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The Brazilian Private Pension System –Pension Funds and a Brief Comparison with the American System

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To my wife Raissa and my daughter Julia,

who are the main reasons of my efforts.

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INTRODUCTION

The great challenge the Brazilian economy now faces is to consolidate the process of stabilization and to restart the economic growth. An essential condition for the restarting of the economic growth is the increase of the volume of investments and of the internal savings.

One of the main factors of sustainability of the growth of an economy is the generation of a minimum volume of internal savings in a continuous way. Such funding makes possible the investments that are channeled to the productive section through the financial system.

In that field, the institutional investors, such as the pension funds, play an important role in the process of accumulating savings.

Regarding that direct relationship, it can be concluded that the expansion of the pension funds is a subject of great relevance, and it constitutes one of the priorities of national discussion. The pension funds can become the largest instrument of capitalization and reorganization of the internal savings in the next years.

Pension funds are playing a fundamental role in the contemporary world. The increase in life expectancy, the transformations of work and their relationships with the systems of public social pension, besides propitiating a larger understanding of the importance of the private retirement plans for the population, have been generating an accelerated growth of the pension funds.

In Brazil, where the socioeconomic imbalances are increasing, stimulating the growth of and invigorating the pension funds is specially important. They can help the country to create more options, and add to the government efforts, in its permanent search to improve the quality of life of the population, improve long period investments, and generate new jobs

This paper will give a global overview of the Brazilian Pension Fund system, by making comments on their main characteristics and drawing some perspectives and recommendations. It will also focus on the most relevant aspects of the American system.

I - THE BRAZILIAN SYSTEM

1.1 Historical and General Aspects of the Brazilian pension system

1.1.1 Public Pension System

As the democratic State is enlarged, more pressing is the need for an efficient pension system which has as its purpose to aid the citizens when they lose all or part of their working capacity.

In Brazil, the first official measure with the character of social public insurance was in 1919, with the Law 3.724/19 which introduced the insurance of work accidents and the obligatory compensation, on the part of the employer, of the accidents happened at the work place. However, just in 1923, with the law Eloy Chaves, that determined the creation of the railway man's pension fund, there was an establishment of a retirement insurance system, but still in an embryonic stage.

The decades of 1930, 40 and 50 were characterized by the entailment between the pension entities and the professional categories. Several institutes of retirements and pensions (IAP – Instituto de Aposentadoria e Pensão) were created.

The decade of 1960 differs from the previous ones for characterizing the beginning of the institutional unification of the system. The Organic Act of the Social Security (Lei Orgânica da Previdência Social), promulgated in 1960, uniformed the contributions and the plans of the various existent institutes and extended to the self-employed the covering of the system when including them as obligatory. The effective unification happened just in 1966, with the creation of the National Institute of Social Security (INPS) that gathered in its structure the retirement and welfare institutes existent at the time

The seventies were characterized by the universalization of the general public retirement system (Regime Geral da Previdência Social) with the extension of the benefits to domestic employees, the regulation of the registration of the self-employed and the enlargement of the benefit to disabled persons not covered at the time and to the rural employees at age seventy or more (and to their dependents). The Constitution of 1988, in their articles 6 and 7, crystallizes that evolutionary process when introducing as basic principles of the system the universalization, the equivalence of rural and urban benefits, and the decentralization of the system. Since then, there has been a relationship between the Public Pension System and citizenship rights.

In the last years, however, the Brazilian Public Retirement System, including the general one and the system of the public sector, that works in a simple partition way has been object of discussion from all society. The system of simple partition, habitually denominated "pay as you go", is organized so that the workers today finance the current beneficiaries' pensions, with the expectation that the future generations can do the same for them. However, that principle of the system is losing its probability of success since some aspects like demographic nature and the impact of the technological transformations in the job markets are getting more importance. It indicates that the next stage of evolution of the pension system should be characterized by a larger development of private initiatives of saving, especially for the groups of larger incomes, without damage of the basic public pension system.

The fundamental point is that the expansion of pension rights promulgated by the new Constitution did not have as a counterpoint the growth of an appropriate volume of resources that guaranteed the balance of the system in the long term.

1.1.2 Private Pension System

The initial mark of specific Brazilian legislation on private pension entities is the Law nr. 6.435, of July 15, 1977. The law defines the private pension entities like those institutions whose purpose is to create private pension plans with benefits complementary similar to those offered by the public pension system. The resources must come from their participants' contributions, their employer's contributions or of both.

The private pension system in Brazil is composed of open and closed entities.

The Closed Entities of Private Pension (*Entidades Fechadas de Previdência Privada - EFPP*), also known as pension funds, are institutions maintained by their participants and sponsors' periodic contributions. The objective is to accomplish investments and to guarantee payment to the participants of benefits complementary to those of the Public Pension System. The closed entities are restricted to the employees' of a company or of various companies. The companies are denominated sponsors. The pension funds are non-profit entities constituted as civil societies or foundations. They accumulate savings by a continuous process of capitalization on the monthly contributions made by their participants.

The Open Entities of Private Pension (*Entidades Abertas de Previdência Privada – EAPP*) work as administrators of individual's savings, capturing resources and offering, in exchange, capitalization plans. They are organized as companies, and they can be profit entities and distribute part of the profits to their shareholders.

Under the aspect of complementarity of benefits, mainly for the part of the population that receives medium and high wages, the role of the pension funds is very important. In the present historical moment of the Country, there are many advantages to have an organized and efficient Complementaty Private Retirement System, standing out among them are:

- larger transparency for the costs and profitability;
- clear definitions of rights and benefits to the participants;
- reduction of the presence of the State, allowing that it is devoted to their typical areas of acting;
- larger incentive to join the formal job market,
- irradiation of positive influences, for instance, the enlargement of the capital market, and the expansion of the connections between investments and savings;
- increase of internal savings if the regulation of the system can give credibility and transparency to encourage its growth.

The present study will focus on the Closed Entities of Private Pension in Brazil, also known as pension funds. Unlike the American system, the pension funds sponsored by public sector organs are subject to the same regulation of those sponsored by private companies. Therefore, the

Brazilian Private Retirement System also includes those pension funds sponsored by public sector organs.

1.2 Current Scenery of the Brazilian Pension Funds

According to official data of the Secretariat of Complementary Pension (SPC), the responsible organ for the regulation of the pension funds' system there are, in Brazil, 360 pension funds (EFPP) which are responsible for the administration of R$ 129.2 billion or US$ 65 billion, approximately. About 64.3% of the assets are concentrated in pension funds sponsored by public sector organs (autarchies, public companies, societies of mixed economy, etc.), as the following table shows:

Sponsor	Number of Entities	%	Assets (R$ billion)	%
Public	87	24.1	83.1	64.3
Private	273	75.9	46.1	35.7
	360	100.0	129.2	100.0

Source: SPC Position: Dec 2000

The total assets of the pension funds correspond to, approximately, 13% of Brazil's GDP, and it is important to note the growth of such assets that, in 1977, represented only 1.1% of GDP.

The Brazilian pension funds covered, in 1999, 2.18 million participants, including the active workers and the inactive ones (without considering the dependents), which represented approximately 3.5% of the economically active population in the country. This percentage is very low and demonstrates the great potential growth of the system. Of the total participants, 77.3% were active workers and 22.7% were inactive and beneficiaries.

Active Workers	Inactive and beneficiaries	Total participants	Economically Active Population	Ratio betwenn Participants/ Econ. Active Population
1.688.882	497.210	2.186.092	62.029.120	3,52 %

Sources: SPC and IPEA Year: 1999

More updated data from Oct/2000, demonstrates that the total participation was altered to approximately 2,257,000, being 76.4% of active workers and 23.6% of inactive and beneficiaries.

1.3 Regulatory System and the Bills in Congress

The pension funds in Brazil are considered complementary to the Public Pension System. They are autonomous from the general Public Retirement System, and the participation is optional and based on the constitution of savings that will guarantee the contracted benefit. The activities of the pension funds are regulated by the Ministry of Social Security, and more specifically by the Secretariat of Complementary Pension (SPC).

As enacted by the Law 6.435, of Jul/ 15/ 1977, that regulates the activities of the pension funds, the objectives of the regulation are:

"I - to protect the interests of the plans benefit participants;

"II - to determine appropriate minimum patterns of economic-financial safety for the preservation of the liquidity and solvency of the benefit plans, and for the pension funds;

"III - to discipline the expansion of the benefit plans, propitiating conditions for its integration in the economic and social processes of the Country;

"IV - to coordinate the regulated activities with the social and economic-financial development policy of the Federal Government.

The government regulation is highly justifiable when it looks to protect the citizens' interests in subjects where they would not have the necessary tools to protect themselves against serious damages.

