

#### **PENSION NOTES**

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## Analysis of the Proposal for Unisex Mortality Tables for Calculating Old-Age Pensions in the Individually Funded System

#### **Executive Summary**

The Advisory Commission created by the Chilean government in 2014 to study the pension system and propose reforms, included among its recommendations the implementation of unisex mortality tables, the elimination of programmed withdrawal and periodic bidding on life annuities for groups of new pensioners. According to President Bachelet and the Commission, the purpose of these measures is to end the discrimination affecting women, and move towards greater gender equity, reducing the gaps in pensions between men and women and granting equal rights and obligations to both genders. This note describes these proposals and analyses their possible effects, while presenting an alternative proposal put forward by the life insurance industry.

A review of Chilean and international experience shows that, from the economic efficiency standpoint, there is no gender discrimination in the provision of life annuities, because even though women receive a lower pension flow at the same retirement age, and with the same

accumulated balance in their individually funded accounts as men, the period in which the benefit is received is longer due to the higher life expectancy of women, so the present value of the pensions received is similar for both genders. The pension gap occurs mainly due to the differences in the legal retirement age, life expectancy and labor market conditions, and not due to the operation of the pensions industry.

The application of unisex tables would reduce the pension gap between men and women, but the magnitude of the effect is limited. It is estimated that this measure could increase women's pensions by about 4%, at the expense of reducing the benefits received by men. When assessing the proposal, it is important to bear in mind that women receiving survival pensions would also be negatively affected by the drop in the pensions of male originators. Furthermore, the application of unisex tables and the changes in complementary regulation that should be implemented, such as greater restrictions on the information provided to companies, and group bidding on life annuities instead of competition at an individual level of each retiree, could harm lower income members and pensioners with lower life expectancies. Companies currently use the available information for identifying the profile of each new pensioner, and offering pension amounts based on individual risks, which would not occur in the case of group bidding.

In addition to the expected effects of the transfer of resources between men and women, and the slight reduction of the gender gap in pensions, the use of unisex tables could cause some unexpected negative impacts. The most basic ones are an impoverishment of the pension product due to less freedom to choose the pension mode and the provider; higher costs and risks for the insurance companies offering life annuities, which could translate into price increases; lower economic efficiency; and disincentives to making voluntary social security contributions and the payment of mandatory social security contributions.

In fact, in order to implement the unisex tables, programmed withdrawal would have to be eliminated, and the types of life annuities that retiring members could opt for would have to be restricted. Pension amount consultations would also be binding for companies and members, eliminating the possibility for the latter to decide not to retire once they have the information regarding their pension amounts. Economic efficiency would be adversely affected, because if the insurance companies do not differentiate between pensioners by different risk levels, the signals and incentives provided to savers and pensioners regarding the most appropriate levels of protection for them, would be weakened. Finally, voluntary pension savings for men and their use for improving pensions would be discouraged,

due to the transfer of resources to women. The effect on savings volumes could be significant, since Chilean figures show that to January 2017, 61% of the savers in these plans are men, with 77% of the total voluntary contributions balances.

The Chilean Association of Insurers presented an alternative proposal to the unisex tables, which consists in providing a monthly subsidy to women equivalent to the difference between the amount of the pension calculated using tables differentiated by gender, and the amount calculated using unisex tables. According to the Association, the main benefits of this proposal are: (i) The provision of a pension complement to women; (ii) It enables permanently eliminating the gender gap in pensions; (iii) The tools for implementing the proposal already exist, with no need to create any new institutional framework; (iv) It is valid for the different pension modes and does not affect pensioners' decisions; (v) It is applicable to retired women and those who will retire in future; and (vi) It corrects undesirable inequities that would be generated with the unisex tables. The subsidy could be financed with Solidarity Pillar resources<sup>1</sup> or other sources.

