

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1. INTRODUCTION

Given the heavy fiscal crises that has been affecting so many countries in this last decades, the reform in the social security systems began to be considered as powerful instruments of adjustments of public accounts of those countries, so that an increasing number of Latin America countries have recently initiated reform of their pension and social security systems. Over the last decade, Brazil has also undertaken a major reform of parts of its pension system to strengthen the governance, management and effectiveness of the system.

The approval of Complementary Law nº 108 and 109, in May of 2001 – revoking the Law 6.435 of 1977, restructure the working bases of the complementary system in Brazil, given a new time in the history of the pension funds in the country.

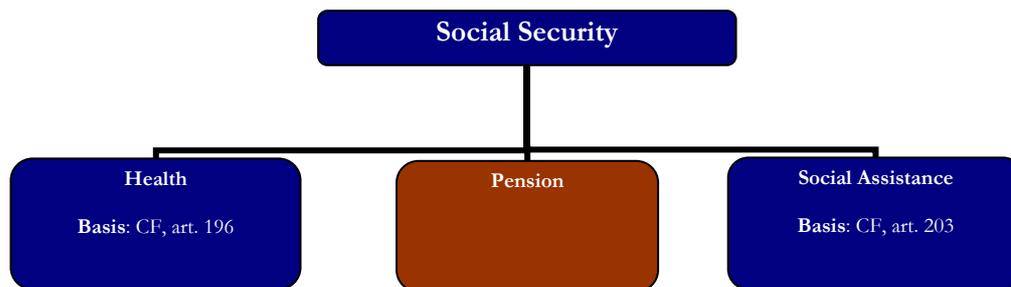
This paper was constructed between Colin Pugh and Mr. Ricardo Pena Pinheiro. Mr. Pugh came to Brazil in May of this year and spends 15 days studying and analyzing the pension fund system in Brazil, which includes the supervisory body and some closed entities, better know as pension funds.

The purposes of this paper are to present an analysis of the current pension system in Brazil.

2. Panorama of the Social Security System

Social Security System

The Brazilian Constitution of 1988 established a social security system based in three pillars; Health, Social Assistance and Pension.



The last one (Pension) is divided in three main branches, as it follows:

The first one is the Basic Social Security System (RGPS – *Regime Geral de Previdência Social*), managed by the National Institute of Social Security. It is mandatory and currently at a R\$3.038,99 cap. It attends to the private sector. Employers, paid employees, domestic servants, autonomous workers and rural workers, contribute to this system. Retirement for old-age is given to 65 year-old men and 60 year-old women in urban cities, and to 60 year-old men and 55 year old women in the rural area. Retirement due to contribution time is given to men after 35 years and to women after 30 years. The system's management is public;

The second one, the Civil Servants' System (*RPPS – Regime Próprio de Previdência Social*) is mandatory, at a cap and sub-cap defined by Constitutional Amendment no. 41/2003. Employees of Public Companies, political agents, temporary workers, and those with positions of trust are excluded from this group, whose affiliation to the Basic System is mandatory. Forced retirement is given to men and women after 70 years and retirement due to contribution time is given to men after 35 years and to women after 30 years. The workers that started as of December 15th, 1998 are subject to the minimum retirement age of 60 for men and 55 for women. The management of this system is public;

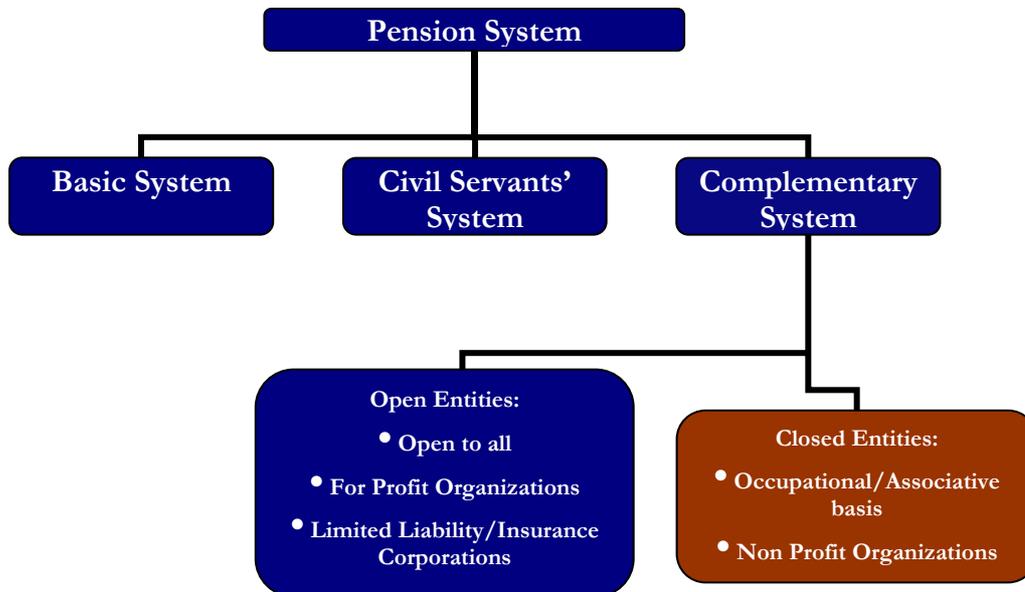
And the last one, that is what matter for us, is the Complementary System that is voluntary and its management is private. The Complementary System has a variety of arrangements, highlighting the funds sponsored by employers and funds that is formed by unions, and is a complement to the RGPS/ INSS benefit.

This System is divided in two segments: the Individual System that operates open pension plans. Employers, singly or as a group, may affiliate their employees to an open pension plan through a group contract. Individual employees, the self-employed and the non-employed may also join open pension plans on a personal basis.

Liability companies and insurance companies may establish open pension plans and the establishment of an open plan is subject to the approval of the Insurance Superintendence (SUSEP) that is a supervisory body bound to the Ministry of Finance.

And the Occupational System that operates closed plans and can be established by the sponsor to the membership of which is restricted to the covered employees of the sponsoring employer. It can also be established by unions and professional associations (duly authorized) to which affiliation is mandatory for the exercise of the profession.

Closed pension plans must be implemented through the establishment of closed pension entities and it is subject to the approval of the National Secretariat for Pension Funds (SPC).



3. Occupational System

3.1 - Regulatory Framework

The first comprehensive occupation pension legislation was issued in 1977 (Law n° 6.435), although less detailed precedents can be traced back to the beginning of the century. Pursuant to this law, Presidential Decree 81.240 of 1978 created the SPC as a supervisory body. The new federal Constitution came into effect in 1988, and article 202 thereof addressed private pension systems. The next major development came in 1998 when Constitution Amendment EC 20/98 reintroduced the concept of establishing pension plans complementary to social security and provided for a Complementary Law on pensions to be enacted. A complementary law project (PLC n° 9/99) was drafted in the following year, but it was never enacted.

The real breakthrough did not come until May 2001, when Complementary Laws n°108 and n°109 were enacted. Complementary Law n° 108 applies specifically to (i) closed pension funds sponsored by state controlled enterprises and organisations and (ii) those complementary pension plans that are now being created for civil servants (employees of the federal, state and local governments). Complementary Law n° 109 revokes all earlier pension laws and, together with Law n°108, forms the base of today's legislative framework. For extra clarity, it should be understood that public sector plans are covered by both Law n°108 and Law n°109, and private sector plans are covered by Law n°109.

