

CHAPTER VIII

RECENT IMPROVEMENTS TO THE SYSTEM AND PENDING CHALLENGES

A. Recent Improvements

1. Multifunds

1.1 Objectives

Until July 2002, each AFP managed two types of Pension Fund, the Type 1 Fund, which was open to all members of the Pension System, and the Type 2 Fund, which admitted only those members who were already receiving pensions or who had 10 years or less to go before reaching the legal retiring age.

As from August of that year, the number of Pension Funds for each Administrator was extended to five, in accordance with the provisions of Law N° 19,795, dated 28th February 2002. These funds would be differentiated by the proportion of their portfolio invested in equities, where the greater the investment in equities, the greater the risk and the greater the expected return.

The main objective in creating a multiple fund ("multifund") scheme in the Social Security System is to increase the expected value of the pensions that members will receive. The possibility of investing in a portfolio of financial assets with a risk-yield combination associated with the member's investment horizon permits an increase in the expected value of his/her pension. This allows the Pension System to achieve its fundamental aim more efficiently, which is to provide members with an income that adequately replaces the one obtained during his/her active life.

The creation of a multifund system allows members to achieve a portfolio distribution which is more in tune with their preferences and needs, as far as risk and yield are concerned. Different members may have different preferences concerning the composition of the portfolio of their Pension Funds, and these are reflected in differing degrees of aversion to risk. The creation of multifunds means that members can exercise their own preferences, thereby producing increased well-being. By way of example: younger members, or those who have other assets which are important compared with their social security savings, may prefer a Pension Fund with a higher level of risk and expected return, in order to increase the expected value of their pensions. Older members, on the other hand, or those who are already receiving pensions, may prefer a Fund with minimal risk, in order to minimize the fluctuations in the value of their pensions.

At the same time, it is hoped that the existence of multiple funds will have a series of positive effects, both for the Pension System in particular and for the capital market in general. Of these, it is worth mentioning the following:

- *Incentives to seek information:* Members have a greater incentive to find out about the performance of their Pension Funds, and this imposes greater discipline on their Administrators.
- *Improvement in the service provided by the AFPs:* The larger number of available Funds makes the service that the AFPs provide for their members more personalized.
- *Member participation:* The opportunity to choose a portfolio means that members feel more involved in the management of their Funds.
- *Better allocation of resources:* The greater specialization of the investments produces increased efficiency in the allocation of resources in the economy.

1.2 Main Features of the Multifunds

The main features of the multifund system are as follows:

i. Choice of Funds by members

There is a free choice of Pension Funds for the members of the Social Security System, except for pensioners, male members over 55 years of age and female members over 50 year of age, who have certain restrictions as far as their mandatory contributions are concerned. Pensioners may opt for one of the three Funds with lower relative risk with these balances (C, D and E), while older members who are not pensioners will be able to opt for any of the four obligatory Funds with their balances (B, C, D and E). Both groups will be able to choose any of the five Funds for their voluntary contributions, agreed deposits and voluntary savings account.

Table N° VIII.1
FUND CHOICE POSSIBILITIES BY AGE BANDS

		Men up to 55 years Women up to 50 Years	Men from 56 years Women from 51 years	Programed withdrawal and temporary income pensioners
Investment Options	Fund A			
	Fund B			
	Fund C			
	Fund D			
	Fund E			

The reason for the restrictions mentioned above is to avoid members who are close to retiring age or already retired taking high risks in the investments made with their mandatory resources, which may do irreversible harm to the level of their retirement pensions and affect the state guarantees for minimum pension that are involved.

Nevertheless, members who do not select a Fund type when joining the Pension System will be assigned to one according to their age. The rule for assigning members to one of the five Funds involves dividing them into three age-bands, with younger members being assigned to a Fund with more equities and older members to one with a higher intensity of fixed income. This rule is applied both to active members and to pensioners.

The method of assignment is given in the following table:

Table N° VIII.2
ASSIGNMENT BY AGE-BAND FOR NON-CHOOSING MEMBERS

Investment Options		Men up to 35 years Women up to 35 years	Men from 36 to 55 years Women from 36 to 50 years	Men from 56 years Women from 51 years and Pensioners
	Fund A			
Fund B				
Fund C				
Fund D				
Fund E				

Members' investment horizons were taken into consideration when defining the different bands, i.e. the time remaining until they reach legal retiring age and their likelihood of recovering from low-yield periods, in order to point them towards the Funds that are best suited to their needs.

A gradual assignment of members to the Pension Funds that correspond to them is also laid down, involving the transfer of 20% of their balances per year, over a period of four years. The aim of this measure is to move the mandatory assignment towards a sequence of portfolios that are closer to the optimum, and limit the financial risk of abrupt changes.

ii. Investment Limits:

Maximum and minimum investment limits are laid down for equities according to the type of Fund, so that there may be clear differentiation between them.

The limits for investment in equities are as follows:

Table N° VIII.3
MAXIMUM AND MINIMUM LIMITS IN EQUITIES
 (As a % of the value of each Fund)

Type of Fund	Maximum limit	Minimum limit
Fund A	80	40
Fund B	60	25
Fund C	40	15
Fund D	20	5
Fund E	0	0

An adequate range is given between the minimum and maximum limits, to enable the portfolio manager to optimise his investment. In fact, the limits that have been laid down will allow the AFPs to structure efficient portfolios for each type of Fund.

With regard to the investment of Pension Funds abroad, a limit has been fixed for the total amount of resources managed by each AFP, in other words, for the investments carried out abroad with an Administrator's five Funds, taken together. In this way the portfolio manager is given more freedom to decide which is the optimum percentage of investment abroad in each Pension Fund.

iii. Obligation as regards the creation of Funds:

The creation of the four Funds with lower relative risk is obligatory for the AFPs, whereas the creation of a Type A Fund, which has a greater concentration of equities, is voluntary.

iv. Transfers between Funds:

Members may freely transfer their balances, consisting of mandatory contributions, voluntary contributions and agreed deposits, between the Funds, as also their voluntary savings. In the case of more than two

transfers of any of these balances in one calendar year, the Administrator will be authorized to charge an exit commission which cannot be deducted from the Pension Fund. The aim of this is to avoid excessive administration costs and the possibility of negative effects on the capital market.

v. Contracts between AFPs and members:

The AFPs and members may sign contracts to allocate resources in two different Funds and also have the possibility of agreeing to future transfers of Funds. The aim of providing these possibilities is to achieve a closer approximation to the risk-return preferences of each member, bearing in mind their individual characteristics.

vi. Minimum Yield:

The earlier mechanism for measuring minimum yield has been maintained; in other words a band which is defined on the basis of the average yield of the System in real terms.

However, the measurement of minimum yield will be carried out for each type of Fund, so that Funds will be prevented from minimizing their differences in order to avoid too much divergence from the average yield. The measurement band has therefore been widened for the two Funds with a higher percentage of their portfolio invested in equities, and the existing band has been kept for the three lower-risk Funds.

vii. Commissions Structure:

In order to avoid increasing the complexity of the System for its members, and making the employer's task more difficult, the commissions structure and its standard application for all members have been maintained, regardless of the Fund which they may choose.

viii. Separation of Balances:

The balances for mandatory contributions, voluntary contributions, agreed deposits and the Voluntary Savings Accounts, may be held in different Funds. In the case of voluntary savings there is no type of restriction by age, or for pensioners.

ix. Conflicts of Interest:

The AFPs are allowed to carry out direct transactions between the different Funds under their management, for the equivalent of the transfers of members between Funds. This measure is designed to avoid

unnecessary costs in the running of the Pension System, given the greater changes in portfolio which are expected to occur in the multifund system.

However, in order to guard against possible conflicts of interest, the AFPs are under the obligation to inform the Superintendency of transactions between the different Funds managed by a single Administrator. This is in addition to the safeguards which already existed in the law, to protect the safety of investments carried out with social security resources.

In order to reinforce the oversight of transactions in the stock markets, the Superintendency is granted the power to supervise any operations in which the Administrators take part and the people who, by reason of their position, have access to information about Pension Fund transactions.