The government's role in the regulation of the private retirement insurance sector must be to ensure that the contract signed by the participant, when beginning his/her contributions to a pension fund, will be completed in the best possible way. In short, that the management of participants' resources, during the whole contribution period, can be accomplished with the smallest risks and larger profitability seeking the future payment of the benefits.

Although the basic legislation which regulates the Brazilian pension funds system is from 1977, there are now some bills in the National Congress that look to establish more safety and consistency for the growth of the system. Such bills are a result of the discussion about the Brazilian Pension System Reform as a whole, initiated by the Project of Amendment Constitutional nr. 20, approved in 1998. The main innovations of the new bills being analyzed by the National Congress, relatively to the pension funds are:

- Possibility of unions and class associations instituting plans of complementaty pension benefits for their participants, as institutors. Therefore, it is expected that autonomous workers such as lawyers and doctors will be incorporated into the system. Besides, workers whose companies which do not offer the opportunity to participate in benefit plans will be able to participate in pension funds created by the unions.
- Possibility of the Union, States and Municipal Districts establishing their own pension funds. Such condition will allow public employees, mainly those of medium and high income, to contribute to the formation of the national intern savings and contribute to the reduction of the negative impact of the pension expenses on the public budget.
- Possibility of creating multisponsored pension funds. Such condition would make it possible for small and middle sized companies that, in most cases, do not have enough employees to justify the creation of a specific pension fund, to adhere to an entity that is technically competent and can propitiate gains of scale to administer several benefit plans.
- Establishment of the Portability and Differed Proportional Benefit (Vesting).
- Establishment of deferment of the income tax on the pension funds assets, that will only be collected at the time the benefits are distributed.

1.3.1 Portability and Differed Proportional Benefit (or Vesting)

Portability is the participant's possibility to transfer his/her accumulated savings for other pension funds when changing jobs without, however, having access to the financial resources (the participant cannot receive money).

Differed Proportional Benefit, or Vesting as denominated in other countries, is the participant's possibility of receiving his/her accumulated savings as a differed proportional benefit, in case of the end of the contractual relationship with the sponsor or institutor. In this way, the pension fund's participant will be entitled to the proportional benefits of his/her time of contribution, according to a vesting schedule.

Both instruments are broadly used in other countries with more developed private retirement systems. However, they are regulated and there are some conditions and limits for use. In the United States, for instance, for obtaining an integral Vesting it is necessary for the participant to have at least 5 years of work in the sponsor company of the pension plan. Other forms of the rights acquisition are allowed, always in a proportional way at the time of work.

In the bills being analyzed by the National Congress, however, the acquisition and utilization criteria (eligibility requirements, lack, etc.) of such rights are not established. They will be regulated later by MPAS/SPC.

1.3.2 The Tax Issue

In function of Law Nr. 9.532, of 1997, that foresees the taxation of pension fund's incomes in financial investments, and other kinds of taxation, there are in judgment in the Federal Supreme Court, various lawsuit that allege the tax exemption of those entities. As there is a preliminary decision but there is no judgment of merit in order to guarantee the exemption, most of the pension funds do not collect such taxes, but make accounting provisions.

In the bills that are being analyzed by the National Congress, however, there is included the provision of the deferment of the income tax. It means that the taxes should be collected only at the end of contribution’s period, when the assets become a benefit for the participants.

That principle seems quite logical, and is used by most of the countries with developed private retirement systems. During the formation of the savings, which is destined to the future payment of the benefits, there should not be a taxation on investments. The taxes should be collected directly from the participants at the moment they receive their benefits. Otherwise, there will be a double taxation.

It is very important to include such a provision in the specific bill for the private retirement sector. Relative doubts about this subject can generate insecurity for the participants and harm the growth of the system.

Recently, this issue was the object of many discussions in the Brazilian political atmosphere. Motivated by the intention of finding resources to support an increase in the minimum wage, some politicians defended the possibility of taxing the pension funds. Such a proposal appears to seek just immediate political interests, without having any reasonable basis.

1.4 Regulatory Organs - Project of Modernization

SPC is the main regulatory organ of the pension funds in Brazil. However, concerning the investments, the guidelines are established by the National Monetary Council (CMN), through the Central Bank of Brazil.

SPC also has the function of supervising the activities of the pension funds. It can apply penalties, intervene and liquidate entities with the objective of protecting the participants' interests.

It is easy to deduce that in any regulated sector it is extremely important to have technically qualified organs to supervise the execution of the rules and this organs must have the power of punishing illegal actions. The performance must be dynamic and must mirror the importance given by the government to the concern for the safety of the system. Otherwise, it is impossible to make the system work on the same basis for everyone and to make the participants greatly trust in it.

In the last several years, considering many aspects such as the growth of the private pension sector, the high degree of markets complexity (mainly concerning the investments), the low level of technical equipment in the public sector in general and the training absence for the technicians, the SPC's role has not being executed in such an active way as it should be.

Because of the intention to improve the regulatory process of the complementary private retirement system in Brazil and to qualify SPC for the exercise of its role, an Agreement of Technical Cooperation was celebrated between Brazil and the Interamerican Development Bank IDB, in DEC/1998. For the Agreement, IDB made resources available in the order of US$ 1,200,000 (not reimbursable) and MPAS made available an amount of equal value. In 1999, US$ 500,000 was used and the forecast for expenses in 2000 was US$ 1,500,000.

The main objectives of the Project are:

I - To improve the regulatory mark of the complementary private pension system in Brazil through the introduction of minimal rules for the financial and actuarial administration of the pension funds and creation of new benefit plans.

In this context there are included studies that seek: implementation of control mechanisms that make it possible to SPC to monitor the investments portfolio of the entities, as well as their actuarial plans; adaptation of the obligatory accounting records to the pension funds;and establishment of parameters for the rules on the Differed Proportional Benefit/Vesting and Portability. It includes, also, the technical training of the human resources of SPC, with the accomplishment of courses and seminars.

II - to provide SPC with computerized control systems and a unified database.

Considering this Project and its investments, the creation of larger disclosure is expected for the whole system, as well as larger fiscalization power for SPC and larger safety for all the participants.

1.5 Investments

1.5.1 Modalities of Investment

The growth of the pension funds' assets as well as their investments have been notably influenced by the development of the national financial markets and by the evolution of the pertinent legislation. On the other hand, the pension funds' investment also contributes to the development of the financial market.

Considering the legal possibilities and the current financial market, the main modalities of investments of the Brazilian pension funds can be classified in:

- Fixed income;
- Variable income (equity);
- Real estate investments;
- Loans and real estate financing to participants.

1.5.1.1 Fixed Income

Among the fixed income investment possibilities, there are Federal Government bonds issued by the National Treasury and by the Central Bank of Brazil, State and Municipal bonds, private bonds such as Bank Depository Receipts (CDB/RDB), Mortgage Bonds (Letras Hipotecárias-LH), Debentures and Investment Funds.

The investments in Federal Government bonds can be considered the most traditional among all the existent ones in the financial markets. Characteristics that make them more attractive to the investors in general, such as liquidity, profitability's forecast and safety, also place them as one of the investment options more frequently used by the pension funds. Such investments are made, in most cases, through investment funds. In other words, in most cases the pension funds invest in investment funds quotes and then the investment funds buy the bonds.

The investments in private bonds (CDB, LH, etc.) and investment funds have as a characteristic the relationship between their risk degree and the financial health and technical capacity (in case of investment funds) of the financial institution which issues or administrates the investment. The enlargement in the modalities of constitution of investment funds and the largest flexibility proportionated to the investors, caused the increasingly intense adoption of those instruments by the pension funds. The flexibility is translated by the agility in the movement of assets (buys and sale) and by tax advantages, such as the non-payment of CPMF in some cases.

1.5.1.2 Variable Income / Equity

The equity market has as its main characteristics a largest exposure to risk, the perspective of earnings of uncertain magnitude, the agility of negotiation of the assets, and the volatility of prices. In Brazil, such a market represents, mainly, a faith in the country's economy. When the economical perspectives get better and the general political scenery becomes favorable, the prices of the stocks tend to rise. However, the investors must also make fundamental analyses to investigate the financial structure of each company individually in order to guide the investments for the more promising companies or sectors.

In case of derivative, there are two slopes totally opposite that should be considered. On one side, it is possible to enlarge the risk of an operation significantly in that market. In contrast, it is possible to eliminate a great part of the risk, even transforming operations of variable incomes in fixed income operations and making other kinds of hedge. Regarding the pension funds, Brazilian legislation has been trying to avoid the possibility of excessive exposures to risk in operations of that nature.