The bodies involved in the various aspects of the regulation of closed pension funds are:

- **Federal government.** It enacts high level “complementary pension laws”, including the critically important Law n°108 and Law n°109 of 2001.
- **National Board of Complementary Pensions - CGPC** (Conselho de Gestão da Previdência Complementar). It is chaired by the Minister of Social Security and is comprised of five members representing the government (including the head of the SPC) and three individuals representing pension fund entities, pension plan sponsors, and plan members and beneficiaries. It is the dominant source of regulations covering a wide range of aspects of the operation of closed pension plans and funds. The SPC develops policies and prepares draft resolutions for consideration by the CGPC, but it is the CGPC (with its wider representation) that brings such regulations into effect.
- **National Secretariat for Pension Funds - SPC** (Secretaria da Previdência Complementar). It issues lower level “instructions” to clarify various laws and regulations and generally to assist plan sponsors and pension fund entities. The SPC legislative department also initiates regulations for implementation by the CGPC and the CMN.
- **National Monetary Council - CMN** (Conselho Monetário Nacional). The National Monetary Council periodically issues “resolutions” concerning closed pension fund investments. The most important is CMN Resolution n°3.456 of

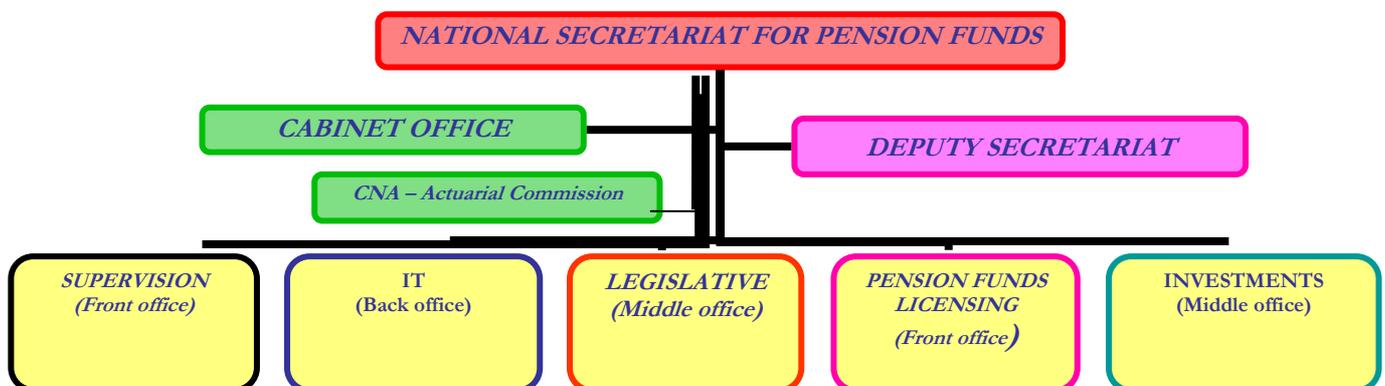
June 2007. It is a comprehensive document that establishes quantitative investment limits for the assets of closed pension funds.

- **Exchange Commission - CVM** (Comissão de Valores Mobiliários). Roughly equivalent to the Securities and Exchange Commission, it issued Deliberation n°600 in October 2009 concerning pension plan accounting and expensing by publicly listed companies.
- **CVM-SPC**. Acting together, they periodically issue “joint decisions” covering matters of mutual interest or overlapping responsibility.

3.2 – The Supervisory Body

The SPC is the supervisor of closed pension funds. It was created in 1978, pursuant to Law n° 6.435/1977 and Presidential Decree 81.240/1978. In the watershed year of 2001, Article 74 of Law 109 continued the regulatory and supervisory roles of the SPC and the CGPC - under the auspices of the Ministry of Social Security - *until a law is passed that creates new regulatory and supervisory agencies*.

The SPC is currently funded, at a very low level, by the Ministry of Social Security (of which it is a department). A major restructuring of the SPC was undertaken in 2003 - subsequent to the election of President Lula who had included private pension issues as a priority during his election campaign. Technical departments were established to replace the general coordination approach. A technical analysis department was created, and there was a reallocation of actuaries and other specialists into the areas responsible for handling different authorization requests. Auditors were hired into the SPC. Later, more auditors were hired, and routine supervisory activities were decentralized into regional offices – with the supervisory professionals in Brasilia retaining responsibilities for the coordination and unification of procedures. The CGPC (the primary source of regulations) was formally restructured by a 2003 presidential decree. However, further comprehensive restructuring of the SPC at that time was conditioned on the creation of PREVIC.



Creation of Previc

The first steps to create Previc were taken in 2004. The Executive Branch forwarded the proposals to the President of the Republic who in turn signed MP (medida provisória) nº233. This temporary law entered into force on its date of publication, but it needed to be approved by the Congress within 120 days; otherwise, it would simply expire. The House of Representatives voted for the law, but the Senate refused, so the Previc envisaged by MP233 was not created.

The issue remained dormant until 2008, when Projeto de Lei nº3962/08 (“*Cria a Superintendência Complementar – PREVIC*”) was sent to Congress. The Executive Branch believed that a law project (*projeto de lei*) would be received more favourably than a provisional law (*medida provisória*). The objective is to create a supervisory agency that is adequate to the size and complexity of the Brazilian private pension system and is independent of political interference. Among the features of the new agency are the Tafic (a fee or levy to be paid by the pension funds to finance the work of Previc), a chamber to solve any disputes, the CRPC - Appeal Chamber for Complementary Pension Plans (Câmara Recursal), and the replacement of the CGPC - National Board of Complementary Pensions by the CNPC - National Regulatory Board for Complementary Pension Plans.

3.3 – Closed Pension Funds

Closed pension funds must be established as non-profit-making legal entities with the single business aim of establishing and managing closed pension plans. These entities manage the contribution and benefit administration and it is supervised by the SPC, which is currently bound to the Ministry of Social Security.

Closed pension funds must be governed by:

- a governing board responsible for setting the management policy for the entity and the plan;
- a supervisory board responsible for the entity's internal controls; and
- an executive directorate responsible for the entity's administration.

The members of these bodies must comply with certain requirements concerning fitness and propriety. The members of the executive directorate must also have a level of higher education.

Closed pension funds sponsored by state-owned enterprises or the government are subject to stricter rules than those sponsored by private companies or associations.

In the case of pension plans sponsored by private companies or associations, the requirements for the composition of the boards and the executive directorate must be regulated in the plan rules. At least one-third of the members of the governing and supervisory boards must be representatives of members and beneficiaries.

Closed pension funds offer defined benefit plans, defined contribution plans or variable contribution (mixed), except funds sponsored by unions, professional associations and pension funds sponsored by the government, all of which that can only manage defined contribution plans. The most part of the occupational pension funds assets (80 %) are held by entities sponsored by state owned companies. Although the new plans being created are defined contribution, most participants and assets are still in defined benefit plans.

Plan Description:

- Defined Benefit Plans: Traditional definition.
- Defined Contribution Plans: Plans where the retirement benefit accumulation is pure DC and where the retirement benefit payouts also continue to be a direct function of participant's account balance. Association plans are DC, and any new civil service complementary plans will be DC.
- Variable Contribution Plans (Mixed Plans): Variable contribution plans are, most of all, DC during the retirement accumulation phase, and in the payout phase it becomes a DB plan.



Benefit Plan ³	Quantity per Plan	Percentage
BD (DB)	373	36,21%
CD (DC)	334	32,43
CV (VC-Mixed)	323	31,36
TOTAL	1.030	100%

Source:SPC/MPS.

In June of 2008, there were 372 entities (closed pension funds), sponsored by 2.491 companies. These pension funds (closed entities) have accumulated US\$ 270 billion (17% of the GDP) in assets, covering 6.8 million workers (including the dependents and beneficiaries), which is equivalent to 2.2% of the labor force.

³ Source: BO/SPC/2008

3.4 – Priority Issues

I) Licensing and pension funds termination

The pension funds shall only be able to institute and operate benefit plans for those they have specific authorization, in accordance to norms sanctioned by the regulatory and supervisory body.

Above are the subjects that the entity should be conditioned to previous and express authorization from the supervisory body:

- * The establishment and operation of the closed entity, as well as the application of the statutes, benefit plans contracts and changes;
- * The operations of merges, split-off, or any other form of company reorganization, related to closed entities;
- * The sponsorship withdrawal;
- * The transfer of sponsorship, group of members, plans and reserves between closed entities.

The changes in the benefit plans contracts will apply to all members of the closed entity, before the approval by the regulatory and supervisory body, observing the accrued right from each member.

Since the beginning of this year an expert group of the supervisory body is reviewing the rule that deals with sponsorship withdrawal (Resolution CPC/MPAS nº 06, April 1988) to update it and to insert operations of merges, split-off and acquisition related to pension funds.