2. Investment of Pension Funds Abroad

2.1 The Situation Prior to the Legal Modification

In February 2002, the investment of Pension Funds abroad amounted to 4,857 million dollars, representing 13.8% of the value of the Funds. This investment was distributed in the following financial instruments: 65.3% of the total invested abroad corresponded to mutual fund shares (9.0% of the Fund), 31.7% to debt securities (4.4% of the Fund), 1.5% to indirect investment abroad via local investment funds (0.2% of the Fund) and 1.5% to investment fund shares, shares, derivatives and liquid assets (0.2% of the Fund).

During recent years, the considerable increase in investment abroad has gradually reduced the available investment margins, a situation which has been most critical in the case of capital instruments.

The law stipulated a limit of between 10% and 20% of the value of the Pension Funds for investing these in foreign securities, and a sub-limit of between 5% and 10% for investment in foreign equities. The limits fixed by the Central Bank of Chile for investment of Pension Funds in foreign instruments was 16% of the value of the Fund with a sub-limit of 10% for equities.

In March 2002 the Pension Funds had accumulated total resources amounting to 36,703.4 million dollars. The Funds increase significantly every year and at present show an annual average growth rate of 29%; this is due to the payment of contributions and the yield on the accumulated Fund. According to estimates from

the Superintendency of AFPs, assuming a real annual average yield of 6%, by the year 2020 the Pension Funds will amount to approximately 96,000 million dollars, representing nearly 83% of the GDP.

Due to the huge size of the Funds compared with that of the local market, the domestic investment alternatives have been getting steadily smaller and once the demand for financial instruments exceeds the supply, the price rises, resulting in lower yields being obtained for the System's members.

This confirms the need to create a constant stream of new investment alternatives for the Pension Funds, to provide an ample supply of instruments to satisfy their growing demand for financial assets and their needs to diversify in order to achieve an appropriate combination of yield and risk.

Investment in foreign issuers therefore appears to be the solution, providing access to a greater number of investment alternatives and to markets with greater maturity and liquidity, all of which allows suitable diversification of the financial risk of the investment portfolio and increases the number of opportunities to achieve higher yields for the Pension System.

2.2 Legal Modifications

Through the Multifunds Law, the limits for investing Pension Funds abroad were broadened, including the possibility of investing in new financial instruments from foreign issuers and carrying out operations or signing contracts abroad.

i. Overall limit

The aforementioned law increased the overall limit for investment of Pension Funds abroad, establishing a range fluctuating between 20% and 30% of the value of all types of Funds in an AFP for these purposes. The Central Bank of Chile is responsible for fixing the definitive limit within this range. A transition period was set, after which the limit for investment abroad should rise to 30% by March 2004. In the case of foreign equities, the existing sub-limit was eliminated.

ii. Limits per issuer

Meanwhile, the limits per issuer for foreign fixed-income instruments have been improved by introducing a risk factor to differentiate between issuers with higher or lower risk, as already happens in the case of local

instruments. The limits per issuer have also been increased in the case of issuers with the best risk-rating, consistent with the increase in the overall limit.

iii. New investment instruments

New instruments, operations and contracts have been included as investment alternatives abroad. In this way the instruments available for investment of the Funds have increased in number, in order to allow the investments to adjust to the dynamic development of international financial markets.

iv. Limit to exchange exposure

The legal modification establishes limits to the exchange exposure per type of Fund, bearing in mind that pensions are paid in local currency. Earlier, investment limits abroad had to fulfil the double objective of limiting exposure both to sovereign issuers and to exchange risks. The second objective was not met because, for example, the investment of an AFP in a foreign issuer calculated in UF counted as "investment abroad" whereas a deposit in dollars in a local bank was considered "local investment". The new limits which have been established are consistent with the Funds' diversification needs.

v. Commissions paid to foreign mutual and investment funds

Maximum commissions have been fixed for Pension Fund payment on investments carried out in foreign mutual and investment fund shares. Any excess over and above these is to be covered by the AFPs. These commissions are laid down by the Superintendents of AFPs, Banks and Financial Institutions and Securities and Insurance, with the aim of limiting the responsibility of the Pension Funds in defraying the costs involved in paying for portfolio management by third parties and avoiding biases which, because they are paid by the Fund, encourage indirect investment.

2.3 Grounds for Increasing the Overall Limit Abroad

i. Effect on risk and yield

The main theoretical grounds for increasing the limit for investment of Pension Funds abroad are its importance for purposes of diversifying the portfolio, allowing better combinations of yield and risk to be obtained on the investments and resulting, at the end of the day, in higher pensions for the System's members.

With regard to the advantages of foreign investment for Pension Funds, it is necessary to bear in mind the following concepts of financial theory on portfolio risk and yield.:

- The expected risk of a portfolio (measured by the standard deviation) is less than the average weighted risk of the assets which make it up, unless the returns on the assets are perfectly correlated.
- The diversification of portfolios eliminates the diversifiable or non-systematic risk, which corresponds to the risk attached to a company, industry or economic sector. At the same time there is a part of the risk which cannot be eliminated by diversification, and this corresponds to systematic or market risk and is defined as that which affects the economy as a whole. In a well-diversified portfolio, only the systematic risk is of any importance.
- The portfolios which offer the highest expected yield for a given typical deviation are those known as efficient portfolios. The boundary of efficiency is defined as that combination of points which minimize the risk of a portfolio subject to a particular return or, alternatively, as that combination of points which maximize the return of a portfolio subject to a particular risk.
- The analysis of the theory of portfolio choice has spread into an international context, this being understood to mean the possibility of investing in assets of other countries. In this scenario, it is held that international diversification can reduce the risk of an asset portfolio, beyond the diversification possibilities that are to be found when investing in the assets of a single country.

The various studies concerning the effect of the investment of Chilean Pension Funds abroad are based on the theoretical justification given above.

ii. Effect on pensions

The main effect of the increase in the limit for Fund investment abroad on the welfare of workers who belong to the Pension System, is seen in the impact produced on the yield of those Pension Funds.

It may be seen below how an increase in the yield of the Funds is reflected directly in the accumulated balance in the individual capitalization account.

Table N° VIII.4
EFFECT OF AN INCREASE IN YIELD ON THE ACCUMULATED BALANCE

Contribution Time	Difference in yield (in %)		
	1%	2%	3%
20 years	11.6	24.7	39.7
25 years	15.2	33.0	54.1
30 years	19.0	42.3	70.9
35 years	23.2	52.8	90.4
40 years	27.7	64.5	113.2

The data presented here correspond to a base yield of 4% per year in real terms, for a member with a taxable income of \$300,000.

In the table it is possible to see that in the case of a worker with 35 years' contributions, an additional point in yield means that at the end of his/her working life, he/she will receive a pension that is 23% greater.

3. Improvements in the Local Investment of Pension Funds

In order to make Pension Fund investment in the local Chilean market more efficient and allow workers' resources to obtain a better yield, Law N° 19,785, which created the multifunds, also introduced the following changes in matters of local Pension Fund investment:

- i. *Subscription of shares with preferential option when investment limits are exceeded:* The Pension Funds are authorized to exercise their preferential option to subscribe company shares when they are exceeded or produce excesses in investment limits, whether by instrument or by issuer. A period is established for coming into line with the limits structure.
- ii. *Limit for risk-hedging operations:* The legal limit was 10% of all the operations in force and effect in the secondary markets. This restriction was considered to be a constraint for the Pension Funds, because the size of the local market made it difficult for hedging operations to be carried out on behalf of the Funds. That limit was therefore eliminated.
- iii. *Limit to indirect investment in a company:* The investment limits in shares per issuer for the Pension Funds included the concept of indirect investment, in other words, they took into account investment carried out by the Funds in shares of a specific issuer

through investment in the shares of other companies. In order to make the investment of the Pension Funds in shares more flexible, this limit was eliminated.