1.5.1.3 Real Estate Investments

Real estate investments are investments in properties destined to the entity’s use, commercial properties, and lands. The properties can also be classified as the most traditional category of investments in the history of the world. For the pension funds, however, various aspects should be appraised. In an economy that goes by a period of high interest rates and low inflation taxes and where the relationship between landlord and renter is regulated strongly by a Federal law, as in the case of Brazil, the real estate market may not be so attractive, depending on the conditions of the operation.

Some new modalities of operations have been accomplished by the Brazilian pension funds in the last years, such as investments in construction of shopping centers, hotels and aquatic parks. Many of those operations, however, have been the object of criticism by some participants, because these investments have a long period of return and they consume high costs for its administration. A very important condition for the success of investments of this nature is the previous and correct analysis of the perspectives of income generation of the investment, which demands a deep knowledge of the market. Such aspects as seasonality, competition, location, and potential demands, among others, relative to the business, must be analyzed in a professional way. The administrative cost of such a business should also be considered and a good contract with the administrator (specialized companies in administration of shopping centers, hotels, aquatic parks, etc.) should be negotiated.

1.5.1.4 Loans to Participants

In that modality, the credit lines are offered to the pension fund participants exclusively, and the period and interest rate are determined by the executive management of the pension fund, according to the legal limits.

A positive aspect of this investment modality is the low level of risk. In most cases, the monthly installments are debited automatically to the participant's payroll, significantly reducing the risk of default.

Such loans usually have low interest rates, just a little above the minimum actuarial rate. Therefore, situations in which the finance markets present more attractive profitability (larger interest rates), providing such loans can reduce the potential profitability of the pension fund portfolio. However, some Brazilian pension funds are adopting interest rates compatible with the opportunity cost of the market , which turns such a modality into an attractive investment.

1.5.1.5 Real Estate Financing

Real estate financing are granted with the exclusive purpose of property acquisition or construction, and they are destined only to the pension fund participants. As they are a long-term investment, usually the mortgage of the property is demanded as a warranty. Such as the loans, depending on the interest rates it can also be a good and low risk investment.

Other investments such as rural credit bills (cédulas de crédito rural) and rural promissory notes are allowed, but they represent a very small percentage of the total resources invested.

1.5.2 Investments Rules

Untill December 2000, the basic legislation that determined the investment limits and modalities for the pension funds was Resolution NR. 2.791 of Central Bank of Brazil, of 30 NOV 00, which ratifies a great number of dispositions contained in Resolution 2.324, of 30 OUT 96. The following tables demonstrate the main investment modalities allowed and their operational limits. The operational limits determined by the legislation only impact the maximum limits of investment, and there is no forecast of minimum limits.

- ✓ Up to 100% can be invested in Bonds of responsibility of National Treasury and/or Central Bank of Brazil and security debts of National Treasury.

- ✓ Up to 80% can be invested, isolated or cumulatively, in fixed-income investments, according to the main modalities and limits as follows:

Modality	Limits
Bonds of responsibility of State or Municipal Treasury	50%
Private bonds as “CDB”, Debentures, Bills of exchange, Mortgage Bonds(LH), etc.	80%
Deposits in savings accounts and physical gold negotiated in future and commodities markets	10% by modality or 15% in total
Quota of Fixed-Income Investment Fund	80%

- ✓ Up to 50% can be invested, isolated or cumulatively, in investments of variable-income, according to the main modalities and limits as follows:

Modality	Limits
Stocks, Stocks Subscription Bonus, Debentures	50%
Quota of Variable-income Investment Funds	50%

- ✓ Up to 10% in real estate investment funds quotas
- ✓ Up to 5% in quotas of mutual funds of investment in emerging companies
- ✓ Up to 16% in properties of own use, commercial properties and lands (Real Estate). In case of lands the maximum limit is of 2%
- ✓ Up to 10%, isolated or cumulatively in operations of loans and/or real estate financing to participants.

There are still other operational limits to the investments diversification. The main ones are:

- Impossibility of concentration of more than 20% of the resources in a single financial institution and another associated company.

- The investments in stocks and stocks subscription bonus of a single company cannot exceed 5% of the resources and cannot represent more than 20% of the voter capital or of the total capital of the company.
- The investments in sponsor's stocks, stocks subscription bonus and debentures cannot exceed 10% of the resources
- Investments in quotas of a single real estate investment fund or mutual fund of investment in emerging companies cannot represent more than 20% of the equity of the investment fund.
- Investments in a single property cannot represent more than 4% of the resources

Resolution NR 2.791 suspended the validity of Resolution 2.720, of 24 APR 00, that instituted the new Investment Administration Model (*Modelo de Gerenciamento de Investimentos - MGI*). The new Investment Administration Model looked to facilitate the introduction of principles and concepts of risk administration in the pension funds and to help the managers and participants of the entities to identify with larger clarity the profitability of their investments for each investment segment, comparing them with the best practices of the market.

Among other innovations, the Model instituted:

- the concept of segmented administration of investments, as a way to facilitate the analyses of each segment ;
- disclosure of investment policies, composition of the investments, acting reports, etc., to the participants of the entity;
- centralization of the asset's custody in a custody agent accredited by CVM;
- establishment of clear criteria for the qualification of the investment risks of the entities and of the allowed levels of financial leverage.

However, considering the difficulties found by the entities in adapting their structure to the new regulation and with the intention of having stronger analyses of the implemented alterations, the National Monetary Council decided to suspend the validity of the new Model (MGI) temporarily. By march 1ST, 2001, SPC was accepting suggestions from the pension funds and from the participants about the new MGI in order to enact a new Resolution with the new rules. In most cases, after changing regulation there is a period of time for the pension funds to adapt their investments

On the other hand, Resolution 2.791 required the pension funds to have risk control systems on their investments, even without still specifying the risk limits admitted, what shows the concern of the government about the issue.

1.5.3 Asset Alocation

The following table demonstrates the distribution of the pension fund investments, separating them by sponsor type (public or private) .

Investment Modality	**Public %**	**Private %**	**Total %**
Fixed Income	44.5	66.6	52.1
Variable Income (Stocks)	39.4	25.3	34.5
Real Estate	8,9	6,4	8.0
Loans to Participants	2.1	0.9	1.7
Real Estate Financing to Participants	4.5	0.1	3.0
Other Investments	0.6	0.7	0.7
TOTAL	100.0	100.0	100.0

Source: MPAS Position: oct/00

It can be noted that there is a clear concentration of fixed income investments in the total assets of the system, mainly in the pension funds sponsored by private companies. This data reflects the great interest rates proportionated by the fixed income market in the last years, and also can indicate a more conservative position of the private entities.

Concerning the loans and financing to participants, there is clearly a larger tendency of the pension funds sponsored by public entities to grant such benefits to their participants. This can be explained by the greater pressure on the part of unions and participants' representations.

Since 1991, a great growth in the total volume of assets of the pension funds has been observed. There are two basic factors that are very important for such growth: the first is related to the profitability of the assets; and the second to the entrance of contributions of both already existent and new participants.

R$ million

Year	Assets	**Year**	Assets	**Year**	Assets	**Year**	Assets
1990	26,352	**1993**	59,959	**1996**	86,629	**1999**	125,995
1991	36,812	**1994**	72,742	**1997**	101,033	**2000**	129,215
1992	43,269	**1995**	74,815	**1998**	101,129		

Source: MPAS/SPC

Considering the evolution of the amount of participants in the last years, we can note, however, that the percentage of new participants' increment has been insignificant:

EVOLUTION OF THE NUMBER OF PARTICIPANTS *number of persons (in 1,000)*

Year	Active Participants	Inactive and Beneficiary Participants	TOTAL
1995	1865	346	2211
1996	1796	384	2180
1997	1700	426	2126
1998	1651	460	2111
1999	1689	497	2186
Oct/2000	1726	531	2257

Source: MPAS/SPC

After the data analysis, it can be concluded that the assets' growth of the pension funds has been motivated basically by the nominal profitability of the investments and by the entrance of the already existent participants' contributions. If on one side it demonstrates that there was a stagnation in the number of new participants in the period, on the other, it demonstrates the great market potential of the sector.

Profitability has been explored and discussed very much, even in the press. The damages that happened in some periods, caused mainly by the retraction of the stock market, frequently are placed in discussions regarding the future of the system. In this way, the analysis of the results indicates the need of adoption, by the pension funds, of new patterns of risk administration and of larger disclosure.

A risk and return analysis is fundamentally important to the good financial administration of a pension fund. If by one side the pension funds have commitments with their participants whose always long for the largest possible profitability rates, on the other hand the funds act in a strongly competitive market in which the risks cannot be neglected.