Relevant Brazilian legislation:

- * Complementary Law 109, May 05, 2001 – Art.17, 25 and 33
- * Resolution CPC/MPAS nº 06, April 07, 1988
- * Resolution CGPC/MPAS nº 12, September 17, 2002
- * Resolution CGPC/MPAS nº 06, October 30, 2003
- * Resolution CGPC/MPS nº 08, de February 19, 2004
- * Resolution CGPC/MPS nº 10, de March 30, 2004
- * Resolution CGPC/MPS nº 12, de May 27, 2004
- * Resolution CGPC/MPS nº 14, de October 01, 2004

- * Resolution CGPC/MPS nº 16, de November 22, 2005
- * Resolution CGPC/MPS nº 18, de March 28, 2006
- * Resolution CGPC/MPS nº 26, de September 29, 2008
- * Instruction SPC nº 30, de March 19, 2009

OECD references:

- * OECD-IOPS Guidelines on the Licensing of Pension Entities:
- * Licensing of pension entities should be a legal requirement.
- * Pension entities should have formal, written charters or documents describing their objectives and parameters (such as types of contributions and benefits), its governance structure and outsourcing or third party service provisions, and the rights of members and other beneficiaries.
- * Adequate risk control mechanisms should be in place to address investment, operational and governance risks, as well as internal reporting and auditing mechanisms.
- * Pension entities offering defined benefit and hybrid/mixed plans should have a funding policy that specifies the sources of funding, the actuarial method to be used, and the mechanisms for fulfilling legal funding requirements.
- * Pension entities should prepare a statement of investment policy.
- * At least where directly exposed to financial and demographic risks, pension entities should be required to hold a minimum amount of free, uncommitted starting capital or otherwise have access to adequate financial resources. The amount should be dependent on the risks to be covered.
- * Pension entities should have a governing body that is ultimately responsible for the entity and a code of conduct for the members of its governing bodies and staff. The code of conduct may be laid out in specific legislation applying to pension entities. Members of the governing bodies should be subject to fit and proper requirements.
- * The licensing process should require the submission of a business plan that takes into account the strategic and operational aims of the applicant. [Hong Kong is one jurisdiction that places great emphasis on the submission of a viable business plan. The business plan must be debated with, and approved by, the regulatory authority (MPFA) before a license is granted. If the trustee subsequently fails to achieve its business plan and is unable to take corrective actions, the MPFA has the clear powers to suspend or revoke the license. The law gives them such powers, and they are quite prepared to exercise such powers when the circumstances dictate.]

* There should be legal provisions requiring the withdrawal of a licence from a pension entity in certain circumstances. A pension entity whose licence has involuntarily been withdrawn should have the possibility to appeal the decision and have it reviewed.

II) Certification of Corporate Directors

Under the umbrella of protection of pension plan members and high quality pension fund governance, there is a strong desire in Brazil to ensure and enforce minimum qualification, training and experience requirements on the members of the Governing Body and others.

One step under consideration in this regard is a requirement for board members to undergo some form of certification process.

Although many countries have well-established “principles” regarding the qualification and disqualification requirements for individual trustees, directors of pension funds.

Brazil is currently considering the idea of mandatory certification for board directors. There seems to be great merit in this idea.

As the following information will indicate, there are very few international parallels for such certification, but this is clearly an area where standards and requirements can be established in Brazil.

Relevant Brazilian legislation:

* Complementary Law 108, May 05, 2001 – Article 20

* Complementary Law 108, May 05, 2001 – Art 35 - § 3º e 4º

International Experiences:

Country examples relating to responsibilities and attributes of trustees of Anglo-Saxon type trust funds) and board members of pension fund foundations. Under international pension taxonomy, Brazilian closed pension funds are considered to be foundations.

III) Risk-Based Supervision

Relevant Brazilian legislation:

Recommendation nº 2, Abril 27, 2009

Background:

Risk based supervision of pension plans is a relatively recent phenomenon, having been preceded by equivalent initiatives in the banking and insurance sectors. IOPS identifies the pension supervisory authorities in Australia, Denmark, Mexico and the Netherlands as being the pioneers of a risk-based approach to pension fund

supervision. Whilst IOPS categorizes these countries as having “developed sophisticated risk-based supervision models, with quantitative and qualitative analysis of the financial and operational risks applicable to their DB or DC pension systems”, many lessons are still being learned.

Definition of risk based supervision:

* Risk-based supervision specifically attempts to vary the scope and intensity of supervision according to the level of risk to which individual pension funds are estimated to pose (in regard to the individual members and beneficiaries of the pension fund and also to the pension fund itself).

* This is to be compared with the more traditional compliance-based approach, where all pension funds are treated the same and that is sometimes cynically called “box ticking”.

* A risk-based approach allows scarce supervisory resources to be targeted at the pension funds which are seen to be at most risk and allows supervisory authorities to take a more pro-active approach. Compliance based approaches are largely reactive.

* An important distinction needs to be made between a risk-based approach focused solely on supervision and a more holistic approach involving both risk-based supervision and risk-based regulation. The OECD and IOPS favour the latter.

OECD/IOPS/World Bank references documents

* Experiences and Challenges with the Introduction of Risk-Based Supervision for Pension Funds, IOPS Working Paper n°4 (2007)

* Risk-based supervision of pension funds: a review of international experience and preliminary assessment of the first outcomes, World Bank 2008.

* Risk based supervision in Australia, World Bank 2008

* Risk based supervision in Denmark, World Bank 2008:

Important Issue Remarks:

* A single, ideal model or structure for risk-based supervision does not exist. No model can be exported from one country to another without modification.

* It can be equally difficult to adopt a model from another sector within the same country, e.g. financial services such as banks and insurance companies. Attempts in the UK to apply to pension funds the same model as is used by the Financial Services Authority were eventually abandoned. Similar attempts in Germany were more successful, but within an environment where special purpose insurance companies (*Pensionskassen*) and direct insurance and indirect reinsurance contracts are dominant financing approaches.

- * Different risk-based approaches may be needed for different types of plans and/or funds.
- * Consider releasing initial proposals in a discussion format, and solicit feedback. Work closely with the actuarial and accounting communities.
- * It is better to start with a pilot project involving a few funds than to implement a big bang rollout of the new supervisory structure.
- * Operational and legal risks are more challenging in developing countries, thus requiring a more robust system.
- * Pension supervisory authorities implementing risk-based supervision have underestimated the amount of change needed within the supervisory agency to implement the transition.
- * The challenge of data collection should not be underestimated. Even a perfect system will not work if it is fed imperfect data or no data at all. It is equally important to avoid demanding and receiving masses of irrelevant data.
- * Whilst recognizing the effectiveness of the power of persuasion, the supervisor must also have legal powers of enforcement – an aspect apparently overlooked in several countries. Ensure that the powers are flexible and framed in such a way as to allow a proportionate response.
- * Hiring new employees and retraining all existing staff appears to be the greatest of all the challenges. Both the philosophy and the processes of risk-based supervision need to be covered. Use international expertise and also leverage in-house training expertise.
- * External communication. Provide training to the pension funds themselves, and increase awareness among other key stakeholders.
- * Allow plenty of time for the transition;
- * Clearly outline the roles of whistleblowers.
- * Remember that a move to risk-based supervision is not a onetime event, but rather it is an ongoing process.

IV) Variable Contribution Plans

In common with many other countries, many Brazilian plan sponsors were reluctant to continue their traditional defined benefit pension plans and were looking for better alternatives than full conversion to pure defined contribution plans. However, the commonality ends there. Brazil subsequently developed its own unique brand of hybrid plans, known as “variable contribution” plans (sometimes called “mixed” plans).

Article 7 of Law 109 identifies the three basic types of plan (DB, DC and variable contribution) and opens up the possibility of other benefit plan designs that may evolve.

CGPC Resolution nº 16, de 22 de novembro de 2005 then defines the three types of plans in slightly more detail. Article 2 and Article 3 include the traditional definitions of DB and DC plans. Article 4 then describes variable contribution plans as “the combination of the characteristics of defined contribution and defined benefit.”

The majority of Brazilian variable contribution plans are pure defined contribution as regards the retirement benefit accumulation, but they then typically include one or both of two features that clearly distinguish the whole plan from being classified as DC. It is these features that make Brazilian plans very interesting and quite different from general international practices. They are:

Risk benefits – those benefits payable on death or disability before retirement. Most plans in other countries that are pure DC for the retirement benefit accumulation simply refund the accumulated employee and vested employer contributions in the event of pre-retirement death or disability. Alternatively, or in addition, there are separate group life insurance and group long term disability (LTD) insurance contracts that provide defined benefit lump sums, survivor pensions and LTD payments. Under this scenario, the pension plan (in isolation) stays as pure DC, and there are no actuarial issues. In contrast, in Brazil, these risks can be retained in the pension plan and thus can involve actuarial risks for the pension fund.

Pension payments during retirement. In common with other countries, the accumulated capital can be paid at retirement (a) as a lump sum, within limits, (b) as a series of programmed withdrawals or (c) as a life annuity. In other countries, if the retiree chooses a life annuity, then the accumulated capital is transferred to a life insurance company for the purchase of an immediate or deferred life annuity – thus transferring all the post-retirement risks (interest rates, inflation, longevity, etc) to a third party. The pension plan thus has no actuarial exposure in any aspect of its design or operation. However, the life annuity purchase approach is not used in Brazil, and indeed a competitive market for this approach has yet to be developed. Instead, the pension fund retains the retirement capital and the life annuity obligation and is thus exposed to actuarial risks.

Whilst acknowledging the special plan design and funding arrangements in Brazil, it should also be recognized that hybrid plans throughout the world involve elements of both DB and DC. Brazil is not alone, although the designs and financing may be different, they are all hybrid plans, and they all present serious challenges for regulators.