- iv. To allow the Pension Funds the possibility of lending or renting out assets:* An important proportion of the Pension Funds' portfolio is immobilized, in other words, the Pension Funds hold securities for a long period of time without engaging in any trading with them. The Pension Funds are therefore authorized to rent out or lend assets in exchange for a premium or price, with the appropriate guarantees and safeguards.
- v. Elimination of screened book assets:* The aim of screened book assets was to prevent or reduce the investment of the Pension Funds in companies with a lower level of control or information about their assets. However, problems and negative incentives were detected in the practical application of screened book assets, so they were eliminated.
- vi. Broadening of the limit per issuer for bonds, according to the series:* In order to give the Pension Funds greater flexibility to participate in new bond issues in the local Chilean market, the limit was extended from 20% to 35% of the series.
- vii. Limit of free availability for local equities:* The investment limit laid down in the law for acquiring freely available shares was raised from 1% to 3% of the value of the Funds for Funds A and B. Also included in this limit, as freely available instruments, were the shares of local investment funds and mutual funds. This measure allows more Fund resources to be channelled to new investment projects.
- viii. Limit to commissions paid to mutual and investment funds:* Maximum limits are established for the commissions to be paid by the Pension Funds on these investments, and the AFPs must pay any excess over and above the limits. These commissions are set by the Superintendents of AFPs, Banks and Financial Institutions and Securities and Insurance and are designed to limit the costs to the Pension Funds of payments for portfolio management by third parties and to avoid biases which encourage indirect investment if paid by the Fund.

4. Voluntary Social Security Savings (VSSS)

4.1 Introduction

As from 1st March 2002, Law N° 19,768 came into force, introducing important changes to Decree Law N° 3,500, which regulates the AFP System, and to the Income Law.

Before the legal change mentioned above, the Pension System already contained tax benefits to stimulate voluntary saving for social security purposes. However, the mechanism was somewhat rigid and was restricted to employed workers belonging to the AFPs. For this reason, one of the main aims of these legislative changes is to improve and broaden the coverage of the tax incentives which reward this long-term saving.

The main aspects of this law are as follows:

- i. The number of financial intermediaries allowed to manage these savings is increased.
- ii. Self-employed workers and those contributing under the Institute of Social Security Normalization (INP) are included in the tax benefit.
- iii. The maximum monthly amount to be deducted from the income tax base is increased from 48 to 50 UF.
- iv. Workers are allowed to withdraw their voluntary social security savings before retirement.

4.2 Tax Benefit

The law establishes as a benefit the possibility of deducting the amounts to be used for voluntary social security savings from the taxable base, with an upper limit of 50 UF per month. Simulations are given below for the different income levels, achieving a Voluntary Social Security Saving of \$200,000 during a particular month.

Table N° VIII.5
EXAMPLES FOR DIFFERENT INCOME LEVELS
(In \$ as of March 2002)

Gross Income	700,000	1,200,000	1,800,000	2,700,000	4,000,000
Without VSSS					
Deduction for AFP + Health	134,680	186,986	186,986	186,986	186,986
Taxable Income	565,320	1,013,014	1,613,014	2,513,014	3,813,014
Marginal Rate	5%	10%	15%	25%	39%
Net Income without VSSS	556,231	973,505	1,503,879	2,216,447	3,066,729
Deduction for AFP+ Health	134,680	186,986	186,986	186,986	186,986
With VSSS	200,000	200,000	200,000	200,000	200,000
Taxable Income (with VSSS)	365,320	813,014	1,413,014	2,313,014	3,613,014
Marginal Rate	0%	5%	10%	25%	39%
Net Income with VSSS	365,320	791,540	1,333,505	2,066,447	2,944,729
Reduction in Net Income	190,911	181,964	170,374	150,000	122,000
Tax Benefit	9,089	18,036	29,626	50,000	78,000

Assumptions: - Contribution rate for AFP: 12.24% (Average of the System)
- Rate of deduction for health: 7%
- Income is only received as an employee

In the above table it may be observed that the tax benefit attached to VSSS increases with the wage, making it possible in some cases to lower the marginal rate of income tax to be paid. Therefore a person who, according to his/her income, corresponds to a marginal rate of 39% will find, as a result of making a VSSS of \$200,000, that his/her net income is reduced by only \$122,000.

4.3 Freely Usable Funds

The law referred to above provides increased flexibility in the withdrawal of voluntary contributions, making it possible for members to withdraw them at any point in their working life and not only on retirement, as was the case before the modification to the law.

Withdrawals made by the worker before retirement will be subject to a special tax and will be considered as income in the year in which they take place. In this way, it is hoped that workers will be encouraged to keep their resources in savings in order to increase their future pension or bring forward their retirement age, by rewarding those people who behave wisely with regard to the financial needs that they will face in their old age.

Withdrawal of Funds

- *Withdrawal before fulfilling the retirement requirements:*

The withdrawal mentioned above will be subject to an additional rate of between 3% and 7%, over and above the contributor's global complementary tax.

The tax rate applicable to withdrawals is as follows:

$$\text{Tax rate} = 0.03 + \left[1.1 \times \left(\frac{\text{TIW} - \text{TEW}}{\text{W}} \right) \right]$$

Where:

TIW : corresponds to the amount of the global complementary tax determined on the wages for the financial year, including the readjusted amount of the withdrawal.

TEW : corresponds to the amount of the global complementary tax determined on the wages for the financial year, without including the amount of the withdrawal.

W : corresponds to the adjusted amount of the withdrawal.

- *Withdrawals by pensioners or persons entitled to receive a pension:*

In the case of withdrawals made by pensioners or persons who fulfil the age and pension amount requirements laid down in DL 3,500 and DL 2,448 (1979), the tax rate will be the following:

$$\text{Tax rate} = \left(\frac{\text{TIW} - \text{TEW}}{\text{W}} \right)$$

Where the terms TIW, TEW and W correspond to those defined above.

4.4 Freely-Usable Surplus

The amount of the freely-usable surplus, which is decided at the time when the member decides to retire, may be withdrawn free of tax up to an annual maximum equivalent to 200 monthly tax units (UTM). This exemption may not exceed the equivalent of 1,200 UTM. All the same, the member may opt, as an alternative, to take advantage of a maximum

exemption of 800 UTM during one year for his/her withdrawals. The exemption will also apply to those savings made at least 48 months prior to the withdrawal. The exemption will not apply to that part of the freely-usable surplus which corresponds to resources originating in agreed deposits.

4.5 Entry of New Protagonists

There has been a broadening of the range of capital market institutions and financial instruments which the workers may choose to manage the funds corresponding to voluntary contributions and agreed deposits. These resources can therefore be managed by Mutual Fund Administrators, Investment Fund Administrators, Life Insurance Companies, Banks and Financial Institutions, Housing Fund Administrators, Stock Brokers, Insurance Brokers and Pension Fund Administrators. The effect sought by introducing this group of agents into the management of Voluntary Social Security Savings is to make a wide range of alternatives available to people who wish to invest their savings, with different combinations of expected return and risk, and at the same time, to provide an incentive to save more.

4.6 Increase in Coverage

Another additional feature is the possibility for self-employed workers to gain access to the benefits of Voluntary Social Security Saving, as long as they are making social security contributions⁷⁷. This constitutes an incentive for this segment of the work force to join the Pension System.

At the same time, people contributing in some of the social security schemes administered by the Institute of Social Security Normalization (INP) will be able to make voluntary savings in the various institutions authorized to manage them.

The changes in regulations described above lay down the bases for extending the coverage of the Social Security System and raising the level of the pensions that workers will receive when retiring from working life.

4.7 VSSS as Protection against Unemployment

Voluntary Social Security Savings can prove useful in providing self-protection against the event of unemployment. An example is given below.

⁷⁷ For every UF contributed, the worker will be entitled to make voluntary savings of 8.33 UF, free of tax.

Example:

A worker who receives a wage of \$833,333 per month (equivalent to \$10,000,000 per year) who withdraws VSSS: \$5,000,000 in one year.

On the amount of the withdrawal the authorized institution is obliged to retain 15%, in other words, the net withdrawal will be \$4,250,000.

Scenario 1: The worker makes the withdrawal while actively employed.

Tax rate to be paid on the withdrawal:	13.7%
Tax to be paid:	\$687,482
Reimbursement on re-liquidation:	\$62,518

Scenario 2: The worker makes the withdrawal while unemployed.

Tax rate to be paid on the withdrawal:	3.44%
Tax to be paid:	\$171,867
Reimbursement on re-liquidation:	\$578,133

The above example shows that there is a tax benefit of \$515,000 when a VSSS withdrawal is made by a person facing a situation of unemployment.