#### I. Introduction

The elimination of mortality tables differentiated by gender for calculating pensions in the AFP system, has been

<sup>&</sup>lt;sup>1</sup> This pillar provides basic old age and disability solidarity benefits to individuals who are not entitled to a pension at age 65, meet residency requirements and are part of the 60% of poorest families, and solidarity pension contributions that complement the pensions financed by members themselves when they do not exceed a maximum limit stipulated by law, and age, residence and poverty requirements are also met. This pillar's benefits are financed with general resources from the public budget.

proposed in the process of analyzing and discussing a new pension reform in Chile. According to the report of the Presidential Advisory Commission on the Pension System ("Bravo Commission") published September 2015, this measure, together with other proposals by the Commission, seeks to move towards greater gender equity in pension amounts, provide equal rights and duties to men and women, and recognize the differences and gender gaps observed in the labor market and in households, including mechanisms for equity in the individually funded account system that would enable sharing the costs associated to performing unpaid work.<sup>2</sup>. On the other hand, in August of 2016, the President of the Republic said that a single mortality table would be used for the specific purpose of ending the discrimination that affects women's pensions.

The purpose of this note is to describe the unisex tables proposal and the accompanying measures put forward by the Bravo Commission, determine whether they would likely meet the desired objectives, given the possible effects they could generate on different groups of members, summarize some international experiences with such measures, and discuss alternative proposals put forward by technicians and the insurance industry.

#### II. The measures proposed by the Bravo Commission

The Commission proposed eliminating the use of mortality tables differentiated by gender. It recommended replacing them with unisex tables, with a uniform calculation of the longevity risk. This proposal is complemented with the elimination of the

programmed withdrawal mode and a single legal retirement age for men and women at 65 (after a transition period).

The Commission also proposed assessing changes to the electronic consultations and annuity amounts offers system.3that make it mandatory for all new members who retire within a certain period of time, to make group and not individual consultations. Under collective system, the insurance companies would compete to win the bidding for the life annuities of an entire group of new retirees, knowing only the overall characteristics of the group, and not those of each one of the pensioners. The companies that offer the highest sales rates for the set of life annuities, would win the bidding. According to the Commission, bids would have to be binding for both the insurance companies and the new pensioners. There would be no possibility of companies offering life annuities outside of the bidding process to any of the new pensioners, and the latter would be prohibited from accepting any higher pension amount offers they could receive outside of the system.

Given the fact that with this proposal the interest or discount rate offered by the insurance companies in life annuities is the same for all members retiring within a certain period of time, regardless of gender, men and women are guaranteed the same pension for the same balance, age and family group. Otherwise, the insurance companies could calculate the income of men, who live less, with a higher rate to compensate for the effect of the greater longevity that the regulations would force them to consider.

<sup>&</sup>lt;sup>2</sup> Pages 129 and 130 of the Commission's Final Report.

<sup>&</sup>lt;sup>3</sup> Page 142 of the Commission's Final Report.

The implementation of unisex tables would require a series of complementary regulatory changes to make them applicable, as well as more sophisticated monitoring mechanisms, in addition to operational adjustments in the insurance industry to comply with the new rules.

### III. Expected effects of the application of unisex tables

### A. Increase in the pensions of women

The use of mortality tables without gender distinctions would have a limited effect on the pensions of women. Using the existing tables differentiated by gender in the Chilean case, it is estimated that with the same balance in the individual account, retirement age (65) and family group (originator and spouse; woman two years younger than the man), the amount of the pension for men is 7.9% higher than the pension projected for women. Hence, unisex tables would entail an increase of approximately 4% in the pensions of women<sup>4</sup>, at the expense of a reduction in the pensions of men. This estimate of a potential increase in the pensions of women is similar to the 6% average increase estimated by Oxera (December 2011), as a result of the application of unisex tables in two European countries (Germany and Netherlands). Both estimates assume that there are no changes of conduct in the selection of the pension mode or, in the Chilean case, that programmed withdrawal is eliminated and all pensioners are forced to opt for a life annuity.