Relevant Brazilian legislation:

* CGPC Resolution Nº 16, November 22 2005

* Complementary Law 109, May 05, 2001

V) Actuarial Funding

According to the Law the supervisory body should determine minimum economic-financial and actuarial security standards, with specific purpose of preserving liquidity, solvency and balance of the benefit plans, separately, and of each pension fund.

With a legal perspective and a commitment to ensure the pensions solvency, the CGPC, based on the criteria mentioned above, approved the Resolution 26, September 29, 2008, which disciplines the pension plans surplus allocation and deficit equation.

This is a countercyclical measure aimed to protect the interest of the participant, who for years contributed to the pension plan with the expectation of receiving a complementation during his retirement, once the accumulated surplus in good times should be used preferably in a prudential way, to adjustments to the economic assumptions (interest rate) and demographic assumptions (longevity).

Relevant Brazilian legislation:

CGPC Resolution nº 26, September 29, 2008 - Minimum funding is still based on AT-83 mortality and a 6% real interest rate. As regards surplus utilization, there is a new threshold of 125% of liabilities calculated using AT-2000 mortality and a 5% real interest rate.

CGPC Resolution nº 18, March 28, 2006 - Minimum funding to be based on AT-83 mortality and a 6% real interest rate.

Complementary Law nº 109, de May 29, 2001 and Complementary Law nº 109, de 29/05/2001 - Several articles directly or indirectly impact actuarial funding and related matters, e.g. Article 18 (basic requirement for adequate funding); Article 20 (overfunding) and Article 21 (underfunding).

OECD reference documents:

OECD "Guidelines on funding and benefit security in occupational pension plans", 2007

1. Occupational pension plans should be funded, i.e. not pay-as-you-go or book-reserved. Funding should be through insurance contracts or an autonomous pension fund, or a combination thereof.

2. Pension plan liabilities should be calculated at least every three years. They should be determined using appropriate calculation methods, prudent actuarial assumptions (e.g. mortality) and generally recognized actuarial standards and methods. Liabilities should be calculated using prudent discount rates that are consistent with the methodologies used in the valuation of assets and other economic assumptions. The governing body of the pension fund should seek the advice of the actuary or other relevant specialist regarding the assumptions and methods to be used in calculating pension liabilities and funding levels.

3. As a basic objective, assets should be maintained at a level at least sufficient to meet the accrued benefit payments. “The legal provisions should not prevent funding methods that seek to dampen the short term volatility in firms’ funding contributions. Prudent amortisation of supplemental costs over time might help achieve a smoother contribution schedule and more stable funding levels. Funding rules should aim to be countercyclical, providing incentives to build reserves against market downturns. Funding rules should take into account the extent to which the autonomous pension fund itself (as opposed to the plan sponsor or the plan members) is directly responsible partly or wholly for the commitments represented by the pension liabilities.”

4. Plan termination. “The allocation of plan assets and the responsibility for underfunding in the event of plan termination should be clearly established. The creditor rights of pension plan members and beneficiaries should be recognised in the case of bankruptcy of the plan sponsor.

International Experiences

Reference documents regarding international actuarial funding practices:

- * “Funding Regulations and Risk Sharing”, OECD Working Paper n°17 (2008)
- * “Comparative Funding Regimes”, Ontario Expert Commission on Pensions (2007)
- * “Minimum technical provisions for defined benefit occupational pensions in the EU”, Groupe Consultatif Actuariel Europeen (2007)
- * “Funding rules and actuarial methods”, OECD Working Paper n°1 (Pugh, 2006)

Laws and practices in other countries:

- * Funding requirements vary enormously from one country to another. The research papers listed immediately above provide both analyses and details of such differences.
- * 105% funding; unchanged at year 2022 for 130% funding); and UK (pragmatic approach, with longer recovery periods where appropriate).
- * Consolidation and re-amortization of existing funding deficiencies, thus spreading the costs further into the future.
- * Temporary exemptions from making deficit amortization payments, thus giving time to evaluate whether the deficit is real and long term or just a temporary aberration.
- * Increased use of letters-of-credit in lieu of physical contributions.
- * USA. A radical overhaul of its minimum funding requirements was implemented in late-2006 (the Pension Protection Act). Some of the transitional requirements will be applied more slowly.

Longevity Improvements:

- * Brazil. Review of current situation regarding existing longevity studies, trends and applicability to membership of closed pension funds (assumed to have better mortality than the general population);
- * UK. The Pension Regulator (TPR) is introducing stringent new cohort mortality tables. Negative reaction from the marketplace.

VI) Insurance and reinsurance

The pension funds, in order to assure assumed obligations with the benefit plans members and retirees, shall be able to contract reinsurance operations, on their own decision or by determination of the supervisory body, complying with the benefit plan contract. It is foreseen in the law but this subject it is not already regulated.

Relevant Brazilian legislation:

- * Complementary Law nº 126, January 15, 2007 - Not limited to EFRPs, this law establishes the new rules for reinsurance (following abolition of the IRB Brasil Re monopoly), including insurance with foreign insurers and insurance in foreign currencies. Modifies the Decree-Law nº 73/1966.
- * Mensage nº 16, January 15, 2007 - "Veto message regarding Law 126/2007." A large portion of Article nº11 was deleted, on the basis that it contained too much constricting detail. Other changes related to prior laws.
- * CNSP Resolution nº168, of 2007 - Addresses reinsurance and retrocession activities and their brokerage and other provisions.
- * CNSP Resolution nº164, of 2007 "Establishes transition rules for the IRB Brasil Re reinsurance and retrocession operations, for the acquisition of reinsurance directly or through brokers, for the acquisition of reinsurance in foreign currency."
- * CNSP Resolution nº 165, of 2007 - Addresses cross-border acquisition of insurance and insurance in foreign currencies.
- * Complementary Law Project nº 249/05. This and other "projetos de lei" were eventually superseded by Complementary Law nº 126, but the "exposição de motivos" in this particular document provide some interesting background to the thinking behind the eventual law.
- * CGPC/MPS Resolution nº 10, March 30, 2004 - Allows EFPCs (= pensions funds) to purchase insurance for death and disability (risk) benefits. The Resolution recognizes the desire or necessity for closed pension funds to reduce or eliminate actuarial risks relating to disability and death benefits, and allows such funds to transfer just such risks (i.e. separate from the retirement liabilities) on an efficient basis through the purchase of an insurance contract.

* Complementary Law nº 109, May 29 2001 - Article 11 allows EFPCs to use reinsurance contracts to fulfill their obligations regarding plan members and beneficiaries, subject to the provisions of the plan and the requirements of the regulatory and fiscal authorities. Article 44 raises the possibility of broader-based insolvency insurance. (Important: This rule is not already regulated).

OECD reference documents:

* OECD “Core principles of occupational pension regulation”, 21 July 2004

* Encourages reinsurance as a potentially better solution than insolvency insurance.

“The need for insolvency insurance and/or other guarantee schemes has to be properly evaluated. These mechanisms may be recommended in some cases but in an adequate framework. Recourse to insurance mechanisms (group and reinsurance) may be promoted.”

International Experiences:

Laws and practices in other countries:

* Many countries allow the entire pension plan to be financed through a life insurance company, then generally avoiding the need to create a separate trust or foundation. In an international context, Brazilian EFPCs are considered to be pension foundations. This is not the subject under discussion.

* Most trust or pension foundation countries either implicitly or explicitly allow the pension fund to purchase individual or group insurance contracts for the transfer of some or all of the pension fund’s risks – whether in regard to death and disability benefits or deferred or immediate retirement pensions. Example (Ontario): “The administrator of a pension plan who is required by the pension plan to provide a pension, a deferred pension or an “ancillary benefit” may purchase the pension, deferred pension or ancillary benefit from an insurance company. Ancillary benefits are death and disability benefits.

* Some countries (e.g. Canada) even allow the plan sponsor directly to purchase such group insurance coverages and then deem them to be part of the company’s pension plan, i.e. with a corresponding reduction of the pension fund’s obligations.

Background reading:

- See Appendix “A” (English).

VII) Pension Fund Investment

The Resolution nº 3456, June 01, 2007 that disposes on the guidelines for application of guarantor resources of the plans managed by the closed pension funds is being reviewed. There is draft of the new legislation that is under

discussion that simplifies, diversifies and optimizes the prudential risk limits, with greater responsibility and diligence to the pension funds managers.