4.8 Other Provisions Regulating the Functioning of the VSSS

i. Selection of Alternatives

Voluntary social security saving can be done directly in the authorized institution, or indirectly in the AFP to which the worker belongs, in which case the AFP transfers it to the authorized institution selected by the worker. Meanwhile, those contributing under the old system can make the deposits in the INP, which is responsible for transferring these to the institutions that they have chosen. In both cases, the worker may make the deposit in person, or ask his employer to deduct it from the payroll.

ii. Commissions

The collection and transfer service provided by the AFPs and INP entitles them to charge a commission. This is fixed sum which may not vary between destination institutions. The purpose of this provision is to give workers easy access to all the investment alternatives in equal conditions.

The institutions are entitled to charge commissions for the administration service. The public must be notified of the commissions fixed and any modifications to them, at the time and in the manner decided upon by the respective Superintendency.

iii. Publicity, Promotion and Information

In order to encourage competition between savings alternatives, it has been stipulated that publicity concerning yields must be given for annual periods. Information about yields must be presented net of costs and commissions and must be based on official information issued by the corresponding Superintendency.

5. Social Security Services by Internet

In the last few years, the development achieved by Internet in the electronic exchange of information and funds has made it possible to carry out transactions with appropriate levels of security, integrity and confidentiality. This technological progress has permitted the Superintendency of AFPs to authorize the payment of social security contributions and compensation payments via Internet.

The expected effect of this new method of collecting contributions is a reduction in the transaction costs incurred by companies and self-employed workers when paying social security contributions.

As a means of safeguarding the efficiency and security of the electronic collection service by Internet, this may only be carried out by companies that manage websites which comply with the technical standards required by the Superintendency.

Under this new scheme, employers may pay their social security contributions and compensation payments by a method which includes the design of a totally electronic system, or by a mixed system which combines sending electronic transfers of information with a form of payment through an agency belonging to the Administrator or some other institution with which it has a collection agreement.

On the other hand, in order to allow the Pension Fund Administrators to extend their coverage in attending the public and make the services that they provide more efficient for members and employers, there are regulations governing the standards of quality and security in a series of services that these institutions must provide via a website. The AFPs are also allowed freedom to provide other services which they decide to include in the website voluntarily.

The services which must be supplied via the website as a legal obligation are: transfers from one AFP to another; signing the Change of Pension Fund form; signing the Selection of Alternatives form for Voluntary Social Security Savings and issuing and delivering the summarized and detailed four-monthly statement. In addition, the Administrators are authorized to offer their members withdrawals of voluntary savings, voluntary

contributions and agreed deposits via the website, among other services. In all operations involving transfer of funds, users must have the use of security mechanisms, consisting of a security password or electronic signature, simple or advanced. These mechanisms will allow users to prove their identity when carrying out transactions.

By means of these provisions it is hoped to improve the quality of the service that the Administrators are offering their members. Meanwhile, the possibility of changing AFP via the website creates a new marketing channel which will allow members to transfer from one AFP to another with lower transaction costs, and that could increase competition between the AFPs.

6. Portability of Individual Accounts

Chile has signed a series of bilateral pension agreements with other States which, in general terms, allow members of the AFP System who have contributions registered both in Chile and in the other contracting State to receive parallel pensions in both countries, using the total of the periods paid where this is necessary to make up the minimum number of years contributed or, in the case of Chile, to be eligible for the state guarantee for a minimum pension. For members of the Pension System there are social security agreements in force with the following States: Germany, Austria, Belgium, Brazil, Canada, Denmark, Spain, USA, France, Holland, Luxembourg, Norway, Portugal, Sweden, Switzerland and Uruguay. However, these agreements have not considered the possibility of transferring the resources accumulated for pension purposes from one State to another, mainly because in most cases they have been signed with countries using a pay-as-you-go pension system.

Given the increasing mobility of workers between countries, authorization has recently been given to transfer Pension Funds, when the worker who belongs to an Individual Capitalization System changes his/her country of residence on a permanent basis.

6.1 *General Principles*

The following general principles have been put forward as the basis for the transfer of social security savings between countries:

i. Transfer in the light of permanent changes of residence

The transfer of funds should be allowed only where there is evidence to prove a permanent change in the worker's country of residence, or when he/she retires. This requirement is based on the following reasons:

- It avoids transfers for speculative reasons.

- it avoids large circumstantial transfers of resources, which might affect the capital markets and exchange markets in the countries.
- it avoids repeated transfers of funds during members' active lives.

ii. Withdrawal from the social security system of the country of origin

The worker would withdraw from the pension system of the country from which he/she removes his/her social security savings funds, because otherwise he/she would oblige the States included in the scheme to make payments on the basis of the legislation and economic risks of other countries. This principle is applied in the case of state guarantees for minimum pension, which would not be paid by the countries from which social security resources had been voluntarily withdrawn, to avoid assuming the risk of funds running out in other countries. The act of withdrawing from the system implies only the loss of entitlement to benefits in the country from which the funds are removed.

iii. Applicable legislation

The legislation to be applied should be that of the country which finally provides the benefits, because it does not seem fair to expect a country to pay benefits on the basis of the legislation of other countries.

iv. Total transfer of funds

In order to simplify the system and generate the lowest possible operation costs, the transfer of the whole balance in the member's individual account, at one and the same time, might be established.

v. Extent of application

The transfer of funds would only apply in the case of pension systems using individual capitalization, because in these systems the members actually own the funds.

vi. Voluntary nature of the transfer

It seems advisable to make the transfer of funds voluntary, because this alternative will not be suitable for all members.

vii. The tax position

In allowing the transfer of social security funds between countries, it is important to bear in mind the tax position with regard to the

contributions and pensions granted by Individual Capitalization Systems. The following situations may arise concerning taxation between the different countries:

- Mandatory contributions are tax-exempt but income tax is payable on pensions.
- Mandatory contributions are not tax-exempt and there is no income tax payable on pensions.
- Neither contributions nor pensions count as taxable income.

When transferring funds, the following criteria must be considered with regard to the taxation of contributions and pensions:

- From the member's point of view, there should be no double taxation; for example, if tax has been paid on the social security contributions, the pension should not pay tax.
- From the State's point of view, it should not lose taxes that have supposedly been deferred until retirement. However, it is possible that taxes lost through pensioners' leaving will be compensated by the taxes paid by pensioners who transfer their funds into the country.

The possibility of paying voluntary contributions exempt from income tax, combined with the possibility of withdrawing freely-usable surpluses which are also tax-exempt when retiring in another country, could lead to an incorrect use of the tax exemption. In those countries where the freely-usable surplus does not pay tax, there would be considerable incentives for members to transfer funds to those countries in order to avoid paying tax. In this situation it is advisable to avoid tax arbitration of pensions.

However, regulations could be introduced whereby, in the case of countries which currently charge a tax on pensions, the transfer of voluntary contributions and agreed deposits would be taxable at the time of exit, and only the sums accumulated in the category of mandatory contributions retain their tax exemption.

The solution adopted must be simple and must not hinder the transfer of social security funds between countries.

6.2 Potential Beneficiaries

The number of people who migrate from one country to another may be an indicator of the universe of people who could benefit from the

authorization of transfers of savings accumulated in individual capitalization pension systems between countries. It is worth mentioning, however, that the statistics are not restricted only to people contributing in this type of pension system.

According to migration statistics in Latin America, it may be observed that approximately 700 thousand people born in Latin American countries with Pension Systems based on Individual Capitalization actually live in some other country with this same type of system. The following table shows the information given for the countries making up the International Association of Pension Fund Supervisory Institutions (AIOS).

Table N° VIII.6
MIGRATION BETWEEN COUNTRIES BELONGING TO THE IAPFSI

Country of Residens	País de Nacimiento									Total of immigrants
	Argentina	Bolivia	Chile	Colombia	Costa Rica	El Salvador	México	Perú	Uruguay	
Argentina		143,735	218,217	2,638	451	178	2,277	15,977	133,653	517,126
Bolivia	17,829		3,909	529	83	46	6,607	5,805	327	35,135
Chile	34,415	7,729		1,666	448	228	827	7,649	1,599	54,561
Colombia	1,953	390	1,496		452	177	1,465	3,182	316	9,431
Costa Rica	697	189	1,277	1,678		8,748	1,279	1,016	201	15,085
El Salvador	140	40	209	212	856		1,350	135	66	3,008
México	4,635	1,329	2,501	4,964	1,521	5,215		2,973	1,097	24,235
Perú	4,165	3,216	4,652	2,374	215	89	723		399	15,833
Uruguay	26,256	376	1,726	362	41	18	362	528		29,669
Total										704,083

Source: Demographic Bulletin of the CEPAL, January 2000. Figures obtained from the population censuses carried out during the 1990s.