Differences in the amounts of pensions between men and women are less in the life annuity mode, with an extensive guaranteed period (6.0% instead of 7.9% for a guaranteed period of 20 years) and, therefore, the impact of the application of unisex tables on pensions would also be lower. This pension mode is being increasingly used by Chilean Pensioners (see Tables 2 and 3 presented further on). On the other hand, the differences are greater for retirees without spouses (13.8%), because in this case there are no surviving women entitled to a pension, who increase the unit capital needed, due to their higher life expectancy.

### B. Transfer of resources between pensioners

The introduction of unisex tables and the use of the same discount rate for all retiring members, ensures an equal conversion factor for converting the balances accumulated in the individual accounts into pension flows, and entails that men, who have a lower life expectancy, will receive a lower pension amount offer, compared to the current situation with tables differentiated by gender. Based on the Chilean mortality tables, it is estimated that 60-year-old women have a life expectancy of 29 years, whereas men at the same age have a life expectancy of 25 years. The approximate magnitude of the effect of unisex tables on pension amounts was presented in the previous section. Hence, the reduction of pensions for men occurs due to the use of life expectancies greater than those really estimated for them. On the other hand, women would experience the opposite situation, i.e., an increase in their pensions. Thus, with the application of unisex tables, there would be a transfer of resources from men to women.

<sup>&</sup>lt;sup>4</sup> Supposing that the unisex tables are calculated by weighting similar life expectancy for men and women.

In most of the pension systems in the Latin American region, the existence of survival pensions for the members of the family group of deceased pensioners, especially spouses, reduces the magnitude of the transfer. This is because the use of unisex tables would reduce the life expectancy of women beneficiaries of survival pensions, and the necessary capital for financing their benefits, partially offsetting the increase in the life expectancy of the male originator.

From the above, it follows that, in addition to the men receiving life annuities, the women beneficiaries of retirees with life annuities who die, would also be negatively affected by the application of unisex tables. This is due to the higher level of capital required for financing each life annuity unit of the originator (since greater life expectancy is assumed), which, as already stated, is only partially offset by the lesser capital required for beneficiary women. Thus, unisex tables would reduce the level of the reference pension for the calculation of the survival pensions of women who are beneficiaries (and increase them in the case of male beneficiaries). This can be especially complex for those widows who live only with the survival pensions their husbands leave them.

Additionally, low and middle income pensioners with lower life expectancies, would also be negatively affected by the unisex tables and the changes to the retirement process that this measure would entail. In Chile, the insurance companies currently use the information they have available to define the life annuity offers they make to retiring members, namely the retirement age, family group and gender. However, they also try to differentiate their offers by means of other variables, such as

the balance accumulated in the individual account (indicator of the level of income of individuals) and the state of health. This is possible with the information they receive and the current retirement process, which involves the presentation of an initial offer in the electronic system, called "internal supply" and the possibility of the companies that participate in the first offer presenting the retiring members with external offers, which must be higher than the internal offers (individuals may even request an auction). With the introduction of unisex tables, the insurance companies will probably try to identify individuals at retirement age for the purpose of reducing the uncertainty involved in this measure. In order to prevent this, the authorities must take measures, which will most likely entail the elimination of certain information provided to the insurance companies of the people who are in the process of retirement, the introduction of bidding for life annuities by groups of pensioners, and the prohibition of making external offers. All of this would affect the possibility of differentiating by income and would be detrimental to retirees with lower incomes, especially benefiting high income women with higher life expectancy.

### C. Fewer possibilities of choice of pension types and modes

# C.1. Elimination of Programmed withdrawal and temporary income with deferred life annuity

The elimination of programmed withdrawal was proposed by the Bravo Commission, because this modality entails pensions decreasing in time, and because the pensioner must face the individual longevity risk.

Furthermore, the use of unisex tables and the consequent transfer of resources from male pensioners who live less to women who live more, is only possible in the life annuity mode, since the insurance companies form a risk pool comprising lower risk life annuity pensioners (who live less) who finance the benefits of higher risk life annuity pensioners (who live longer). This is not possible in programmed withdrawal due to the characteristics of this pension mode, which does not allow such transfers between pensioners due to the existence of property and inheritance rights.