In that aspect, an efficient policy of asset allocation becomes fundamental. The investments must be distributed in different modalities of assets, in a way to guarantee an equilibrium for the whole portfolio. The decision about the asset allocation in the variable income market or the fixed income market, for instance, must be highly dynamic and reflect the needed policy for obtaining the balance of the pension fund. In case of entities which presents an eventual actuarial deficit, a little more aggressive investment policy can be justified, but only if it is accompanied by an efficient risk administration system which allows the dynamic correction of the strategy.

The investment portfolio administrator of a pension fund, when dealing with the process of asset allocation, should make an analysis of the assets' financial flows and the flow of future value benefits and contributions, in a way to adapt the profile of assets' liquidity and to determine the acceptable level of risk/return.

A pension fund is a multiple-horizon investor, because pension benefits must be planned for a continuum consisting of the short term, medium term and long term, all within the context of an unbroken chain of pension benefit payments. Some people are retired today, some will retire in five years or ten, and still others will retire in 25 years or even longer.

The effective monetary policy in Brazil since the Real Plan, has favored the investments in assets with very low risk, especially bonds issued by the Government (National Treasury and Central Bank). This was caused by the maintenance of the real interest rates at a very high level. The expressive gains of investments in those bonds influenced the asset allocation of the pension funds. According to data published by ABRAPP, the participation of fixed income assets in the total portfolio of the pension funds shifted from 29.6%, in December 1994, to 45.9% in January 2000 (In October 2000 it has already shifted to 52.1%, as showed on page 19) . During this period, CDI - Interbank Depository Certificate, which marks the interest rates of fixed income investments, presented nominal profitability of 295.6%. IBOVESPA, an index that reflects the profitability of the main stocks of the market, presented a valorization of 279.3%.

The change in the exchange rate policy, faced in January 1999, caused the increase of inflation rates and a fall in the real interest rate, raising the debate on the asset allocation policy. The need to reach the actuarial goals and the lower attractiveness of the "assets free from risk" demands an increasingly understanding, on the part of the sponsors, participants and investment managers, of the process of asset allocation, including: the scenarios, the expectation of return of each assets class and the risk of each possible allocation.

The successive financial crises of 1997 (Asia), 1998 (Russia) and 1999 (exchange rate depreciation in Brazil), have made the notion of risk control fundamentally important.

The basic theory of risk and return is usually studied in pricing models of the financial assets. They are destined to explain the behavior of the assets prices, and to supply mechanisms of evaluation of a proposed investment on the risk and return of the whole portfolio. The risk is the possibility of loss or, in other words, it refers to the variability of the return rates. The logic of most portfolio administrators is averse to risk. Risk control is an increasingly recommended procedure in the context of the global economy.

One of the commonly used models is the Capital Asset Pricing Model (CAPM), which is based on assumptions of an almost perfect market, basically in relation of its efficiency and the investor's preferences, such as: a) supposition that the investors have the same information on the negotiated assets; b) the investors make investments considering a long period horizon; and c) the assumption that no investor is sufficiently big enough to affect market prices substantially.

Although its is not the object of the present study, it should be noted that the model (used here just as an example) as well as other existent ones used by Brazilian pension funds, cannot be considered as ideals, or be completely efficient in an isolated way. For each case, it is necessary to deepen the study and to include evaluation aspects which are not merely mathematical.

It should never be forgotten that pension funds have financial objectives. The collection and capitalization of contributions process and the payment of benefits is essentially a financial process and there are a lot of risks. In this way, the financial performance of the pension funds should be constantly evaluated. To make an evaluation, the return rate should be analyzed and compared with the profitability of a referential portfolio with a similar opportunity cost. Depending on the market conditions, the actuarial cost of a pension fund can be inferior to the market opportunity cost (actuarial cost is the minimal profitability required to pay the benefits). In Brazil, most of the pension funds have an actuarial cost equivalent to price indexes (INPC, IGPM, etc.) added to a interest rate of 6% aa. If by chance the market opportunity cost goes above the actuarial cost, a more transparent comparison should be made with the market opportunity cost.

1.5.4 Tendencies

The complexity of the financial markets is always increasing, and some aspects such as the beginning of the maturity phase is a reality for many pension funds. The beginning of the maturity phase is characterized by the increase in the percentage of inactive and beneficiary participants, which provokes a reduction of the volume of contributions and an increase of the expenses (payment of benefits).

Such changes indicate an increasing demand for larger productivity of the pension funds (larger profitability) and larger liquidity of the assets, an aspect that can cause the reduction of investments in low liquidity assets, such as real estate.

On the other hand, such aspects have been driving a great number of pension fund managers to look for the expertise of specialized asset management institutions, through the allocation of resources in investments funds. The mutual or exclusive investment funds propitiate an opportunity to take advantage of many investment alternatives offered by the national market, using the expertise of outside managers.

The recruitment of outside managers to manage the pension funds' resources, is called outsourcing. In Brazil, an outsourcing can be classified in two main forms: direct or indirect.

In the direct form, the pension fund administrator hires one or more institutions to be responsible for the administration of the resources and its investments, regarding certain levels of minimum profitability previously determined. This direct form usually involves the totality of resources in the pension funds. This kind of outsourcing can be justified in small pension funds (with small volume of resources), considering that the administrative costs can be reduced once it is not necessary for the entities to hire their own specialized technicians.

In the indirect form, the pension fund administrator allocates part of the resources in exclusive or mutual investment funds that have previously defined profiles and in agreement with the asset allocation policy. In this case, the pension funds usually maintain only part of their resources in those investment funds. Another part of the resources continues to be administered by the fund's technicians. This is the ideal form for the bigger pension funds and can provide several advantages, such as:

- use of the outside managers' expertise in specific markets (fixed income, stocks, and derivative);
- possibility of comparing the profitability presented by the various investment funds;
- possibility of comparing the own administration (pension fund technicians) and outside administrations;
- maintenance of constant exchange of information between their own technicians and the outside managers - improvement of the pension fund technicians' capacity
- flexibility to change the outside managers in case of bad performance

The partial and indirect form of use of the outside managers' expertise, through the allocation of resources in investment funds, is the ideal form for a big pension fund. It is very important for them to have their own specialized technicians in order to know if an outside manager is doing its job well and to have conditions to make technical decisions about the investments allocation in investment funds.

The Asset Management activity in Brazil has been growing in an accelerated way in the last several years. As a result of the macroeconomic stability, many great players of the international market have been attracted and have already initiated activities of Asset Management in Brazil. In this process, there are many beneficiaries. The market became more professional and some concepts that were previously distant from the Brazilian reality became quite common. Risk administration, "Chinese Wall" and compliance are three examples of concepts that are essential for the success of a professional Asset Management institution today. Those institutions that are not capable of creating and adapting to new technologies certainly will stop existing or will be incorporated by other more qualified institutions. In this context, the pension funds, as one of the main institutional investors, are also beneficiaries, and there is a tendency to improve the quality of their assets.

Regarding the decrease of the real interest rates, the control of inflation and exchange rates, the growth of GDP, and other positive indicators, another tendency can be concluded. In a way to seek the achievement and even overcome the actuarial goals, a natural tendency for the asset allocation policy of the pension funds will be to slowly move part of their investments from the fixed income market to the stock market.

1.6 Benefit Plans

1.6.1 Methods of Benefits Financing

In terms of methods of benefits financing, a pension system can be divided into partition systems or capitalization systems.

A partition system, also known as "pay as you go", finances the benefits of the inactive and beneficiary participants with the contributions of the active workers, that is, the total contributions, minus the administrative costs, is distributed among the retired and beneficiary participants according to a previously defined criteria. In this case, there is only a transfer of resources. In Brazil, this method is used by INSS in the public pension system.

The capitalization system is characterized by the fact that resources of the active participants are invested in a way to generate a fund which will pay, in the future, the benefits for those who contributed to the fund. In Brazil, all the pension funds are forced to use this method.

1.6.2 Defined Benefit versus Defined Contribution

In order to understand the operation of pension plan systems, one must understand that, when participants retire they can receive, in most cases, two pensions. One is guaranteed from the public pension system, as a result of the contributions payed to Social Security, and another, that is usually optional, from a pension fund, that is established by the regular contributions of both the sponsor and the participant. The sponsors' contributions are actually an indirect form of differed wage to the participants. In other words, payment that will only be available to the employee, in most cases, by the time of his/her retirement.

Concerning the relationship between benefit and contribution, the pension systems can be divided into two modalities: defined contribution and defined benefit.

In the system of defined contribution, the participants' periodic contributions are flexible and the benefit is not defined. In this way, the benefit will depend both on the amount of contributions and the profitability reached by the investment of the contributions' resources. In this system, the participants have to assume the investments risks. If the pension fund's assets do not present a good profitability, because of market conditions or bad administration, the participant will may have his/her future benefit reduced. However, there are advantages the participant can benefit from, such as: the ease of monitoring the resources deposited in his/her account; the transparency of the administration of resources (including a clear identification of the administrative costs), the possibility to contribute more in order to have a larger future benefit, and the possibility of choosing the desired profile for the investments (aggressive, moderate, conservative, etc.), which can provide him/her with larger profits eventually, or less risks. These conditions are possible because each participant has an individual account, and can monitor his/her own resources balance.