6.3 Bilateral Agreement with Peru

Permission was included within the framework of the bilateral Social Security agreement signed in August 2002 with Peru, for members of the Individual Capitalization Pension Systems of both countries to transfer the balances accumulated in their individual accounts voluntarily from one country to the other, so that these could be managed by the AFP of their choice.

The main features of the authorization to make individual accounts portable, as contained in this agreement, are as follows:

- Permission is given to transfer the pension funds deposited in the individual capitalization accounts to an AFP belonging to the pension system of another country in which the member is permanently resident. In order to guarantee the social security nature of the transfer, contributions to an individual capitalization system must be recorded for at least 60 months in the country to which the funds are to be transferred, or the person concerned must be receiving a pension in that country.
- The social security funds to be transferred must include all the mandatory contributions, voluntary contributions, agreed deposits or payments by an employer, as appropriate, which the member has in his individual account at the date of the transfer. Such funds will be paid into the worker's individual account in the category of mandatory contributions.
- In the case of voluntary contributions paid in Chile, these may be included in the transfer, in which case they will be subject to the Chilean tax regulations which apply tax to withdrawals of these contributions from individual capitalization account.
- The social security benefits provided in Chile which have been partly funded with social security funds from Peru will be taxable according to Chilean rules as far as the part corresponding to contributions paid into the Chilean Social Security system is concerned, and in accordance with the yield obtained on the transferred funds.
- The transfer of resources from the individual account includes the Recognition Bond, as long as this meets the requirements of the country concerned. The liquidation of the Recognition Bond will be carried out only in cases where compliance with the requirements demanded for its liquidation is proven, in accordance with the law of the country in which the Bond was issued. If the liquidation of the Recognition Bond is not possible according to the legislation of the country from which the social security funds are being removed, the member will be entitled to trade that document on the formal secondary market of that country for purposes of the transfer.
- The disability and survivorship insurance and the funeral expenses or death benefit pertaining to members of the Individual Capitalization System is governed by the law of the country in which the Administrator concerned has its legal domicile. For these

purposes, workers who transfer their individual capitalization account count as new or recently incorporated workers.

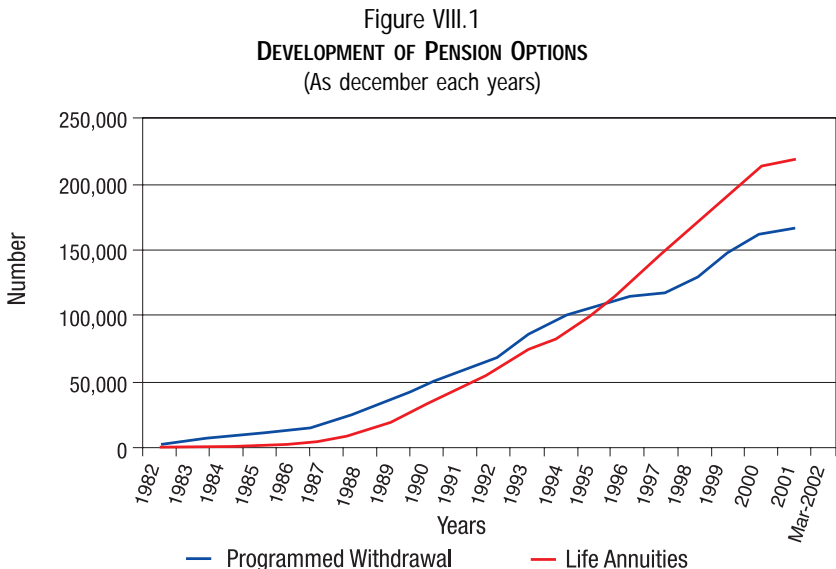
- Members who are already receiving pensions under Chilean or Peruvian legislation on the date when the Agreement comes into effect will be entitled to request the transfer of their social security funds to the country in which they receive their pension. Once the funds are received in the country of destination the amount of the benefit is to be recalculated or augmented, whichever the case may be, in accordance with its legislation.

B. Pending Challenges

1. Life Annuities

1.1 A Description of the Market

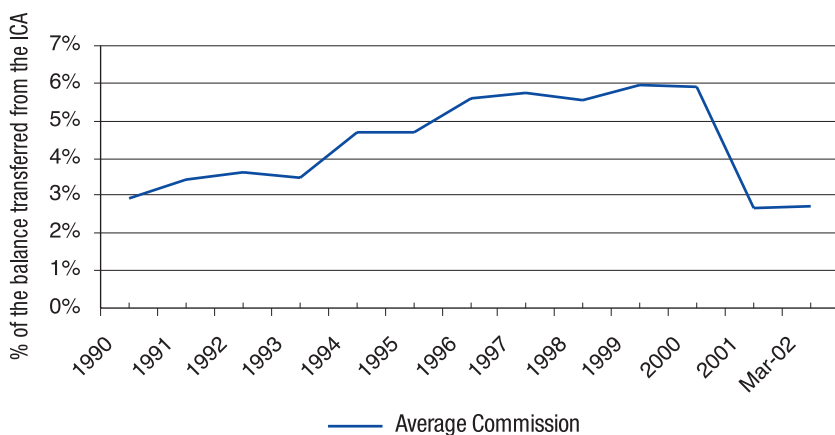
The Life Annuity pension option has increased sharply since 1988 with the reforms introduced to Decree Law 3,500 (1980) which reduced the requirements for obtaining an early retirement pension and opened up the possibility of assigning the Recognition Bond.



The grounds for a proposal to introduce improvements to this pension option are based on the fact that the life annuity market is known for its lack of transparency in the marketing of the service. There is little information for the Life Insurance Companies, which do not have access to the identities of possible pensioners, and inadequate information for the pensioners themselves when making their choice of pension option and of the Company that will provide the service. What is more, there are conflicts of interest between the intermediaries and the members and a preference for money in cash on the part of the clients.

These factors all contribute to raising the levels of commissions, encouraging cash payments to members and producing an informal information market.

Figure VIII.2
DEVELOPMENT OF LIFE ANNUITY COMMISSIONS
(As of december each year)



At present, marketing of life annuities is carried out by sales staff employed by the Insurance Companies and by insurance brokers.

With regard to the conflicts of interest between intermediaries and members it is possible to claim that, since the intermediaries do not charge clients for such services, due to the fact that their income comes from the Insurance Companies, they face a serious conflict of interests. Obviously, the most advantageous alternative for them is to recommend the member to place his retirement pension with the Insurance Company that offers them the best brokerage commission, even where that Company may not offer the best pension for the member. In fact, since

the commission is part of the Insurance Company's costs, it may be deduced that the size of the commission paid to the intermediary will be inversely proportional to the amount of the pension.

The definitive nature of the option for a life annuity and the magnitude of the sums of money involved make it very important to improve the transparency of the market, avoiding the conflict of interests mentioned above and high commission charges. In order to achieve this, an electronic system has been proposed for consultations and offers of pension amounts, and this would be mandatory for all members wishing to receive a pension. This system will provide members with information about what the Insurance Companies and AFPs are offering and will have no restrictions as regards the offers that they may choose. Once they are aware of the offers, they will be able to request external offers, call for bids or decide against retiring at all.

1.2 A Description of the Draft Law

In order to improve access to pension benefits, a draft law is currently going through parliament. Its contents are described below:

i. System of consultations and offers of pension amounts

There is a proposal to set up an electronic system of consultations and offers of pension amounts, which would be mandatory for every member wishing to receive a pension.