Other Brazilian source documentation:

* “Regulação dos investimentos nos fundos de pensão: evolução histórica, tendências recentes e desafios regulatórios”, Leonardo André Paixão, Ricardo Pena Pinheiro e José Carlos Sampaio Chedeak (15 pages, 2005)

* “Supervisão e controle dos investimentos nos planos de benefícios administrados pelos fundos de pensão”, Ricardo Pena Pinheiro e Carlos Eduardo Rodrigues da Cunha Gomes (16 pages, November 2006).

OECD reference documents:

OECD Guidelines on Pension Fund Asset Management

* Introduction: “The OECD Guidelines on Pension Fund Asset Management set out a basic framework for the regulation of pension fund investment, where regulation is defined in a broad sense that may include: the main body of the pension law; related laws (e.g. trust law); tax requirements; standards set by pension and financial sector supervisory authorities; codes of conduct developed by professional associations (e.g. a pension fund association); collectively bargained agreements; or plan documents (e.g. trust documents).

* The governing body of the pension plan or fund and other appropriate parties should be subject to a “prudent person standard” such that the investment of pension assets is undertaken with care, the skill of an expert, prudence and due diligence. Where they lack sufficient expertise to make fully informed decisions and fulfil their responsibilities the governing body and other appropriate parties should be required to seek the external assistance of an expert.

* The legal provisions may include maximum levels of investment by category (ceilings) to the extent that they are consistent with and promote the prudential principles of security, profitability, and liquidity pursuant to which assets should be invested. Within this framework, certain categories of investments may be strictly limited. The legal provisions should not prescribe a minimum level of investment (floors) for any given category of investment, except on an exceptional and temporary basis and for compelling prudential reasons. Portfolio limits that inhibit adequate diversification or impede the use of asset-liability matching or other widely-accepted risk management techniques and methodologies should be avoided. Matching of the characteristics of assets and liabilities (like maturity, duration, currencies, etc) is highly beneficial and should not be impeded.

* Investment in assets of the plan sponsor, in parties related or affiliated with any pension entity or pension fund managing company is prohibited or strictly limited to a prudent level (e.g. 5 percent of the pension fund assets).

* Investment abroad by pension funds should not be prohibited.

* All legal provisions setting forth quantitative portfolio limits should be regularly assessed to determine whether they are unnecessarily inhibiting the ability of pension fund asset managers to implement optimum investment strategies, and (such provisions should be) amended to the extent necessary.

International Experiences:

* In the European Union, pension fund investments in the assets of the plan sponsor are strictly limited to 5% of the overall fund – thus matching the OECD requirements. All other forms of quantitative restrictions are forbidden by EU law. The emphasis is on the prudent person rule, supported by asset-liability management.

* A similar approach is adopted in North America and elsewhere. Quantitative restrictions are slowly dying.

* For a long time, Switzerland (not an EU member state) adopted an interesting variation of the move away from quantitative restrictions. It retained its somewhat complex asset mix restrictions, but the regulator allowed DB pension funds to exceed these limits if they could prove - through asset liability modelling studies - that the limits created inefficient portfolios for such funds. [An asset liability modelling study generates a chart that shows a curve of “efficient” portfolios that generate the best rates of return for the degree of risk that the pension fund is prepared to accept. An asset mix that falls below the line – such as an asset mix imposed by law – is then “inefficient”.]

* Quantitative investment restrictions are still to be found in Latin America.

* Risk based supervision can make it easier to remove quantitative investment restrictions. For example, Mexico with VaR, whilst Chile retains quantitative restrictions.

* Chinese Enterprise Annuities (occupational DC plans) are subject to quantitative investment restrictions. Recent discussions with the regulator confirm a reluctance to abandon such limits. A similar situation can be found in other so-called emerging economies.

* Limits on foreign investments. This can be an even more delicate issue. Until recently, one mature and the sophisticated pensions market, namely Canada, had very strict limits on foreign investments. For several decades, the maximum was 10% of assets, which was eventually raised to 30% before the limit was eventually being abolished in 2005.

VIII) Financial Education

In 2007, the Committee of Regulation and Supervision of the Financial, Capital, Insurance, Pension and Capitalization Markets (COREMEC), created a Working Group to develop the Brazilian Strategy of Financial Education (ENEF), that aims to high the financial and previdenciary education level in the country.

The SPC is a member of Coremec and participates in the ENEF elaboration. All the strategy achievements' is on the website - <http://www.vidaedinheiro.com.br/Enef/Default.aspx>. In 2008, the SPC published the Recommendation nº 01 that provides financial education actions regarding the pension issues.

Relevant Brazilian legislation:

- * Deliberation COREMEC nº 8 de June 29, 2009
- * Decree nº 5.685, de January 25, 2006
- * Deliberation COREMEC nº 3 de May 31, 2007
- * Deliberation COREMEC 5 DOU July 08, 2008

Background:

- * Private pensions are becoming an increasingly important source of retirement income - accentuated by retrenchment of social security benefits in many countries, increasing longevity among pensioners and other factors. But, pension contracts are complex and extremely long term arrangements. Most consumers lack even basic financial planning skills, let alone a good understanding and knowledge of pensions and retirement savings.
- * The challenges are becoming even greater, as traditional defined benefit plans are often being replaced by pension plans at the other end of the risk spectrum –namely, defined contribution plans with individual investment choices.
- * There is an increasing awareness among regulators of the need to implement coherent and transparent financial education programs.

OECD references:

- * “Recommendation on good practices for financial education relating to pension plans”, (2008)
- * OECD International Gateway for Financial Education
- * “Guidelines for the protection of rights of members and beneficiaries in occupational pension plans” (2003).

Basic OECD conclusions:

Financial education should be taken into account within the pension regulatory and supervisory framework. It does not replace the need for continued prudential regulation and consumer protection. Instead, it should be complementary.

- * Financial education can promote market efficiency and symmetrical information.

- * Best practices should be shared between countries.
- * All main stakeholders have a role to play. These include plan sponsors, governments and other public authorities, the social partners, pension fund associations, providers of retirement income products and financial intermediaries.
- * Methodologies and criteria should be developed to assess the needs of the population and to evaluate the impact and effectiveness of existing programs.
- * Particular attention should be paid to defined contribution plans. Automatic enrolment, transparent opt-out features, default contribution rates and default investment allocations should all be considered.
- * Various tools for estimating retirement income needs and savings requirements should be developed and made easily available.

Specific OECD recommendations for member directed occupational DC plans:

1. Where members direct their own investments in an occupational pension plan, they have the right to a number and diversity of investment choices sufficient to permit them to construct an appropriate investment portfolio in light of their own individual circumstances and in the context of the particular pension programme.
2. Members should be provided with complete information regarding investment choices that is standardised and readily comparable. At a minimum this information should include disclosure of all charges, fees and expenses associated with each investment choice, as well as portfolio composition and historical investment performance data.
3. Members managing their own individual accounts have the right to timely and fair execution of their investment decisions and to written confirmation of these transactions. The right (or responsibility) to make and execute investment decisions should not be inhibited by the assessment of any unreasonable charges or fees.
4. Members and beneficiaries who are required to manage their own individual accounts should be provided sufficient opportunity to acquire the financial skills or education and other assistance that they need in order to make appropriate investment decisions in their pension plans.

IX) Administration Expenses

Since 1978, and by virtue of the law, decree and resolution listed below, the annual administration expenses of a closed pension fund are not allowed to exceed 15% of the contribution flow into the plan during the year. It is difficult to imagine that this limit had any real practical effect when it was first introduced, but more recently there are two commonly found situations where the requirement is difficult to justify and even more difficult to satisfy. They are:

- * A mature plan that is comfortably overfunded and where, as a consequence, plan sponsor and plan member contributions have been significantly reduced or totally

suspended. 15% of a low or zero contribution is clearly a very low or zero amount, but the work involved in operating the pension plan and fund has not diminished.

* An even more mature plan that is closed to new members and that ultimately becomes just a collection of pensioners and other beneficiaries. On the basic funding principle followed in Brazil and elsewhere, the benefits for such members should already be fully funded. Thus again, there is no contribution inflow, and the 15% rule is impossible to apply.

Different types of plans and funds:

It is difficult to discuss the relative merits of maximum fee levels without recognizing that there are many varieties of pension plans and pension funds. Legislation or lack of legislation, in other countries regarding maximum fees recognizes these differences. The first two bullets discuss the two types of plan and fund that are to be found at the extreme ends of the spectrum.

1. A traditional defined benefit pension plan financed through a single employer closed pension fund. By definition, a “not-for-profit” fund. In the large majority of countries, the employee contribution rate is fixed in the plan rules, and the employer pays the rest of the cost required to fund the benefits and cover the administrative costs. If the costs of funding the plan increase, whether because of actuarial losses or high administration expenses, the employer pays these extra costs. The benefits paid to plan members and other beneficiaries are fixed by the plan rules, and should not be affected in any way by such cost increases. The argument is strong that there is no need to legislate maximum administration costs under this scenario, because it concerns a (hopefully) sophisticated buyer that already has every direct incentive to control costs.