In the case of defined benefit plans, the future benefits are previously stipulated. Participants have the guarantee of receiving, in most cases, benefits equivalent to the average of their wages in their last few years of employment, or equivalent to their last wages, depending on the rules of each plan. The contribution's amount is fixed and there is no possibility of contributing more in order to get a larger future benefit. In this system, if the pension fund's resources are not sufficient to pay the benefits due to all participants, the sponsor company is responsible for the fund equilibrium. The participant also does not have the possibility to define the desired profile for investments.

There exist, still, hybrid modalities of plans that conjugate characteristics of defined contribution and of defined benefit plans. They are usually called mixed plans.

In the Brazilian private pension system, most of the plans are of defined benefit. It can be noted, however, that there has been a tendency to increase the defined contribution plans, according to the following table:

PERCENTAGE OF BENEFIT PLANS BY MODALITY

YEAR	Defined Benefit	Defined Contribution	Mixed
1996	56%	17%	27%
1999	51%	30%	19%

Source: MPAS

However, concerning the number of active participants, it is clear that, in spite of the growth in the number of defined contribution plans, the defined benefit plans are responsible for the great majority of active participants, as the following table shows:

PERCENTAGE OF ACTIVE PARTICIPANTS BY BENEFIT PLAN's MODALITY

YEAR	Defined Benefit	Defined Contribution	Mixed
1996	77%	6%	17%
1999	60%	13%	27%

Source: MPAS

Concerning the inactive and beneficiary participants, there is also a concentration on defined benefit plans and there can be noted a tendency to migrate to mixed plans. The low percentage of defined contribution plans can be explained because these kinds of plans have only existed a few years.

PERCENTAGE OF INACTIVE and BENEFICIARY PARTICIPANTS

YEAR	Defined Benefit	Defined Contribution	Mixed
1996	89%	0%	11%
1999	69%	1%	30%

Source: MPAS

II - THE AMERICAN SYSTEM

2.1 Brief Historical and General Aspects

American pension funds are less than a hundred years old, but the pension plans are older. Some data indicate that, probably, the first American pension plan was the "veterans' pensions", established by the Federal Government in 1818.

Almost sixty years later, in 1875, American Express Company instituted the first corporate plan, for employees over age 60 who had worked at least 20 years in the company. There was no pension fund backing the benefits and they were paid with the company's own income.

Between 1900 and 1920, about 200 to 250 companies instituted pension plans, but the recession following World War I almost halted pension development until the Revenue Act of 1921, which provided some tax exemptions, was extended to include pension plans in 1926. The great depression and World War II slowed pension development. However, it was reinvigorated after War II.

Nowadays, the private pension system's assets exceed $4.9 trillion. If the public pension funds are considered (pension funds sponsored by public sector), that amount shifts to more than $ 8 trillion. That amount represents more than the total Gross Domestic Product of most other nations, including Brazil. More than 8.5 million retirees are receiving monthly checks from the private pension fund and another 4 million have received a lump sum payment. The private system is an indispensable part of the retirement security of American workers and their families.

In 1999, about 44% of all private wage and salary workers were covered by a pension plan. For full-time workers the rate was somewhat higher, at 51%.

Despite these achievements, the American governants know that much more remains to be accomplished. Although millions of workers are joining the system, the proportion of the workforce participating has remained virtually constant for almost three decades. In addition, there are some gaps in coverage. The proportion of women earning and receiving pension benefits remains below that of male workers. The gap for minority groups remains even larger. While about one-half of white workers in the private sector are accruing benefits, only about one-third of African American and one quarter of Hispanic workers have been brought into the system. The challenge is not simply to expand coverage, but to expand it in a manner that gives high priority to reducing these gaps.

The lack of real growth has occurred despite an increase in both plan sponsorship and coverage within all major industry groups. It can be associated with several changes in the labor force. Over the past three decades, there has been a significant shift in employment away from manufacturing and toward service industry jobs. From 1979 to 1998, the percentage of private sector workers employed in manufacturing industries decreased from 30% to 20% while the percentage of workers employed in the service industries increased from 22% to 32%. The manufacturing sector, in which the American private pension system largely originated, has one of the highest coverage rates at 63% of workers compared to 35% in services.

Another change in the labor force was the trend toward part-time work. The percentage of workers employed on a part-time basis increased from 15% in 1979 to 18% in 1998. This has had a similarly constraining effect because the coverage rate is only 12% among part-time workers compared to 50% for full-time workers.

Workers without pensions are most likely to be employed by small firms, to receive low wages, to be young, to have low tenure, and to be employed on a part-time basis. Workers falling into one or more of these categories account for over 90% of all American non-covered workers.

Workers in small firms: Almost 40% of the private wage and salary labor force, or approximately 40 million workers, are employed in firms with fewer than 100 employees. The coverage rate of workers in these small firms is only 20% compared to 66% among workers in firms with 1,000 or more employees.

Low Wage workers: Only 24% of workers earning less than $20,000 annually participate in a pension plan. About 55% of low wage workers are employed by firms that do not offer pension plans.

Young workers: In 1993 only 24% of workers under age 30 participated in a pension plan, a decrease from 29% in 1979.

Low tenure workers: About one-fifth of all workers have less than one year of tenure with their current employer. Only 37% of low tenure workers are employed by firms with pension plans. Only 9% of low tenure employees have pension coverage.

Part-time workers: Only 12% of part-time workers in the private sector receive pension coverage compared to 50% of full-time workers. About 63% of part-time workers are employed by firms that do not sponsor pension plans. Even when the employer offers a plan, most of the part-time workers are excluded because of the plan provisions requiring employees to work a minimum number of hours annually (generally 1,000) to be eligible to participate.

2.2 Regulation of the System

The USA Department of Labor is responsible for the enforcement of the rules which establishes the participants' rights and fiduciaries' duties of the pension fund system.

The Labor Department's Pension and Welfare Benefits Administration - PWBA is the agency charged with enforcing the rules governing the conduct of plan managers, investment of plan money, reporting and disclosure of plan information, enforcement of the fiduciary provisions of the law, and workers' benefit rights. But other agencies also are involved in pension law monitoring and enforcement. They are The Treasury Department's Internal Revenue Service - IRS and The Pension Benefit Guaranty Corporation - PBGC.

The Internal Revenue Service is responsible for ensuring compliance with the Internal Revenue Code, which establishes the rules for operating a "tax-qualified" pension plan, including pension plan funding and vesting requirements. A pension plan that is "tax-qualified" can offer special tax benefits both to the employer sponsoring the plan and to the participants who receive pension benefits.

The Pension Benefit Guaranty Corporation - PBGC, a non-profit, federally created corporation, guarantees payment of certain pension benefits under defined benefit plans that are terminated with insufficient money to pay benefits.

2.2.1 ERISA

The Employee Retirement income Security Act -ERISA, is one of the most important piece of legislation affecting the American private pension system. Passed in 1974 after more than ten years of discussions, hearings and draftings, ERISA was designed to ensure that the pension promises made to employees were kept. During the hearings, Congress heard case after case of employees working long years for companies only to be fired just before retirement and denied a pension. Other cases involved employees who retired, then discovered that the companies had no money to pay the promised benefits.

ERISA is a federal law that sets minimum standards for pension plans in the private sector. This law brought some of the most significant changes in the whole history of the benefit plans in areas such as: investment and actuarial rules; disclosure; vesting; and an insurance system. The main key provisions of ERISA were:

- Rules for disclosure of plan operations to employees and the government.
- Rules for eligibility for plan participation.
- Alternative schedules for vesting employee benefits.
- Prudence and Fiduciary behavior
- The Pension Benefit Guaranty Corporation (PBGC), which assumes the responsibility for paying benefits to vested employees if a plan be terminated by the employer.

2.2.1.1 Disclosure

As a way to protect the participants, ERISA determined that a series of information must be given to the Internal Revenue Service, the Labor Department and also to the plan participants.

The plan participants have the right to receive a description of the plan within 90 to 120 days after they become participants. Each year, they must also be provided with a summary description of the plan that includes such items as requirements for plan eligibility, vesting provisions, and the circumstances that can result in disqualification. They must also be provided with copies of the statements and schedules from the annual report to the International Revenue Service and Labor Department showing assets and liabilities at market values, and receipts and disbursements during the previous 12 months.