The basic characteristics of the proposed system are as follows:

- *Transmission of information:* The transmission of information about members and/or beneficiaries to the institutions participating in the system and the pension estimates that these provide, will be carried out by means of a computational communications system.
- *Participants in the consultation system:* The institutions included in this system will be Pension Fund Administrators and Life Insurance Companies. Life annuity insurance brokers authorized by the Superintendency of Securities and Insurance and bank subsidiaries which carry out insurance brokerage will also be allowed to take part.
- *How the system will work:* The AFPs and Life Insurance Companies will have to have their own electronic information systems and remain interconnected, receiving members' consultations and transmitting them to all the institutions involved, and receiving the Life Insurance Companies' offers of life annuities and the

Administrators' offers of programmed withdrawal, which must then be passed on to the member who is making the consultation.

- *Selection of pension option:* Once this information has been received, the members may choose any pension option and any offers presented in the system. They may also call for bids, request an offer from outside the consultation system, on condition that the amount of any such offer is greater than that offered within the system by the same Insurance Company, or postpone their retirement decision.
- *Call for bids:* In order to carry out a bidding procedure, members must select the type of life annuity, naming at least three Life Insurance Companies to take part in it. At the same time, the members must fix the minimum bid, which cannot be less than the highest offer made by these same Companies in the Consultation System. In the case of identical bids, the member may choose the company he/she wishes.

The bidding shall be binding, as long as more than one bid is made and in this case, the member must choose the highest bid offered. If only one bid is made, the member may choose to accept it, request a new bidding procedure, request an external offer, consult again within the System or give up the idea of retirement.

- *Oversight:* The functioning of the system and the institutions taking part in it shall be governed by the rules laid down jointly by the Superintendencies of Pension Fund Administrators and Securities and Insurance.

ii. Prohibitions and penalties

The Insurance Companies, Pension Fund Administrators and their directors and employees, as also the intermediaries of life annuities and programmed withdrawals, are forbidden to offer or provide members or beneficiaries with incentives or benefits other than those prescribed in the law.

Specifically, it is proposed that administrative penalties should be imposed. However, any person committing the offence of offering or providing members or beneficiaries with this type of benefit again, after being penalized once, will be liable for the minimum term of imprisonment.

Penalties are also laid down for those obtaining illicit capital benefit from the use of members' personal data, as contained in the information used in the consultation and offers system.

iii. Brokerage commissions

It is proposed that the commissions paid by the Insurance Companies for life annuity brokerage be subject to regulation, in order to prevent reductions in pensions resulting from the payment of inflated commissions. Specifically, it is proposed that Life Insurance Companies be allowed to pay brokers, sales agents or other persons involved in marketing life annuities a commission or payment for the brokerage or sale of these, to a value equivalent to 2.5% of the member's funds transferred to the chosen Insurance Company, for each life annuity acquired. In any case, the aforementioned commission may not exceed 40 UF.

iv. Information system for those offering pensions

In order to improve the transparency of information about future pensioners for Insurance Companies and brokers, the Administrators will issue a list containing the names of members who will be reaching legal retiring age within a year of the date of issue or who have a balance sufficiently large to fund an early retirement pension. This list will also include members or beneficiaries who are applying for a pension. It is worth mentioning that these people will be entitled to state that they prefer their names not to be included on the list.

v. Participation of the banking system in marketing life annuities

It is proposed that Banks be allowed to take part in marketing Life Annuities through specialized subsidiaries, in order to make the marketing of them more competitive and so benefit members wishing to retire.

vi. Requirement for early retirement and withdrawal of surplus

In order to enable workers to obtain pensions that are closer in value to their wages in active life, to restrict state commitments in minimum pensions and avoid steep reductions in the balance in the member's individual account when he/she retires, the following proposals have been made:

- The requirement concerning the average income of the member for an early retirement pension is increased, the average percentage required rising from 50% to 70%. This increase will be introduced gradually and should be in force in its entirety at the beginning of the seventh year from when the law comes into effect.
- There is an increase in the percentage required relative to the minimum pension in case of an early retirement pension (110% of

the Minimum Pension) and the withdrawal of the freely-usable surplus (120% of the Minimum Pension) to 150% of this. This requirement should be in force in its entirety at the beginning of the fourth year from when the law comes into effect.

- There is a modification in the calculation of the average of wages over the past 10 years for purposes of the early pension and the withdrawal of the freely- usable surplus. A maximum of 16 months without contributions will be permitted. In that case, the calculation of the average income is kept the same as that used currently, in other words dividing the sum of wages for the part 10 years by one hundred and twenty. However, if the number of months without contributions is greater than 16, the number of months over that number will be subtracted from the divisor, which will mean an increase in the average income requirement. As things are at present, there is no limit for periods without contributions. This requirement will be applied in its entirety as from the fourth year from when the law comes into effect.

vii. Transitory rules

In the case of members who are approaching the legal retiring age, the requirements for early retirement in force before the law comes into effect will be unchanged.

1.3 The Advantages of the Consultation and Pension Offers System

The main aim of setting up this system of consultations is to provide the member with information about the offers from Insurance Companies and AFPs at one and the same time in a way that is clear and comparable, and to make the amount of the pension the most important variable in the decision. The following should be mentioned as some of the main advantages of the consultation system:

- Increased pensions, due to the reduction in commissions, and greater price competition, due to the existence of a larger number of agents participating in the market.
- Ease in obtaining information. The member can make all the enquiries that he/she feels to be necessary about pension offers and include questions about all the types of Life Annuity that he/she likes, in addition to obtaining information about Programmed Withdrawal.
- Greater transparency, due to the fact that the variables involved in the decision are independent of the private interests of the broker.

- Greater choice for the member from among a variety of Companies, because all the Life Insurance Companies in the market can take part in the system, and can present their offers simultaneously and in a comparable form.

In this way, the proposed system allows the worker to take an appropriate decision with information that is both more uniform and more reliable, introducing the increase in members' pensions as its fundamental axis.

2. New Pension Options

In the draft Life Annuities Law described in the previous section there is a proposal to incorporate two new pension options, in order to increase members' possibilities of choosing an alternative that is better suited to their needs, while retaining adequate regulation.

2.1 Programmed Withdrawal with Immediate Life Annuity

Under the programmed withdrawal option, the pension is calculated on the basis of the pensioner's life expectancy and that of his family group, with a discount rate that reflects the effects of the yield earned by the resources accumulated in the individual account. The pension is recalculated each year, taking into consideration the new age of the member and his family group and the new estimate of the discount rate.

The programmed withdrawal option has two main drawbacks. In the first place, in order to calculate the pensions, the expected yield of the Pension Fund must be estimated for the whole period of the pension calculation horizon. This estimate, like any other yield forecast, is extremely complex, especially considering the high volatility of return on investments in emerging capital markets, such as Chile's.

In the second place, even if the yield of the Pension Fund were to be forecast faultlessly, the pension received under the programmed withdrawal option would present a descending profile over time. This is due to the recalculation of the pensions on an annual basis, using new probabilities each year with regard to the member's future survival.

In view of the above, it is proposed the members who fulfil the requirements for receiving a pension should be allowed to use part of the balance in their individual capitalization account to acquire a life annuity, for an amount greater than or equal to the minimum pension, keeping the rest of the balance in any of the Pension Funds of Types C, D or E according to choice, in order to use the programmed withdrawal option. The pension will be the sum of the amounts received under each of the options.

In addition, those members who have acquired a life annuity greater than or equal to 70% of their average taxable wages for the past 10 years and greater than or equal to 150% of the minimum pension, will be allowed to place the remaining balance in their individual capitalization account in a Type A or B⁷⁸ Fund.

In the case of survivorship pensions, in order to opt for the combination of life annuity and programmed withdrawal there must be total agreement among all beneficiaries. This is also true for the other options – immediate life annuity and temporary income with deferred life annuity.

The main advantage of this option is that it provides a much more even pension profile than programmed withdrawal alone, though it reduces possible inheritance.

2.2 Variable Life Annuities

A new type of life annuity is proposed, with a fixed component equivalent to at least the minimum pension and a variable element related with an investment portfolio.

This scheme admits the possibility that some of the pension flows may vary in relation to a particular investment portfolio.

A variable life annuity provides the pensioner with a lifelong pension. The amount of the pension is recalculated annually depending on the yield obtained by the portfolio in which the funds are invested. This life annuity would be offered with a guaranteed pension throughout the period in which case the pensioner would partially absorb the variations obtained by the Funds.