Another factor that hinders the coexistence of the programmed retirement mode and life annuity with unisex tables, is the adverse selection effect. It is evident that pensioners who may be negatively affected by the use of these tables, would try to avoid the negative effects. One way of doing it would be to select programmed withdrawal, in which the monthly pension would be reduced by the use of unisex tables, but for the benefit of the family group and the pensioner's heirs. Indeed, in case of death, the accumulated balance in the individual account would be greater due to the lower pension paid to the originator and would be used, first of all, to pay the pensions that the survival pension beneficiaries are entitled to and, when entitled individuals no longer exists, it would remain as an inheritance. This would prevent the transfer of the funds to the pensioners who live longer. Hence, if the possibility of choosing the programmed withdrawal remains open, most men will surely choose pension this mode, making the implementation of unisex tables very difficult.

If the adverse selection behavior described in the foregoing paragraph occurs, another effect that would occur with unisex tables and the maintenance of programmed withdrawal, would be that the men who choose this pension mode would have a degree of protection against longevity greater than that existing prior to the implementation of the measure.

However, the majority of women should choose life annuity. Those who do not do so and opt for programmed withdrawal, would not receive the aforementioned transfers and would experience a faster depletion of the accumulated balance in their individual account, because the pension would be calculated with life expectancies below those actually estimated, which would aggravate the declining profile of pension amounts under this pension mode and create a contingency for the State.

In the temporary income with deferred life annuity mode, there may be difficulties similar to those raised by programmed withdrawal, depending on the period of temporary income, the deferral of the life annuity and the ratio between the amounts of both components of the pension.

### C.2. Greater restrictions on the types of annuities offered

In the Chilean market, the life insurance companies offer different types of life annuities: immediate; deferred; simple; guaranteed, with an increase in the percentage of the old age reference pension paid to surviving beneficiaries. In the guaranteed life annuities, in the case of the death of the originator, the insurance company ensures that during the guarantee period the sum of the survival pensions paid to all the beneficiaries is not less than the

amount of the life annuity paid to the originator; it is a simple way of leaving an "inheritance." The guaranteed period can be 20 years or more. Moreover, pensioners may decide to increase the percentage of their pension that their beneficiaries will receive when they die, at the cost of reducing their own pension. Retirees can request up to three different life annuity options with special conditions from the life insurance companies, i.e. guaranteed number of months and/or percentage increase terms.

According to the information provided by the Superintendency of Pensions in January 2017, 43% of life annuities taken out that month were immediate and 57% deferred; 15% were simple and 85% guaranteed. In immediate life annuity, almost 94% had guaranteed periods of between 5 and 20 years, and in deferred life annuities the percentage rises to 98% (see Tables 1, 2 and 3).

Table 1: Immediate and deferred old-age life annuities taken out in January. 2017

	Men		Women		Total	
Type	No.	%	No.	%	No.	%
Immediate	672	43%	314	43%	986	43%
Deferred	873	57%	422	57%	1,295	57%
Totals	1,545	100%	736	100%	2,281	100%

Source: FIAP based on Superintendency of Pensions information.

Table 2: Simple and guaranteed old-age life annuities taken out in January, 2017

	Men		Women		Total	
Type	No.	%	No.	%	No.	%
Simple	242	16%	97	13%	339	15%
Guaranteed	1,303	84%	639	87%	1,942	85%
Totals	1,545	100%	736	100%	2,281	100%

Source: FIAP based on Superintendency of Pensions information.