In the information provided to the Labor Department and the Internal Revenue Service, it must also include an opinion by a qualified public accountant on the accuracy of the statements, and an actuarial report showing the size of the unfunded liability and unfunded vested liability (if any).

2.2.1.2 Eligibility

Participation may not be denied to employees who have reached age 25 and have one year of service with the company or, if the plan provides full and immediate vesting, have reached age

25 and have three years of service. Part-time or seasonal employees who work at least 1,000 hours a year must also be covered.

2.2.1.3 Vesting

The Act also provides three schedules under which employees may vest in their accrued benefits , that is, acquire legal rights to their benefits. Before the passage of ERISA, many plans allowed vesting only upon retirement and after 20 or 30 years of uninterrupted service. The three vesting schedules approved by ERISA were:

- ✓ Cliff vesting. This form provided full vesting (100%) after 10 years of service. There was no vesting prior to completion of 10 years of service. This was the vesting schedule selected by most sponsors of defined benefit plans because it was the simplest to administer and also the least expensive. The record keeping was much simpler than that required by the other alternatives.

- ✓ Graded vesting. This form provided for 25% vesting after five years of service plus 5% for each additional year of service up to 10 years (50% vesting after 10 years), then 10% vesting for each year thereafter so that full vesting was achieved after 15 years of service.

- ✓ The rule of 45. This form combined age and years of service. A participant was 50 percent vested when, with at least five years of service, his or her age and years of service added up to 45. From then on vesting accrued at 10% per year.

However, The Tax Reform Act of 1986 reduced for two the schedules of vesting previously established by ERISA. The rule of 45 was excluded, and the acquisition period for the other two schedules was abbreviated. The present rules give the following options:

- ✓ Cliff Vesting. After five years of service.

- ✓ Graded Vesting. 20% vesting after three years of service plus 20% for each additional year of service up to 7 years. The full vesting is achieved after 7 years of service.

2.2.1.4 Prudence and Fiduciary Behavior

ERISA defines a fiduciary as anyone who exercises control or authority over plan management or assets. There are four general fiduciary duties established by ERISA.

The first one is about conflict of interest. It specifies that fiduciary must avoid situations like that. The fiduciary may not deal with plan assets for his or her own benefit. And a fiduciary may not allow more than 10 % of plan assets to be invested in employer securities or real property.

The second one is that a fiduciary must see that the assets are invested with the care, skill, and diligence that a "prudent man" who is familiar with such matters and acting in like capacity and like circumstances would use in the conduct of a comparable enterprise.

The third duty is that a fiduciary must diversify plan investments so as to minimize the risk of large losses.

And the fourth is that a fiduciary must operate in accordance with plan documents and instruments.

2.2.1.5 Pension Benefit Guaranty Corporation - PBGC

The PBGC is, in effect, an insurance company that guarantees to pay the vested pension benefits of plan participants (up to a certain level) in the event of termination of their pension plan for any reason. This guarantee is funded by a premium per employee paid by the plan sponsor each year. To prevent pension fund sponsors from dumping their pension obligations onto the PBGC if they become onerous, Congress stipulated that the PBGC can use up to 30% of a company's net worth to pay employee benefits if the company terminates a plan with assets insufficient to meet its vested pension obligations.

PBGC, however, only insures defined benefit plans. It does not apply to defined contribution plans.

2.3 Benefit Plans

Generally speaking, there are two types of pension plans as it have been discussed before in this paper: defined benefit plans and defined contribution plans.

In the American System, there are two types of plans which are more frequently used:

2.3.1 401 (k) Plan

It is a defined contribution plan in which the participant can elect to defer receiving a portion of his/her salary which is instead contributed on your behalf, before taxes, to the 401(k) plan. Most of the time, the employer matches the participant's contribution. There are special rules governing the operation of a 401(k) plan. For example, there is a dollar limit on the amount the participant may elect to defer each year. Currently the limit is $10,000, and it may be adjusted annually by the Treasury Department to reflect changes in the cost of living. There is also a limit to the employer/employee combined contribution that is up to a maximum of 15% of compensation or a maximum of $30,000.

Although the 401 (k) plan is a tax-qualified pension plan the participants may be permitted access to funds in the plan before retirement. For example, if the participant is an active employee, his/her plan may allow him/her to borrow from the plan. Also, the plan may permit him to make a withdrawal on account of hardship, generally from the funds he/she contributed. Withdrawals will be subject to a possible 10% penalty if the participant is under age 59 ½.

2.3.2 Cash Balance

It is a defined benefit plan in which an account is maintained for each plan participant. It defines the benefit in terms that are more characteristic of a defined contribution plan.

In a typical cash balance plan, a participant's account is credited each year with a "pay credit" (such as 5 percent of compensation from his employer) and an "interest credit" (either a fixed rate or a variable rate that is linked to an index such as the one-year treasury bill rate). Increases and decreases in the value of the plan's investments do not directly affect the benefit amounts promised to participants. Thus, the investment risks and rewards on plan assets are borne solely by the employer.

When a participant becomes entitled to receive benefits under a cash balance plan, the benefits that are received are defined in terms of an account balance. In many cash balance plans, in case of retirement the participant can choose to receive an annuity or to take a lump sum benefit equal to the account balance. Traditional defined benefit pension plans do not offer this feature as frequently.

The benefits in most cash balance plans, as in most traditional defined benefit plans, are protected, within certain limitations, by the federal insurance provided through the Pension Benefit Guaranty Corporation.

Employers are allowed to change (terminate or amend) their traditional defined benefit plans and convert them to a cash balance plan formula. However, federal law does place some restrictions. For example, a plan amendment cannot reduce benefits that participants have already earned.

2.3.3 Some Differences between Cash Balance and 401(k) plans

Participation - participation in typical cash balance plans generally does not depend on the workers contributing part of their compensation to the plan; however, participation in a 401(k) plan does depend, in whole or in part, on an employee choosing to make a contribution to the plan.

Investment Risks - The investments of cash balance plans are managed by the employer or an investment manager appointed by the employer. The employer bears the risks and rewards of the investments. Increases and decreases in the value of the plan's investments do not directly affect the benefit amounts promised to participants. By contrast, 401(k) plans may permit participants to direct their own investments within certain categories. Under 401(k) plans, participants bear the risks and rewards of investment choices.

Federal Guarantee - Since they are defined benefit plans, the benefits promised by cash balance plans are usually insured by the Pension Benefit Guaranty Corporation - PBGC. Defined contribution plans, including 401(k) plans, are not insured by the PBGC.

2.3.4 Other modalities

There are other specific modalities of plans in which participation in the total system is not so representative, such as:

Simplified Employee Pension Plans (SEP) – The plan allows employers to make contributions on a tax-favored basis to individual retirement accounts (IRA) owned by the employees (according some limits). SEPs are subject to minimal reporting and disclosure requirements and are usually established in small companies. It represents an easy, low-cost retirement plan option for employers, which can make tax-deductible contributions and avoid administrative costs. The funds are managed by a financial institution, and the employer's contribution is limited to 15% of pay or $30,000 a year, whichever is smaller. Employers must contribute a uniform percentage of pay for each employee. Businesses are not locked into making contributions every year. They can decide how much to put into a SEP each year, having some flexibility when business conditions vary. Employees can also contribute, but the tax bases will be a little bit different.

Employee Stock Ownership Plans (ESOP) – These plans are a form of defined contribution plans in which the investments are primarily in employer stock. Congress authorized the creation of ESOPs as one method of encouraging employee participation in corporate ownership.

2.3.5 Benefit plans' evolution

One of the most significant changes in the American private pension system over the past 20 years has been the increasing importance of defined contribution plans. The number of participants in these plans has grown from fewer than 12 million in 1975 to 40 million in 1998. Over 75% of all pension covered workers (active participants) are now enrolled in a defined contribution plan. About 92% of all the pension plans are defined contribution plans. Assets held by these plans increased from $74 billion in 1975 to over $2.4 trillion in 1999.

However, while many small defined benefit plans have terminated in recent years, large companies are maintaining their plans. From 1985 to 1995, the number of defined benefit plans with 1,000 or more participants decreased from 5,226 to 5,019 while the number of plans with 10,000 or more participants increased from 552 to 664. Also a tendency to change from traditional defined benefit plans to hybrid arrangements such as cash balance plans, has been observed.

Essentially, all of the new pension coverage has been in defined contribution plans. Almost all new businesses establishing pension plans are choosing to adopt contribution plans, specifically 401(k).

There is also evidence that some employers are replacing defined benefit plan with 401(k) plans. A study conducted for the Department of Labor found that, over the 1985-1992 period, about four to five percent of defined benefit plan participants were in plans which were terminated and replaced by 401(k) plans. This represents about 10% of the increase in the number of active participants in 401(k) plans in the same period.