It is also suggested that the variable component of the life annuity might be expressed in a currency or system of re-adjustability other than the UF.

The main advantage of this pension alternative is that it allows individual preferences to be adapted to various different portfolio or index alternatives.

3. Coverage for Workers who do not have an Indefinite Contract and for the Self-employed

The Pension System regulated by DL 3,500 introduced a very significant set of innovations when compared with the systems that had been known up to that time. These had to do mainly with its method of financing,

⁷⁸ In the case where a member has chosen the programmed withdrawal option alone for his/her pension, and the pension in Funds C, D or E fulfils the requirements specified, the remaining balance may be placed in a Type A or B Fund.

the fact that workers were given possibilities of choice and also the roles of the public and private sectors within the pension system. However the changes introduced by the social security reform were less significant in the area of coverage, failing to allow this to expand to include groups of workers such as wage-earning workers with a fixed-period contract for building work, a specific job or service and workers who are self-employed.

3.1 Self-employed Workers

In the case of self-employed workers, any natural person who engages in a paid activity without being subordinated to an employer may become a member of the Pension System managed by the AFPs⁷⁹. However, even though the Pension System has been operating for more than two decades, the segment of self-employed workers shows very low coverage, and one that has remained static as time has gone by. As a result, about 95% of self-employed workers have no social security protection.

Part of this low coverage in the sector of self-employed workers may be explained by certain imbalances in the tax situation and differences in the coverage of the disability and survivorship insurance which negatively affect self-employed workers. In this sense, giving self-employed and employed workers equal rights would have the effect of increasing the net benefits received by those self-employed workers who pay contributions.

However, in the international context, the majority of studies carried out in developed and developing countries reveal that the elasticity of the saving on the net return of the investments is very low or non-existent, Repetto (2001)⁸⁰. In Chile, Bennett, Loayza and Schmidt-Hebbel (2000) obtained a statistically significant negative response for voluntary saving in the households concerned, by comparison with the real interest rate⁸¹.

In summary, these empirical results would appear to show that, as long as the payment of contributions remains voluntary for self-employed workers, the fact of extending the benefits received by employed members to the self-employed will have a low expected effect in terms of workers' becoming members and contributors on their own initiative. In consequence, a simple savings rule, such as making it obligatory for self-employed workers to set aside a percentage of their income as

⁷⁹ In accordance with the provisions of article 89 of Decree Law N°3,500 (1980)

⁸⁰ "Personal Savings Incentives : Lessons from the Economy of Behaviour", published in "Empirical Analysis of Saving in Chile", Central Bank of Chile 2001.

⁸¹ "A Study of Aggregate Saving by Economic Agents in Chile". Working Document N°85, Central Bank of Chile.

savings periodically, might be an efficient way of increasing their welfare. However, establishing the obligation to contribute for self-employed workers is not in itself sufficient to increase coverage in this segment of the labour market, since supervising this obligation is complicated and may prove expensive.

3.2 *Wage-earning Workers who do not have an Indefinite Contract*

According to the information generated as a result of the ENCLA '99⁸² survey, towards the end of 1999, 82.2% of wage-earning workers were hired on an indefinite contract.

Table N° VIII.7
DISTRIBUTION OF WAGE-EARNING WORKERS BY TYPE OF
EMPLOYMENT CONTRAC

Type of Contract	Percentage of the Total Sample	Projection to Universe of Wage-Earners
Indefinite	82.8	3,096,811
fixed-term	6.4	239,367
Building work or Job	8.6	321,649
Fee-based	1.6	59,841
Other	0.6	22,440
TOTAL	100.0	3,740,108 (1)

Note: (1) The number of wage-earners corresponds to estimates prepared by the National Institute of Statistics (Employment Survey) for the three-month period October, November and December 1999.

Source: Results Report, ENCLA '99

In other words, extrapolating the results of the ENCLA'99 to the universe of wage-earners towards the end of 1999, about 561 thousand workers were hired either by building project or job or for a fixed period. Concerning these two groups of workers, it is to be expected that their contractual relationships will be more intermittent and that their social security contributions will therefore be less concentrated. From the point of view of their coverage in the Pension System, this lower contribution density has two important consequences. In the first place, the percentage of the income covered varies, depending on whether or not the worker is contributing in the Pension System. For example, in the case of total disability pensions, the average percentage of income covered is 70% if the member is working at the time of the accident. If he/she is not

⁸² Labour Survey, produced by the Research Department of the Labour Office.

working, but the accident occurs within the twelve months following the termination of the contractual relationship, the coverage falls to 50%, as long as the member has paid contributions for at least six months in the year preceding the end of that contractual relationship⁸³. Finally, if the worker affected by the accident does not fulfil these requirements, he/she is not covered by the insurance, and benefits are therefore funded only from the balance in the individual capitalization account.

It is therefore true that the more intermittent the degree of employment, the greater the likelihood that an accident involving disability or death will be inadequately covered by the Pension System. In the second place, in the case of retirement pensions, the lower the concentration of contributions, the lower the expected value of the pensions. However, workers belonging to the system whose pensions fall below the respective minimum benefits may receive funds from the system of benefits guaranteed by the State, if they fulfil the requirements laid down in the law. In the case of retirement pensions specifically, the most important requirement that pensioners must meet if they wish to make use of the state guarantee is that of having paid contributions for at least 20 years. This requirement is more difficult to meet, relatively speaking, in the case of workers with a history of intermittent contributions. In order to prevent this problem arising so frequently, it has been suggested that a minimum retirement pension might be introduced with scaled amounts and requirements. For example, it might be possible to fix a minimum corresponding to 50% of the value of the minimum pension, which could be paid to those with 10 years' contributions. Starting from that basis, increases in the guaranteed percentage could then be fixed for those with more years of contributions, up to 20 years of contributions, which would continue to be the necessary requirement entitling members to 100% of the minimum pension. However, the viability of this proposal depends mainly on the cost involved for the government.

4. Gender Considerations in the Pension System

In this section there is an analysis of women in the Pension System, concentrating on aspects of the regulations which have been mentioned as a source of difference in the benefits received by men and women. The expected effects and costs of introducing modifications to the regulations in question have been given for each of the aspects analysed.

In the regulatory plan of the Pension System, the differences in treatment of men and women are seen mainly in the following areas:

⁸³ A draft law is currently being processed to unify coverage at 70% of average income in both cases.

- i. Coverage of the worker's family group.
- ii. Legal retiring age.
- iii. Formula for calculating pensions.
- iv. Requirement for obtaining the minimum pension guarantee, in terms of the number of years' contributions.

i. Coverage of family group

The Pension System includes the following members of the family group in its coverage: the member's spouse, offspring under 18 years of age or under 24 if they are studying full-time at any level of education, parents and the mother of the member's offspring from a non-matrimonial relationship.

However, while women do not have to fulfil any special requirements in order to be beneficiaries of a widow's pension, men in the same situation will receive a widower's pension only if they are totally or partially disabled. This must be duly established by the system for assessing the degree of disability. In other words, women contributors produce less coverage for their spouses than men.

However, it should be mentioned that the main effects of including men as beneficiaries of women's pensions is a decrease in the amount of pension for those women who have a spouse, an increase in the cost of the disability and survivorship insurance and an increase in expected expenditure on the state guarantee for minimum pensions.

ii. Legal retiring age

Historically, various of the pension schemes in force in Chile included retirement pensions with retiring ages or seniority retirement requirements that were lower for women than for men. In this respect, the social security reform of the 1980s maintained the difference in the retiring ages for men and women, fixing them at 65 and 60 respectively. This difference in retiring ages presents a public policy problem that is difficult to solve, because from a strictly actuarial point of view and considering that the average life-expectancy of women is higher than that of men, it would be logical to raise the retiring age for women. However, the cost-effectiveness ratio of this measure in improving women's pensions depends crucially on the employment opportunities open to women over 60 years of age.

In fact, under present regulations, once the age requirement has been reached, women members may choose to continue working and paying contributions into the System, continue working without paying contributions, retire on a pension and continue working or, finally, retire on a pension and withdraw from active working life. By contrast, if the

legal retiring age were to be raised from 60 to 65 years, women workers would have only one of the four alternatives mentioned between those ages, that of continuing to work and therefore pay contributions into the System.

iii. Formule for calculating pensions

The pensions awarded under the programmed withdrawal option are calculated according to mortality tables that are differentiated by sex. These show a greater number of years' life expectancy for women at all ages.