Table 3: Guaranteed old-age life annuities taken out in January, 2017

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Years	Immediate		Deferred		Total	
Guaranteed	No.	%	No.	%	No.	%
+ 0.5 - 5	27	3.3%	15	1.3%	42	2.2%
+ 5 - 10	236	28.8%	373	33.2%	609	31.4%
+ 10 - 15	287	35.0%	493	43.9%	780	40.2%
+ 15 - 20	245	29.9%	233	20.8%	478	24.6%
+ 20	25	3.0%	8	0.7%	33	1.7%
Total	820	100.0%	1,122	100.0%	1,942	100.0%

Source: FIAP based on Superintendency of Pensions information.

The variety of life annuity choices described in the foregoing paragraphs becomes more difficult with a group bidding system, like the one that would have to be implemented with elimination of mortality differentiated by gender. Furthermore, if the options available to pensioners are not limited, and given the fact that they decide the pension time and mode when they receive the certificate of pension amount offers, the risk for the insurance companies would increase due to the uncertainty regarding the final mix of life annuities which the new pensioners will decide on (combination of men and women and the distribution of their pensions by type of life annuity) and which the companies must pay in the long-term, increasing the price of this pension mode.

On the other hand, if the offer is binding for retiring members and the insurance companies, as proposed by the Bravo Commission, the selection of pension modes by members would have to be decided prior to having the information of the amounts of each type of pension, and they could also not repent of retirement, as occurs in the system currently in force (for example if the amount of the pension that is offered is low).

The elimination of programmed withdrawal and the greater difficulties for insurance companies to be able to offer different types of life annuities, depletes the pension product, limits the freedom to choose the type of pension and insurance company that members currently have, and reduces the competition between bidding institutions.

### D. Effects on equity, incentives and economic efficiency

The political discussion regarding unisex mortality tables has been marked in Chile and other countries by concerns regarding equal treatment of men and women, under the hypothesis put forward by some that gender differentiated tables discriminate against women. Remember that the President of the Republic of Chile herself said in August, 2016, that a single mortality table would be used, with the specific purpose of ending the discrimination affecting women's pensions.

However, from a technical and economic efficiency standpoint, the international experience of the insurance industry is not consistent with this belief, because the use of gender-differentiated tables has not been discriminatory. Although women in the life annuities market receive a smaller pension that men of the same age for the same premium payment, pension payments extend for a longer period of time, so that the present value of the benefits received is similar for men and women (Oxera, 2011).

In fact, on reading the reasons put forward by the Bravo Commission for the elimination of gender-differentiated tables, one can appreciate that the Commission itself considered that the inequality issue does not lie in the provision of pensions, but rather in the labor market and in family life, a situation which it intended to partially correct through the pension system. In fact, the Bravo Commission noted that the gender gaps and

differences observed in the labor market and households must be acknowledged, by including gender equity mechanisms in the individually funded system that enable sharing the costs associated with carrying out unpaid work.

On the other hand, if life insurance companies do not differentiate the life annuity offers among pensioners with different levels of longevity risk, economic efficiency is affected. Indeed, the pricing of the insurance companies based on the risks they face depending on the actual profile of individual life annuity pensioners, gives better signals and incentives to savers and pensioners regarding the most appropriate levels of protection for them, and improves economic efficiency. Based on international experience, in most countries, gender is the second most important factor for assessing risks in the provision of life annuities, after age.

Additionally, even if the law were to stipulate that life insurance companies must constitute reserves for the life annuities taken out by members of the AFP system based on unisex tables, it would not reflect the real risk they face in paying the promised life annuities. Since women live longer, and men live less, insurance companies would be under or overcovered, depending on whether the life annuities correspond to women or men, respectively.

The negative effects on incentives and economic efficiency would be greater if the application of unisex tables is extended to other types of insurance, as has occurred in the European countries.

#### E. Effects on voluntary savings

There is a percentage of members of the individually funded systems who engage in voluntary pension savings (VPS) to complement the pension amounts obtained from the mandatory contributory program. For example, 9.9% of the members of the AFP system in Chile had voluntary contributions and VPS deposits in some of the pension fund managers in September 2016 (Table 4).