This change in the pension system is a reflection of fundamental changes in the economy as well as in the current preferences of workers and employers. The movement from a manufacturing-based to a service-based economy, the increase in the number of part-time and temporary workers, and the increased mobility of many workers has led to changes in the needs and interests of both employers and workers.

Employer preferences have similarly changed. The increased competition and volatility of the global economy has made many reluctant to undertake a long-term financial commitment to a defined benefit plan. Many employers perceive defined contribution plans to be advantageous, and there are indications of workers embracing the idea of having more direct control over decisions about the amount of contributions to make and how to invest their pension accounts.

2.4 Investments : Disclosure, Rules and Inspection

Three government agencies have authority to investigate possible violations of the rules for private plans and to bring lawsuits or assess penalties against individuals engaged in illegal actions: the Department of Labor, the Internal Revenue Service and the Justice Department.

The Labor Department has authority to investigate fund mismanagement. If an investigation reveals wrongdoing, the Department can take action to correct the violation, including asking a court to compel plans trustees and others to put money back in the plan. Courts can also impose penalties of up to 20% of the recovered amount and bar individuals from serving as trustees and plan money managers.

The Employee Plans Division of the Internal Revenue Services has authority to investigate "party in interest" transactions. Parties in interest are people or organizations who have close ties to the plan, such as an employer or union, people employed by an employer or union, trustees of the plan, the plan administrator, or relatives of those people. There are prohibited transaction provisions of ERISA barring a number of transactions between plans and parties in interest.

Cases of fraud or stealing of pension money are investigated by the Federal Bureau of Investigation. If illegal activities are found, the case can be referred to the US Department of Justice for prosecution. Criminal penalties can include fines, prison sentences, or both.

The Labor Department has an Internet site which provides every citizen with information like "what to do if you think the rules have been broken". In this way, the government tries to educate and encourage the participants to be watchdogs over their pension plans. Federal pension law makes it unlawful for employers to fire or otherwise retaliate against employees who provide the government with information about their pension fund's investment practices.

The Pension Funds has to fill some Annual Report Form called 5500 (to larger pension funds) and 5500-C/R (to smaller pension funds) which gives to the government and participants some information such as the name of the plan administrator, transactions with parties in interest, all the expenses, loans and investment practices and diversification. One of the strategic goals of the Pension and Welfare Benefits Administration-PWBA's "Strategic Plan 1999 - 2004" is to improve the process of Form 5500 fillings.

Pension managers generally are not allowed to put all assets of the pension plan in a single investment such as one stock or real estate in a single location. They are generally expected to spread the money among variety of investments so there is less chance that one poor investment could expose the entire pension fund to a risk of large losses.

Although there are not as many specific rules of investment diversification as there are in Brazil's legislation, there are some rules like to avoid investments up to 10% of the plan's assets in qualifying employer securities (stock and certain other marketable obligations) of a company whose employees are covered by the plan. However the Department of Labor may also grant additional exceptions if it finds that the exceptions will not expose to risk the participants and beneficiaries interests.

Before the enactment of ERISA, state law and the internal Revenue Code controlled whether a particular investment was suitable for a pension plan. Indeed, many states prescribed lists of permissible investments. In enacting ERISA, Congress changed these sometimes rigid and conflicting state standards and created flexible investment standards under ERISA's prudence rule to meet the changing conditions of the marketplace and plan needs. Under that rule, the prudence of a particular investment is determined by the role that the investment plays within the overall plan portfolio. However, in enacting ERISA, Congress adopted some prohibited transaction provisions. The prohibited transaction rules specifically bars a number of transactions between plans and parties in interest.

The essential rules are really a matter of common sense: the money must be invested in participants interest; money paid out as expenses must be reasonable; pension fund investments must be diversified; and the pension money must be invested wisely and carefully.

One important characteristic of the system is that the government agencies are very active on enforcing the rules. From 1995 through the first two months of 2000, for instance, the Government opened 4,663 investigations involving 401(k) plans. Of those, 1,913 were closed with monetary recoveries on behalf of participants totaling more than $80.5 million. In addition, during that period there were 151 criminal cases opened. At this point, 71 of those cases resulted in charges brought against 90 persons. Seventy-seven persons have been convicted or have pled guilty, serving a combined total of 64 years in jail.

2.5 Retirement Savings Education Campaign

The USA Department of Labor is committed to helping America's workers become better savers. Through the "Retirement Savings Education Campaign", which began in 1995, they are providing workers with information about the retirement income system, and with tools that will help them build a secure retirement future. The Department has undertaken a big campaign with activities ranging from television advertising, speeches, and distributing tens of thousands of educational brochures.

Since the beginning of the campaign, there are now 250 public and private sector partners, and they have formed the American Savings Education Council (ASEC), a non-profit organization.

As part of the campaign, they have prepared brochures and developed specific programs targeted to groups with historically low private pension coverage such as Hispanics, women and African Americans.

The Department is also looking to form alliances with class associations. They formed an alliance with the Chamber of Commerce and the Small Business Administration (SBA) to educate small business owners about options that are available to them for establishing a retirement savings program. The campaign's material includes an interactive website that allows employers to explore a variety of plans that may appropriate for their employees. The goal is to encourage the four million small business owners who do not provide a plan for their 32 million workers to adopt one of these options.

They have also implemented initiatives to teach youth that it is never too early to begin saving and planning for a secure retirement.

III - FINAL COMMENTS AND RECOMMENDATIONS

Although the American private pension system is not much older than the Brazilian system, considering that the great growth only took place after World War II, its evolution in terms of covered population, assets volume and its ration with GDP, the rules' stability, and the population's education, is unquestionable.

Like in Brazil, the participation in the private pension system is optional, but unlikely in our culture, the attention and importance given to the issue by society and by government is much larger. Obviously, the wealth of the country contributes significantly to the success of the system, but on the other hand, an indispensable condition for the development and obtaining of wealth is the formation of intern savings.

Lessons like the government's concern about the education of the population for the importance of the private pension and for the system's safety should be learned.

Relative to the benefit plans, it can be noted on the American system a predominance of defined contribution plans (92% of the plans and 75% of the active participants). In Brazil, as previously mentioned, up to 1999 only 30% of the total plans were of defined contribution, and only 13% of the total active participants had a defined contribution plan. About 60% of the active participants had defined benefit plans.

It must be emphasized that in the brazilian pension funds sponsored by the public sector, which are responsible for the administration of most assets of the system, the reality is not different. Most of the plans are also of defined benefit. Such condition ends up imputing to Government the responsibility for the risks of bad administration or even corruption in such funds.

In case of pension funds sponsored by the public sector, it is necessary that the Government develops incentive campaigns to the migration of the participants to the plan's modalities with the characteristics of defined contribution, clarifying the conditions and even offering such financial incentives as the possibility of withdrawal of a small percentage of individual savings. The sponsor's effective engagement is also fundamentally important, ir order to provide an efficient communication plan, total transparency and offer advantages such as the possibility of investment’s profile choice by the participants.

It is not fair that the whole society, through the government, keeps on being responsible for the risks of a certain category of workers, considering that, when a defined benefit plan of a public pension fund has insolvency problems, the government must provide resources to solve the deficit. The plans of defined contribution can propitiate a larger transparency for the savings administration, considering that the participants can monitor the evolution of their individual savings individually. This kind of plan also propitiates to workers a larger perception of the importance of the system, since they become more interested in monitoring their own future benefits.

Relative to the investments' administration, it can be noted that in the American system the rules are quite flexible. There are not many specific rules as for investment limits but, instead of it, there are certain principles of good administration such as prudence and diversification. The prudence and the diversification rules of ERISA are the standards for examining the traditional financial attributes of an investment, such as safety, rate of return, and diversification. These guidelines give each fund a certain flexibility in meeting its fiduciary requirements. Each plan’s investment policy should depend both on financial objectives and on the characteristics of the plan, such as funding needs, benefit structure, and cash flow demands.

In spite of having flexible investment rules, the American system has an efficient system of control and fiscalization enforced by the Government, and participants are also educated and motivated to constantly monitor their investments.

In the Brazilian system, the rules that guide the investments are reasonably appropriated. Before having more flexibility on the rules, there must be an efficient control system. However, the current rules need some improvements about the compulsory nature of risk control. These improvements are being studied and discussed by SPC, as previously mentioned. Relative to the risks, the analyses on the sustainability of the fund considering its assets and liabilities is very important. In spite of being considered typical long period investors, pension funds are not merely a long-term investor. Instead, they are a long term, medium-term, and short-term investor all at the same time. A pension fund's numerous investment horizons depend on the size and timing of its benefit payments to plan participants. A pension fund cannot afford to consider itself as only a single-horizon, long-term investor, when its true needs are so varied. In that way, for each pension fund there must exist a different form of analysing its financial equilibrium.