2. At the other extreme, a personal pension plan that is financed through the retail (or “open”) pension market. Such plans are, by definition, defined contribution (DC). The providers are usually insurance companies or other financial institutions. “For profit” organizations generally dominate this marketplace. High charges under such contracts cause a direct reduction in the amount of pension or other benefit that the individual will eventually receive. There are already far too many examples of such policies being mis-sold to unsophisticated buyers, frequently by sales personnel remunerated on a front-end loaded commission basis by the financial provider. One of the worst examples was the personal pension plans introduced by the Margaret Thatcher government in the UK in the 1980s. The problems were further aggravated by these personal products being allowed to be offered to members of occupational DB pension plans as an alternative to continued membership in the occupational plan. Now in the UK and some other countries, the administration charges that can be levied under such individual plans are strictly regulated. For example, the maximum charges under a so-called stakeholder pension plan in the UK cannot exceed 1% of the assets accumulated by the individual under his or her contract. At this stage, it is also important to recognize that such personal or individual plans are often grouped together to create a simplified version of an occupational defined contribution (DC) pension plans.

In Brazil, traditional DB pension plans financed through closed pension funds closely resemble the first category – the important difference being that both the plan sponsor and the plan members share the responsibility for cost increases. But equally, the responsibility for proper and effective governance is shared between the two parties – through the Governing Board, etc... At the other end of the spectrum, there are also individual pension contracts in Brazil that closely resemble the second category.

Relevant Brazilian legislation:

Resolution CPC n.º 01/1978

Portaria SPC n.º 176/1996

Decree n.º. 606/1992

OECD references:

* Fees in Individual Account Pension Systems – A cross country comparison”, OECD Working Paper n.º27 (2008)

X) Pension Fund Accounting

Pension fund accounting in Brazil has been the subject of active debate in recent years. Whilst some pension funds were producing high quality accounts, concerns had been raised about the accounting practices of other funds.

A “Comitê de Pronunciamentos Contábeis” was established to address these concerns and also discuss convergence with international pension fund accounting standards. Subsequently, on 26 January 2009, CGPC Resolution n.º. 28 were issued.

This project appears to have reached a successful conclusion.

Relevant Brazilian legislation:

* Resolution n.º. 28, January 26 2009

International Experiences:

International Accounting Standard n.º26. “Accounting and Reporting by Retirement Benefit Plans”.

This is actually one of the least prescriptive international accounting standards, and it has not been changed since its introduction in 1987, except that it was reformatted in 1994. There are no projects to change this standard.

XI) Pension Plan Expensing

Pension fund accounting, as discussed in the previous section, is concerned with the income statement (profit and loss, P&L) and balance sheet of the pension fund itself.

Pension plan expensing is an entirely different subject. It relates to the recognition of the cost of the pension plan in the income statement (P&L) and on the balance sheet of the plan sponsor. It is a much more complicated subject, and it is highly controversial.

The international accounting standard in this regard is IAS 19 “Employee Benefits”.

The Brazilian equivalent is CVM Deliberação 371 issued in December 2000. It is almost identical to the version of IAS 19 that was in effect at that time.

Other important issues concerning legislation:

* International Accounting Standard 19 “Employee Benefits” Since the 2000 version on which Brazil’s CVM 371 is based, IAS 19 has been amended:

* In 2002 to place a ceiling on the asset that could be held on the employer’s balance sheet for an overfunded plan and

* In 2004 to allow and encourage immediate recognition of gains and losses on the balance sheet without passing the effect through the income statement (P&L).

* “Preliminary Views on Amendments to IAS 19 Employee Benefits”, IASB March 2008

2008 proposed changes to IAS 19:

* Only traditional defined benefit plans that calculate benefits in terms of an employee’s final-average earnings would continue to be classified as defined benefit plans for the purposes of IAS 19. All other plans, including defined contribution plans, would now be classified as “contribution based” plans.

* Currently, only *pure* defined contribution plans are classified as defined contribution, and all other plans are classified as defined benefit.

* The reclassification approach has been the subject of much controversy. It appears to be a solution for a non-existent problem.

* The corridor approach would be abandoned. This currently allows the plan sponsor to ignore gains and losses that are less than 10% of the plan liabilities.

* Immediate recognition - whereby all gains and losses are fully recognized on the plan sponsor’s balance sheet - would become mandatory. Immediate recognition is currently an option, but most plan sponsors use the deferred recognition approach

that spreads the gains and losses over the employees' average expected future working lifetime.

* Immediate recognition would affect the plan sponsor's balance sheet, which would then be very volatile, but it would not necessarily pass through the income statement (P&L). Three options are being discussed in this regard.

Implications for Brazil

* Traditional defined benefit plans. Full and immediate recognition of all gains and losses, whatever the source and whatever the type of plan, would become mandatory.

* Defined benefit plans where funding deficits are addressed by increases in plan member (employee) contributions, as well as by conventional increases in plan sponsor (employer) contributions. This is the case in Brazil, in some plans in the Netherlands, etc... but it is not the case in the huge majority of private sector pension plans in Anglo-Saxon countries. The Dutch and others are arguing that IAS 19 is dominated by Anglo-Saxon thinking and practices and should not be applicable in its present form to their pension plans. There is no end in sight to this debate.

* Variable contribution plans. The international accounting standards board explicitly admits that it does not know how to regulate the expensing of variable contribution plans. Paragraph 5.60 of "Preliminary Views" states:

"A benefit promise may specify more than one benefit event. For example, a benefit promise may specify that an employee will receive different types of benefits depending on the benefit event that triggers payment of the benefit. For example, an employer may promise an employee a defined contribution benefit if the employee survives to retirement or a defined benefit death in service widow's pension if the employee dies before retirement. In this case, the employee has the possibility of receiving different benefits for different events. The accounting for the option to receive different benefits for different types of benefit events is outside the scope of this project. The Board could not address these promises in this project and meet its intended timetable."

* In summary, the Preliminary Views are unlikely to be adopted in their present form and, even if they were adopted, they would do nothing to clarify the expensing of Brazilian variable contribution pension plans by the plan sponsors.

APPENDIX “A” – BACKGROUND READING ON REINSURANCE

Outsourcing Pension Plan Risks – Reinsurance and Other Solutions

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Almost everyone is now painfully aware of the *investment risks* inherent in the operation of pension funds – and whether it is the plan sponsor or the plan members who suffer in the event of poor investment performance. But, there are other important pension plan “risks” that demand our attention. This article will focus on what are arguably the other two most important risks – two risks that are particularly relevant to variable contribution plans in Brazil, and also with potential application to Brazilian DB and DC plans.

One is the issue of *longevity* risk, and the fact that pensioners in many countries are living longer and longer. It is an issue that is now receiving an increasing amount of attention, and we will return to it later in this article.

In contrast, the other receives little attention. Indeed, in some countries, the issue is completely ignored. It is the risk of very volatile or generally very poor claims experience under pension plans that provide significant benefits on *death and long-term disability*. It is with good reason that Brazil and most European countries generally refer to a pension plan’s death and disability benefits as its “risk benefits”. Where these risk benefits are financed through a closed pension fund, the fund itself generally “self-insures” such liabilities. In other words, it directly assumes the obligation when a plan member dies or becomes a long-term disability claimant. The incidence of such claims can be very volatile. This can be a major distraction for the administrators of the pension fund (for whom we will use the Anglo-Saxon, common law word “trustees”). The attention of the trustees is inevitably focused on the administration and investment of the pension fund assets for retirement purposes. It is indeed a major part of their job, as reflected by their interest and expertise in such investment-related matters.

Effective administration of the risk benefits requires somewhat different knowledge and skills. More basically, it requires acknowledgement by the trustees that they should be paying close attention to the cost effective financing and administration of the pension plan’s risks benefits. The rewards can be significant. None of this is rocket science, and some readers may conclude that I am just stating the obvious. Indeed, administrators of Brazilian *variable contribution plans* that include DB death and disability benefits already know these challenges. So, what solutions are being employed in other countries, and how could they be relevant to Brazil?

We will first remind ourselves that the death and disability benefits provided by some pension plans are very large. The UK is an easy example. Upon the death in service of an active employee, a traditional UK pension plan would provide two death benefits – a lump sum payment equal to three years’ salary (or four years’ salary for executives) **plus** significant monthly payments to the employee’s survivors. Some of these survivor pensions are payable for life. Their present values - the amounts that should be reserved and financed immediately upon the employee’s death – can be significant. Long-term disability pensions to disabled employees can be even more

significant. The monthly disability payments are generally twice as large as the monthly pension payable to a surviving spouse. If we ignore the large lump sum death benefits payable in some other countries, many Brazilian DB and VC pension plans provide equivalent risk benefits.