Table 4: Number of members and savers with voluntary deposits and contributions in the different fund managers in Chile (To September 2016)

Variable	Men		Women		Total	
	Nº	%	Nº	%	Nº	%
Members (a)	5,391,470	53.1%	4,757,415	46.9%	10,148,885	100.0%
Savers (b)	613,885	61.0%	391,754	39.0%	1,005,639	100.0%
(a) / (b)	11.4%	n.c.	8.2%	n.c.	9.9%	n.c.

Note: Savers with zero voluntary deposit and voluntary contribution balances are excluded.

Source: FIAP based on information from the Superintendency of Securities and Insurance.

The implementation of unisex tables and the resulting transfer of resources involved, would discourage voluntary pension savings and their transfer to the individual accounts for financing better pensions, by pensioners who subsidize the rest with the new tables, and/or will encourage them to save voluntarily in other types of products or fund managers. Since men are the ones who would be most affected by unisex tables, the effect on VPS could be significant. Table 4 shows that 61% of savers with Voluntary deposits and contributions in the different fund managing institutions (AFPs, mutual fund managers will, life insurance companies and or others) are men. Furthermore, the history of voluntary pension savings in the AFPs to January 2017, shows that men have 77% of the voluntary contribution balances.

It is reasonable to anticipate that the disincentive will be greater for middle and lower income male workers, who do not receive the tax benefits obtained by high income individuals when engaging in VPS. In the case of the latter, the benefit can be up to 35% of the saved amount, which could compensate for the negative effect of unisex tables. In this regard, the experience of the Riester pensions in Germany is worth considering. These are life annuities calculated with unisex tables, in which men and women receive the same pension amount for every euro paid in. This implies that the estimated present value of the benefits received by men throughout their passive lives is less those received by women. The evidence of these plans shows that even with this loss, men have incentives to enroll in these plans, due to the contributions paid to them by the State and the tax credits received, which offset the effects of unisex tables. The situation can be very different for lower income workers and pensioners, who receive less tax incentives for voluntary pension savings. For example, low income individuals who do not pay taxes and pay in voluntary social security contributions, receive a 15% tax bonus in Chile, and nothing in other Latin American countries.

Hence, the disincentive introduced with unisex tables should be cause for concern, since it negatively affects the broadening of the base of members of the pension system engaged in voluntary savings, particularly low and middle income workers. The aforementioned effect could also discourage mandatory pension contributions.

#### IV. International experiences

Gender is one of the factors that was used for a long time by the insurance companies in Europe for defining their life insurance product offers. In 2004, the European Union suggested equal treatment of men and women in accessing and bidding for goods and services, but did not forbid the use of gender by insurers in the calculation of the benefits. However, in March 2011 the European Court of Justice ruled that genderbased differentiation in prices and benefits is discriminatory, and therefore decreed that pricing differentiated by gender could no longer be used in new insurance contracts. On the other hand, in the pensions of the occupational plans in the United States and Canada, the use of mortality tables and life expectancy not differentiated by gender is a common practice. In Latin America, on the other hand, all countries with individually funded pension systems use tables defined by the authorities which differentiates between men and women, in both the programmed withdrawal and life annuity modes.

By restricting the ability of insurance companies to price life annuities considering the risks they face among segments of pensioners, in this case according to gender, they must adjust the terms of the offer. This is due to the fact that the results obtained by the insurance companies critically depend on their price-fixing mechanisms and the variables considered in this process; and gender is one of the most relevant long-term risk variables they face in the provision of life annuities.

According to Oxera (2011), the use of unisex tables and the consequent inability to consider gender differences in pricing,

increases the risk faced by insurance companies, because they do not know what percentage of men and women they will finally have in their life annuity portfolios. This can, in turn, raise capital requirements to cover the increased risk. The effects of increased risk are particularly important for products such as life annuities, which are long term. Certain forms of implementation of unisex tables can reduce risk, such as, for example, bidding for the portfolio of all new pensioners during a certain period of time. Insofar as the risks that companies face increase, they could also increase their costs and prices, reduce the number of companies that are willing to compete in the market and, ultimately, consumers will be harmed. Based on international experience<sup>5</sup>this portfolio risk can be significant and involve life annuity prices being similar to those existing prior to the application of the unisex tables for pensioners with greater life expectancy, especially if the latter make up the majority of pensioners, or if the adverse selection effect is significant.