To reach the flexibility stage of the American rules, however, there are some necessary changes which are in course of being concluded, such as larger equipment and technical training of the regulatory organ. It is also necessary to increase the level of understanding and education of the population about the importance of the system. In this field, the Government has an important hole, which will be commented on later.

The importance of the pension funds to the country's future is unquestionable. There are no doubts on the fact that those entities can contribute significantly to the growth of the intern savings and the increasing of capital market. The growth of the intern savings is an indispensable condition for the structural changes that are taking place in Brazil in order to propitiate development. Besides, considering the financial difficulties faced by the public pension system, the pension funds are fundamental for the safety and tranquillity of a great part of the workers.

In Brazil, various aspects indicate the tendency of growth to the pension funds system. The bills in analysis by Congress, among other conditions, will make possible the creation of new pension funds sponsored by the public sector (Union, states and municipal districts), pension funds instituted by unions and class associations, and multisponsored funds (facilitating the participation of small and medium companies).

On the other hand, the low volume of workers that today participate in the system, is another factor that indicates the great potential for the growth of pension funds.

Examples as the one of the USA, where the system already includes almost half of the population, demonstrate that the development of the private pension system has a close relationship with the level of the country's development. However, in a way to consolidate this increasing of the pension funds in Brazil, some conditions are indispensable and should be pursued, such as: stability of rules and tax issue; transparency and credibility; and the government's role as educator.

Stability of Rules and the Tax Issue

Together with the economic stability, the stability of the rules is an essential condition to propitiate the growth of the system. When a businessman thinks about creating a pension fund it involves a long term planning. Constant and abrupt alterations on the rules are a discouraging aspect for any long-term decision. To participants, in the same way, the insecurity about the rules is a discouraging factor. When a worker chooses to participate in a retirement plan he/she is abdicating from the possibility of current consumption, on behalf of a future benefit. The confidence in the stability of the system is essential.

In this context, the tax issue has a great importance. In the USA and in the great majority of the developed countries, such as Germany, Canada, Holland and Japan, the taxes are only collected when the benefits are paid to the retired and beneficiary participants. There is no taxation during the period of saving capitalization. In Brazil, the bills in analysis in Congress determine the deferment of the tax, which means that it will only be collected in the end of the contribution period, when the assets become income to participants, as in most of the developed countries' systems. It is fundamentally important that such a proposal be approved by Congress. Otherwise, there will be a double taxation which would harm the process of saving accumulation and would probably reduce the interest of both participants and sponsors to contribute to the growth of the system.

Apart from using macroeconomic policy, for example, by changing the general level of interest rates, the government can conceivably affect the rate of voluntary saving by the treatment of saving by the tax system regulation.

Transparency and Credibility

The incentive to the formation of pension savings is directly related with the confidence that people have in the system. To obtain confidence, among other aspects, the information accessibility is very important.

The current level of information disclosed by most of the Brazilian pension funds is not satisfactory. Mainly in the plans of defined benefit, it is very difficult for the participant to monitor the real financial evolution of the investments and the compatibility between the pension fund's assets and liabilities. In other words, it is difficult for the participant to evaluate the risks on his/her future payment of benefits.

If every participant had conditions to monitor and to supervise the pension funds' investments and if they knew how to evaluate their risks, the government's regulatory hole would be quite simplified. However, a more active posture of the participants demands a long-term change in participants' education.

Therefore, one of the roles that government should carry out is to monitor the financial performance of the pension funds. The government should assure that the rules are accomplished and that there is transparency in the administration of funds, in a way to contribute to the increased confidence about the system.

In the USA, various information about investments and expenses of the pension funds are made available, through the Internet, to participants. Also, the participants are motivated to monitor the management of their resources, and they are protected by law in case of the accomplishment of accusations about bad administration.

In Brazil, the SPC 2000 Project, which looks to modernize and to equip SPC, is a great step for the improvement of the fiscalization system. However, there are still many things to be done in a way to propitiate a favorable atmosphere to the system's growth. For example, It is very important to make on-line and computerized information, about the administration of resources, available to participants.

On the other hand, SPC should adopt strong punitive measures for eventual illegal administration actions and publish them. Like the USA example, the publication of the investigations and their results is very important to the transparency of the system. Only through a strong and active fiscalization agency can the government contribute to the system in order to grow in a more solid way, having the participants’ and society's trust.

The creation of an independent agency to regulate and fiscalize the system has been discussed by some technical segments. It could be a good measure, but there are some conditions that should be applied: the agency should have its own budget; the technicians should be chosen by a technical selective process; and the goals should be previously determined. The achievement of the goals should be monitored by a special committee of Congress and discussed with the society.

In the American system, there is an insurance company that guarantees the defined benefit plans, and is funded by a premium per employee paid by the plan sponsor each year. Although it is a good tool to increase the confidence in the system, it does not seem to be a short-term alternative to Brazil’s system. This alternative would demand a period of funds’ accumulation to the insurance company and would apply only to defined benefit plans. This should be considered as a medium and long-term alternative. Besides, the increase of the defined contribution plans seems to be a more appropriate condition that should be pursued.

The Government’s Role as Educator

The government's role should not and cannot be merely to enforce rules and to fiscalize the system. Although these functions have a fundamental importance to the system's development, another role no less relevant is to contribute to the population's education about the importance of the system.

One of the great evolutions noted in developed countries is exactly the perception of society about the importance of the intern savings, specifically the private retirement system.

In the USA, as already mentioned, one of the government's great concerns is to promote the education of the population about the importance of the private pension system expansion. Campaigns are developed with the objective to inform and to educate the population, mainly that part of the population that is usually less favored by benefit plans. This issue has been recently discussed in Congress during a statement of the Secretary for Policy and Welfare Benefits Administration before the Special Committee on Aging of U.S. Senate, which shows the importance given to the theme.

Although the resources in Brazil are scarcer, this is an issue, which should be faced with priority by the government. Many education actions can be developed with a low cost and in association with the private sector. Generic informative campaigns (media), explanations addressed to specific categories of workers and employers, technical support available through the Internet and even the inclusion of this theme in fundamental schools are some examples of possible actions.

The construction of a solid private pension system is fundamental for the construction of the country's future.

BIBLIOGRAPHY

AMBACHTSHEER, Keith P. and D.Don EZRA. 1998. *Pension Fund Excellence: Creating Value for Stakeholders*. John Wiley & Sons, Inc. New York

MERKLE, Ned. 1981. *Do's and don'ts of pension fund management*. Amacom. New York.

GRAY, Hillel. 1983. *New Directions in the Investment and Control of Pension Funds*. Investor Responsibility Research Center, Washington, D.C.

MANSFIELD, Clay B. and Timothy W. CUNNINGHAM. 1993. *Pension Funds: A Commonsense Guide To a Common Goa*l. Richard D. Irwin, Inc.

MACKENZIE G.A., GERSON Philip and Alfredo CUEVAS. 1997*. Pension Regimes and Saving*. International Monetary Fund. Washington, D.C.

HORNE, James C.Van. 1998. *Financial Market Rates and Flows*. Prentice Hall Inc. New Jersey.

U.S. Department of Labor – Pension and Welfare Benefits Administration. 2001*. Private Pension Plan Bulletin*. Washington, D.C.

ALLEN JR., Everett T., Joseph MELONE, Jerry S.ROSENBLOOM, and Jack L. VANDERHEI. 1994. Planos de Aposentadoria. ICSS. São Paulo – SP.

PEREIRA, Francisco, Rogério B. MIRANDA, and SILVA Marly. 1997. *Os Fundos de Pensão como Geradores de Poupança Interna*. IPEA, Texto para Discussão nr. 480. Brasília-DF

ABRAAP-Associação Brasileira das Entidades Fechadas de Previdência Privada. 2000. *Revista da ABRAAP nr. 264*. São Paulo-SP

ABRAAP-Associação Brasileira das Entidades Fechadas de Previdência Privada. 1999. *Revista do 20º Congresso Brasileiro dos Fundos de Pensão – Previdência e Desenvolvimento: ações integradas*. São Paulo-Sp

ICSS-Instituto Cultural de Seguridade Social. 2000. *Revista Seguridade nr. 1*. São Paulo-SP

Websites:

Ministério da Previdência e Assistêncial Social

www.mpas.gov.br

Secretaria de Previdência Complementar – Projeto SPC 2000

www.previdenciasocial.gov.br

U.S. Department of Labor – Pension and Welfare Benefits Administration

www.dol.gov

Associação Brasileira das Entidades Fechadas de Previdência Privada

www.abrapp.org.br

Instituto de Pesquisa Econômica Aplicada

www.ipea.gov.br