Is there a danger that a year or two of very high death and disability claims can cause a significant actuarial deficit for the pension fund and perhaps generate cash flow problems? Many trustees either do not think so, or they have simply not given the matter any thought. This is unfortunate, especially as cost effective solutions are available in many countries. Arguably, Brazil is not yet one such country where easy solutions are available, but Complementary Law n° 126 and associated regulations on reinsurance have already served to stimulate the debate. I will not directly re-enact that debate, about which much has already been written and discussed in Brazil itself. Instead, I will return to the international scene.

Outsourcing risk benefit risks. There are generally two approaches for employers to provide their employees with death benefit coverage. The first has already been mentioned, namely death benefits promised in the pension plan and financed through the pension fund. The second is through a “group life insurance” contract with a conventional life insurance company. [A third approach of the employer directly paying death benefits is ignored; it is generally neither appropriate for the employer nor tax effective for the beneficiary.]

Conventional group insurance. Under a conventional group life insurance contract, the employer (or other enterprise, association or union) is the contract holder. In its standard form, it is insurance rather than reinsurance, so there is also a direct link between the insurance company and the covered employees. The premiums paid each year to the insurer are calculated around the “expected claims” for that year for the entire employee group – plus a risk premium and loading to cover administrative expenses and profit. In other words, it is conceptually very similar to group medical insurance plans found throughout the world.

In North America, Western Europe and elsewhere, group life insurance is now the most common approach to providing death benefit coverage for employees. The marketplace is competitive, the premiums are attractive, and the experience rating and other contractual aspects are flexible and negotiable. Employers in countries whose pension plans are DC for retirement almost inevitably provide death benefit coverage under a *completely separate* group life insurance contract. It does not matter whether the death benefit is a lump sum or survivor pensions. The latter are slightly more complicated, but the underlying contractual arrangement is the same. Disability benefits can be financed on a group basis under very similar conditions. These are generally called “long term disability” contracts. In the UK and Ireland, they are more optimistically called “permanent health insurance”, and I only wish it were true that one could purchase insurance that would guarantee permanent health!

The company pension plan then talks only about retirement benefits (although often with a refund of accumulated contributions in the event of pre-retirement death or permanent disability). However, there is an obvious problem in applying this approach to countries where the group insurance marketplace either does not exist or is not competitive. This is currently the challenge in Central & Eastern Europe,

where mandatory or voluntary DC pension plans are being introduced at a fast pace. It is a challenge that Brazil has already accepted, and its variable contribution pension plans are one somewhat unique and interesting solution. Could reinsurance be an effective complement to these arrangements?

We will now move back to a traditional DB or other pension plan that *does provide* significant death and/or disability benefits within the plan. This is where the story becomes more interesting, as we enter the world of reinsurance. Trustees of the pension fund may decide that their primary focus is on the management of assets for retirement purposes. Indeed, the current economic and financial problems have increased pressure on fund trustees to prove or improve their competence in this area! Proper management of the risk benefits is set aside as a challenge for another day! This is unfortunate, as cost effective and relatively simple solutions are already available in many countries. The first solution is for the fund to contract for group insurance on the basis just described. The risk benefits would still be part of the pension plan, but the pension fund would be the contract holder of a group insurance policy, thus transferring all the mortality and morbidity risks to the insurer. If both death and disability benefits are involved, two policies would probably be necessary.

Aggregate stop loss arrangements. More effective and more interesting arrangements are possible, especially when one recognizes that the real problem with risk benefit claims is their *volatility* – in other words, their capacity to be disastrously high in some years. We now enter the world of “aggregate stop loss” and similar arrangements. For a relatively small reinsurance premium, the fund purchases protection against claims in any year exceeding a predetermined level. A typical threshold would be 125%-150% of expected claims. In other words, the fund completely manages the claims, but it is protected against bad years. It is reimbursed by the reinsurer for claims that exceed the stop loss limit specified in the contract. Could this be an interesting approach for variable contribution plans in Brazil that provide significant death and disability benefits? I leave that for the reader to decide! The challenge is that this is a highly specialized market. Although their prices are generally competitive, few reinsurers actually offer this product, and it is frequently necessary to look to foreign reinsurers for this purpose – thus bringing us back to the current debates in Brazil.

Outsourcing longevity risk. This article will now conclude with insurance, reinsurance and other financial arrangements regarding retirement benefits that are paid in the form of *lifetime pensions* to the retiring employee (and often to the surviving spouse). Retirement benefits that are paid as lump sums or as a series of programmed withdrawals are not relevant in this regard. We are concerned about lifetime pensions where the pension fund or a third party is assuming longevity risk.

There is an increasing and imaginative choice of ways to outsource longevity risk. Just a few will be discussed at this time.

Individual annuity purchases. The easiest approach to understand is the purchase of an individual life annuity from an insurance company when a pension plan member retires. This is the dominant approach under DC plans in countries where the retiree chooses or is required by law to purchase a life annuity. This system requires a competitive, cost effective and financially stable life annuity market, which is not the

case in many countries. The option of leaving the DC accumulation in the pension fund and effectively “purchasing” a life annuity from the fund itself is most unusual – except, of course, in Brazil!

Retaining the annuity obligation in the fund. At the other end of the spectrum, traditional DB pension plans of any reasonable size have tended to retain the life annuity obligation in the pension fund. The liabilities for the active members are also DB, so actuarial calculations and corrective funding measures are already required. The pensioners are just one part of the liabilities – although increasingly the dominant obligation in DB plans that are closed to new members. This approach has worked well for many decades and has the advantage of allowing the fund to retain (and productively invest) the post-retirement assets. However, for a number of reasons, including longevity concerns and the closing of such plans to new members, plan sponsors are now looking at ways to outsource these obligations. This can be especially attractive under closed plans where the plan membership will soon consist solely of pensioners.

Bulk annuity purchases. As its name would imply, this involves the bulk purchase of annuities from a third party (traditionally a life insurance company). The pension fund would pay a single premium or a series of premiums to the insurer, and the insurer would then assume all further liabilities regarding the retirement and survivor pensions involved. In its simplest form, the pension fund would bear no further investment or longevity risk. However, there is always the risk of the life insurer – rather than the pension fund or plan sponsor – become insolvent. Little thought would have been given to this possibility before 2008 and the AIG saga, but it is now discussed quite openly. Anyway, bulk annuity purchases are not attractive at the present time, because they involve the sale of a substantial amount of fund assets during a period of depressed market values.

Individual longevity insurance. This could be a very valuable option under DC plans where the retiree has some flexibility regarding the permitted forms of retirement payout options. Under one approach that I believe deserves more attention, the retiree would have the choice of spending around 15%-20% of the retirement capital on a deferred annuity commencing only at an advanced age (say, age 85). This deferred annuity would have no subsequent cash value, and nothing would be paid under the policy if the retiree died before age 85. Retirees would be purchasing true *longevity insurance*, thus protecting themselves against the risk of outliving and outspending their retirement capital. The remaining 80%-85% of retirement capital could be paid partially in cash (if national legislation allowed), but would basically be paid out as a series of so-called “programmed withdrawals”. This combination addresses several objectives of retirees, such as (a) still being able to productively invest most of the retirement capital and (b) leaving the entire remaining balance of that capital to their families (the bequest motive), whilst (c) also protecting themselves against the financial consequences of living to an advanced age.

Bulk longevity insurance. This is a quite different arrangement. For a closed group of plan members (e.g. all current pensioners), the pension fund and the longevity insurer would develop a mutually agreeable set of longevity assumptions. The future cash flow of payments to this closed group of pensioners would then be developed around these assumptions. The longevity insurer could be a life insurance

company, but the market is not necessarily restricted to such institutions. The pension fund then pays these fixed, *expected* cash flows to the longevity insurer, together with an insurance fee. In turn, the longevity insurer pays back to the pension fund the amounts *actually due* to those pensioners and survivors who are still alive on the payment due dates. These payments would continue for the whole of their lives, even if they survive well beyond their expected lifetimes. The pension fund retains the plan assets and can more precisely invest such assets (e.g. with more accurate hedging of the inflation risk). There will be no subsequent actuarial losses for the pension plan as a result of increasing longevity!! In effect, the pension fund has *outsourced the longevity risk* (and only the longevity risk) to the third party. One can imagine the peace of mind that this could bring to plan sponsors and fund trustees.