On the other hand, international experience also shows that the application of unisex tables can have certain consequences not contemplated in this measure. In addition to the aforementioned effects on adverse selection and the transfer of resources between men and women, the operating and business costs of insurance companies could increase, depending on the way that unisex tables are implemented, and affect the incentives for saving in the contributory systems.

Operating costs can increase due to the need to understand and apply the new regulations,

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<sup>&</sup>lt;sup>5</sup> Interviews with many insurance companies conducted by Oxera (December 2011).

modify company systems, websites, pricing mechanisms, etc., and manage the transition to the non-gender differentiation operating system.

In business terms, since life annuity pricing without considering the gender-based longevity risk differences would mean that the sales margin would be higher for men than for women, and insurance companies could engage in strong competition to capture the former. This must be avoided through the implementation of mechanisms for bidding on all new pensioners, as previously discussed.

#### V. Alternative proposal to unisex tables<sup>6</sup>

The Chilean Association of Insurers presented an alternative proposal to the application of the unisex tables. Under this proposal, the current conditions of the retirement process are maintained, i.e., both men and women select the pension mode they want and the respective institution, at the time of retirement, based on the pension amounts that the AFPs and the insurance companies offer them based on non-unisex tables, i.e. that differentiate life expectancy between men and women. On the other hand, according to the Association's proposal, the Pension Amount Consultation and Offers System (SCOMP) would calculate the final pension amounts of women, at the corresponding age and based on the corresponding balance, but using mortality tables and life expectancy of men. This would entail an increase in the pension amounts of women, since their life expectancy is greater than that of men. The

difference between both pension amounts would be paid to women monthly. The resources needed for this subsidy could be funded with resources from the Solidarity Pillar or some other source of financing that it is decided to use.

In programmed withdrawal, the pension difference is determined in UF (unit indexed to price variation) at the time of retirement, even if the pensioner decides to switch to the life annuity mode later on.

According to the Association, the main benefits of this proposal are: (i) The provision of a pension complement to women; (ii) It enables permanently eliminating the gender gap in pensions; (iii) The tools for implementing the proposal already exist, with no need to create any new institutional framework; (iv) It is valid for the pension modes and does not affect pensioners' decisions; (v) It is applicable to retired women and those who will retire in future; and (vi) It corrects undesirable inequities that would be generated with the unisex tables.

The Association estimates that the normal and early old age pensions of women retiring annually would increase by 10.5%, with a greater impact on simple life annuity (14.2%) and women without a family group who are beneficiaries of a survival pension. For women who have already taken out normal and early retirement, an increase of a 14.6% in the pension is estimated.

The first calculations carried out by the Association of Insurers, using unisex tables constructed on the basis of an equal proportion of men and women, and simple life annuity, are as follows:

<sup>&</sup>lt;sup>6</sup> Chilean Association of Insurers (October, 2016).

Table 5: Impact on pensions of the monthly bonus vs. unisex tables

Impact	Monthly bonus	Unisex tables
Men	None	7.4% decrease
Women <sup>7</sup>	10% increase	9% increase

Source: Newsletter No. 8/16 of the Chilean Association of Insurers October 2016.

On the other hand, according to information provided by the Association, the cost of the monthly bonus is USD 100 million per year for life annuities, with a 50% surcharge for programmed withdrawals, amounting to a total of USD 150 million per year. If this is financed with an increase in social security contributions, it would entail an increase of 0.3 percentage points.

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<sup>&</sup>lt;sup>7</sup> These estimates of pension increases are different from those presented in III a), probably due to differences in the assumptions used. However, the details of the assumptions for these estimates are not available.

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