Table N° VIII.8
LIFE EXPECTANCIES

	Life Expectancy by Age (in years)	
	60 Years	65 years
Men	20.29	16.65
Women	24.32	20.21

Source: Mortality Tables RV-85-H and RV-85-M

This feature of the Pension System creates differences in the amount of pension according to gender, even when the accumulated balances are identical at the time of retirement. In any case, it should be borne in mind that this effect tends to even out to the extent that men reaching retiring age often have legal beneficiaries of a survivorship pension, whereas women usually do not have any. Moreover, in the case of life annuities, where Life Insurance Companies are able to compensate risks by maintaining a portfolio of annuity holders that is balanced by sex, there may be a possibility of reducing the differences in benefits between men and women.

This effect tends to be more significant in the case of people who choose the programmed withdrawal option, where the calculation is strictly individual, with mortality tables differentiated by sex. It has been suggested that the mortality tables might be unified as a way of eliminating the differences in pension by sex. The expected effect of this measure is that in the case of women the balance will be exhausted too soon, while men will accumulate a larger amount than expected in inheritance. Increasing women's pensions might also mean an increase in expected expenditure on the guarantee for minimum pensions.

iv. Number of contribution years required to obtain the minimum pension guarantee

As has already been mentioned, in order for an retirement pensioner to have access to the state guarantee for a minimum pension, the most important requirement is 20 years' contribution payments. This requirement is the same for men and women, even though the time horizon for contributions ends five years earlier in the case of women than in that of men. However, both men and women may make up the requirement for the number of years if they do not have sufficient years' contributions to be eligible for the state guarantee. This is done by extending their working life and continuing to pay contributions, an alternative which seems more plausible in the case of women, given their greater life expectancy.

5. Industrial Structure

5.1 Incentives to Improve Social Security Culture among Members

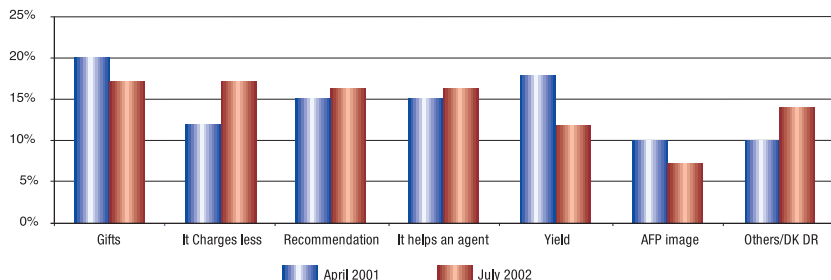
In general, it may be said that members have little knowledge of the Social Security System. This may be due to the fact that they perceive it as a mandatory, long-term product which is hard to understand, or because they show little interest in finding out more information about charges and associated yields. This does not mean that individuals are lacking in rationality, but rather that they have a problem of short-sightedness. There is therefore very little sensitivity to the relevant variables in choosing an AFP. The following tables illustrate the low level of members' knowledge when it comes to the commissions they are charged.

Table N° VIII.9
MEMBERS PERCEPTION OF THE LEVEL AND TREND OF COMMISSIONS

How much do AFPs Charge		Trends in Commissions Development in the past two years	
Don't know	51%	Have remained the same	51%
Over 10%	24%	Don't know or don't reply	24%
Between 5% and 10%	9%	Have tended to rise	16%
Between 3% and 4%	3%	Have tended to fall	9%
Charge 2%	5%		
1% or less	1%		
Charge in pesos	3%		
No reply	4%		

Source: CERC Barometer, September 2001

Figure N° VIII.3
MEMBERS REASONS FOR CHANGING AFP



In the period covered by the survey, most people showed a high degree of ignorance with regard to the commissions being charged.

The following chart reinforces the impression of members' lack of sensitivity with regard to the most important variables when choosing an Administrator.

From the above chart it is possible to see that there are other variables, apart from commissions and yield, which have an important influence on the decision to transfer.

The following measures might contribute towards mitigating the effects of members' lack of sensitivity with regard to commissions:

- With the launching of multifunds, it is hoped that members will be encouraged to participate actively, mainly by seeking out information about social security and choosing a Fund Type, while at the same time increasing their understanding of how important this decision is for the accumulation of social security resources and for the pension that they will one day receive.
- By creating Voluntary Social Security Saving, people are encouraged to increase their social security savings to achieve a better pension by being given tax rewards. Also, the interaction of members with other institutions, as these are able to build up an interesting client portfolio, should produce conditions for possible new candidates to enter the basic service of the Administrators.
- With the progress of information and communications technology, it should be possible in the near future for members to transfer between Administrators by Internet. This will allow members to reduce transaction costs, because they will be able to carry out the process at the time that they prefer and with fewer costs of co-

ordination with a salesperson. It will also be possible to reduce the costs of the transfer process, because the Administrators will have fewer marketing expenses. Finally it is hoped that the measure will improve the conditions needed to increase competition in the market.

One challenge is to make progress in trying to create greater sensitivity in members with regard to the variables of yield, price and quality of service.

5.2 The Dilemma between the Effects of Concentration and Economies of Scale

In March 2002, the Administrators as a whole were handling resources amounting to 36.7 thousand million dollars, representing approximately 55% of the GDP. There are certain critical views concerning the possible effects on the capital market of the fact that the Pension Funds are concentrated in a small number of agents, handling large volumes of resources.

In the light of this, proposals have been put forward to modify the current organization of the social security market. These range from those that seek to increase the competition for the managed funds by allowing the entry of bank subsidiaries, to the recent proposal to de-concentrate the Pension Funds by using specialized investors⁸⁴.

On the other hand, concentration has allowed the Administrators to make use of existing economies of scale in providing the service, while contributing to the weakening of competition in the sector. At the same time, economies of scale in a hypothetical competitive scenario might make a small Administrator non-viable in the long term⁸⁵. The above suggests evidence for the fact that it is possible to improve efficiency in the industry, but this would be to the detriment of greater de-concentration in the management of the resources.

So far, the dilemma remains between concentration and the economies of scale existing in the industry, and it will continue to do so until there is some accurate way of assessing the costs and benefits of each.

⁸⁴ Arrau and Valdés, "To de-concentrate the pension funds and increase competition in their management" published in *Estudios Públicos* N°85, Centro de Estudios Públicos, summer 2002.

⁸⁵ However, according to the literature of economics, it is possible to exist as a small company in a market, as long as one specializes in one segment of it.

5.3 *Conclusions*

Since the Administrators have the impression that their members are not influenced by the price of the service provided, they have very little incentive to reduce the commissions they are charging and find themselves involved in trying to compete by means of other mechanisms. This is the reason why there was strong competition between Administrators in the 1990s through the activities of sales personnel, though this distorted the assignment of resources due to the excessive size of the sales force, increased the costs of the System and caused a loss of social efficiency. At the end of the 90s changes were introduced in the processes used by members to transfer from one AFP to another and the structure of the industry was modified through a process of take-overs and mergers. This made room for reductions in marketing costs and led to a fall in the percentage commission that members were being charged.

The presence of economies of scale has facilitated saving on costs over time. The increase in the number of people contributing in the Administrators has made it possible to make use of economies of scale, and this came about in two ways: on the one hand by the obligatory incorporation of new contributors entering the System, and on the other by the reduction in the number of Administrators, which has produced greater concentration in the industry. The savings on costs mentioned above have been passed on in part to the members, and in part have gone towards increasing the income of the Administrators so that they have obtained greater capital returns. High rates of return might encourage the entry of new bidders to the system, but there is no evidence of this in the industry, mainly due to an effect of customer-ism among members who, to a large extent, transfer for reasons other than the relevant variables. This weighs against the entry of new firms, because they are unable to gain access to a large client portfolio and thus be able to offer a lower commission.

The challenge of making progress in the search to create greater competition in the industry is being addressed. However, the alternative of increased de-concentration must take into account the importance of economies of scale in obtaining lower production costs for the service. Finally, those offering social security services should be encouraged to transfer a more significant proportion of their cost savings to their members.