In conclusion. An article of this length cannot possibly cover all aspects. There is much more that can be said on these subjects, but I hope the article has served to increase awareness of the old and exciting new approaches that are being discussed and implemented by closed pension funds in other countries. In early May, soon after this article is published, I will be making my next visit to Brazil. I hope I will have the opportunity to participate in the debate and subsequent developments.

Standard & Poors 2008 Global Reinsurance Report, pages 54-55: “Brazil Finally Comes Of Age. The Brazilian reinsurance market has promised much for so long. It is now poised to deliver.”

After a decade of debate, the Brazilian reinsurance industry has finally been opened to competition. The passage of Complementary Law 126 ended the 69-year-old monopoly of government-related IRB Brasil Resseguros S.A. (IRB-Brasil Re; unrated). Resolution 168, approved by the National Council of Private Insurance (CNSP) and enacted in December 2007, provides a general framework for the functioning of the domestic reinsurance industry under a new environment of regulated competition.

The opening of the domestic market to national and international reinsurers became effective on April 17, 2008, and the regulator Superintendência de Seguros Privados (SUSEP) has already authorized:

- Three local companies (IRB Brasil Re, J Malucelli, and Muenchener Rueck do Brasil);
- Eight admitted companies (Lloyd's, SCOR Global Life U.S., SCOR Reinsurance Co., Swiss Reinsurance America Corp., Swiss Reinsurance Co., Transatlantic Reinsurance Co., Partner Reinsurance Europe Ltd., and XL Re Latin America Ltd.); and
- Four occasional reinsurers (Everest Reinsurance Co., Hannover Rueckversicherung AG, Mapfre Re, Companhia de Resseguros, S.A., and Munich Reinsurance Co.).

The regulatory framework for occasional reinsurers limits their participation to 10% of ceded premiums. We therefore expect that occasional reinsurers may transition to become admitted reinsurers in the future.

Law 126 has transformed the reinsurance segment. IRB-Brasil Re has lost its historical role as regulator of the reinsurance market; this responsibility has been transferred to the established insurance industry regulator, SUSEP. The former monopoly will evolve to resemble its new foreign competitors, focusing on relationship management, internal systems, risk management, human resources, and competitive pricing.

Regulation Will Favor Local Reinsurers.

SUSEP will authorize the operations of domestic and foreign reinsurers under three categories:

- Local reinsurer: a reinsurer domiciled in Brazil with minimum capital of Brazilian real (R\$) 60 million, and exclusively carrying reinsurance and retrocession businesses.
- Admitted reinsurer: a reinsurer domiciled in a foreign country that establishes a permanent representative office in Brazil. An admitted reinsurer needs to maintain a minimum dollar-denominated domestic deposit of \$5 million (\$1 million for life reinsurers) with local banks to cover potential losses. The reinsurer needs to have a track record of five years in the business, minimum capital of \$100 million, and credit ratings of at least 'BBB-'.
- Occasional reinsurer: a reinsurer domiciled in a foreign country, with no representative office in Brazil. The reinsurer has to report minimum capital of \$150 million, and credit rating of at least 'BBB'.

The regulation in Brazil not only implements minimum requirements for operations, but also distinguishes them by local and foreign reinsurers. IRB-Brasil Re and other local reinsurance companies will be "preferred" to foreign-domiciled companies at first. Between 2008 and 2010, local reinsurers will have the right of first refusal over at least 60% of the reinsurable business of local insurance companies.

As the transition to a fully open market progresses after 2010, 40% of the annual reinsurance cession will have to be offered to local reinsurers. If the local reinsurer refuses to accept a certain risk, the insurance can be offered to a foreign reinsurer. Only local reinsurers can reinsure endowment insurances and supplementary pension plans. We believe that the intention of the rule is to give enough time for local reinsurers to adapt to the new rule, and provide incentives for the incorporation of reinsurers in Brazil.

Retention Limits Offer Potential For Market Consolidation

Another important aspect regulated by Resolution 168 is the minimum retention levels. The new framework limits reinsurance and retrocession to 50% of the premiums written. This requirement eliminates a long-standing practice in Brazil--common among small carriers operating mainly as insurance brokers--of ceding nearly all of their risk to the reinsurer monopoly. With this practice no longer permitted, the proposed retention requirements could force some insurers with weak capitalization and limited financial flexibility out of the market, and open up opportunities for market consolidation.

Brazil is among the last countries in the world to end its reinsurance monopoly. Costa Rica and Cuba are the only countries in Latin America that still protect their markets

with a monopoly. Until April 2008, IRB-Brasil Re was the sole provider of reinsurance in Brazil, reporting total gross premiums written of R\$3.26 billion (approximately \$1.9 billion) for the year ended December 2007. As most of the insurance lines in Brazil are short-tailed, IRB-Brasil Re's main target is property risk. In 2007, this sector recorded earnings of R\$5.7 billion (\$9.2 billion) with a loss ratio of 31%. Overall, IRB-Brasil Re reported a combined ratio of 71% and a return on equity of 20% in 2007.

Insurers should benefit from the favourable economic conditions in Brazil.

Despite the opening of the market to competition, IRB-Brasil Re will continue to be the largest local reinsurer in Brazil and will retain a fairly advantageous position against new entrants for the foreseeable future. IRB-Brasil Re also benefits from its long-term relationship with local insurance companies and its knowledge of the domestic market should enable it to remain competitive. Despite these strengths, IRB-Brasil Re also understands that it needs to adapt and is trying to adjust itself to the new rules and market conditions. It is focusing on process and product improvements to enable it to compete with companies in the private sector.

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We believe that total reinsurance premiums should increase steadily because of Brazil's good prospects for the primary insurance business. As the market opens, innovations will be introduced and dynamism regarding new reinsurance operations will increase.

The Brazilian insurance industry has significant potential for growth. We expect the industry to take advantage of the fundamental changes taking place in the domestic market, notably the opening of the reinsurance industry and improved regulation in line with international standards (informed by the International Association of Insurance Supervisors), together with greater monetary stability. Standard & Poor's acknowledged the stabilization of the Brazilian economy when it raised the Republic of Brazil's foreign currency rating to 'BBB-' on April 30, 2008. While Brazil's attainment of investment-grade status will ultimately result in lower interest rates, it is also bringing substantial new opportunities for insurance companies.

Total insurance premiums in Brazil have been growing at an average rate of 15% year on year since 2003. Nevertheless, it is still a fairly underdeveloped industry that represented only 2.91% of GDP in 2007. With total written premiums of R\$58.6 billion (\$34 billion), the developing domestic industry is already the largest in the region, attesting to its huge potential. The improvement in income levels brought about by the control of inflation and increase in formal employment is also boosting domestic credit, and thus the demand for insurance. The boom in auto loans and residential mortgages, for instance, is promoting vehicle and residential insurance because lenders have made it mandatory. Large investments under project finance structures, necessary to solve bottlenecks in the country's infrastructure, should boost surety and credit insurance.

Industry concentration is high and should remain so, encouraged by the competitive environment, lower interest rates, and stricter regulatory rules. These will support greater solvency and a more functional reinsurance industry, which will, in turn, require greater governance from all players and greater retention capacity. We expect financial conglomerates' participation in the insurance markets to remain strong. Foreign insurers will also become increasingly important players, given their interest in tapping a large potential market.

Source

- ENEF “Previdência”, Patrícia Cerqueira (January 2009).
- Análise de Compatibilidade da Legislação Brasileira dos Fundos de Pensão aos Instrumentos do Acquis, da OCDE. (February 2008). Identification of areas of current compliance and non-compliance with relevant OECD guidelines would be an essential element in the description of the Brazilian pension scene. In this regard, it is important to note that:
 - The “OECD Guidelines for Pension Fund Governance” have been modified since the comparisons were made (<http://www.oecd.org/dataoecd/18/52/34799965.pdf>). Colin Pugh has prepared a document that identifies all of these changes. Some of the changes are important, so the Brazilian analysis should perhaps be updated.
 - The “OECD-IOPS Guidelines on the Licensing of Pension Entities” have also been amended. See <http://www.oecd.org/dataoecd/7/34/40434531.pdf>.
 - “Fifteen Principles for the Regulation of Occupational Private Pension Schemes” was replaced some years ago by “Core Principles of Occupational Pension Regulation”. See <http://www.oecd.org/dataoecd/14/46/33619987.pdf>. The principles have been substantially reformatted, but they retain many of the same objectives as the original document.
- “Coletânea de Normas dos Fundos de Pensão”, 3 Edição (October 2007).
- SPC “Relatório de Atividades, 2003-2007.
- “The Brazilian Complementary Pension System”, Flávio Marcílio Rabelo (FGV).