National Accounts Pension Funds' Compilation: The case of Chile

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ABSTRACT

The paper explores the basic nature of the Pension Funds in Chile and the sources and methods used in the national accounts. The fund is an individual capitalization scheme. It has been included in the Chilean financial accounts since 1986. Instruments and transactions codes are guided by the SNA93, and the period comprises 1986-2008. Furthermore, this paper makes a comparative analysis between SNA93 and 2008 SNA recommendations. Finally, it examines the effect of the applications of the 2008 SNA on the currently measures.

A. THE BASIC NATURE OF THE PENSION FUNDS IN CHILE

A.1. General Characteristics

The Chilean individual-capitalization private pension fund scheme (pension funds) was created by Decree Law 3500 in 1981. His management is responsible for a so-called corporation Pension Fund Manager (AFP), which has a single business line and is financially separated from the Fund.

Enrollment to this fund is compulsory for all employed workers, and voluntary for autonomous or self-employed workers. This enrollment is optional for workers who were still members of the old social security scheme at the time this reform became effective. Workers who decided to join the new scheme transferred their accrued contributions through a "recognition bond" issued by the State.

It is a defined contribution scheme, which provides for a compulsory 10% contribution to the pension fund and an additional 2% for heavy work, on the gross taxable compensation, with a limit fixed by law. The fee charged by AFPs varies among managers, and it may be set as a fixed and/or variable proportion of the same basis on which the contribution to the fund is calculated.

Any worker becomes a member when s/he joins the individual-capitalization pension scheme, and stops being one only when s/he decides to disenroll him/herself, after meeting all applicable legal requirements, and is thus included in the old pension scheme.

Any person may enroll as long as they qualify as workers, either employed or self-employed, regardless of the type of work they do or of the kind of employer they work for. When a worker becomes a member of an AFP, s/he is automatically incorporated into the pension scheme, even when s/he changes jobs, becomes unemployed, or retires from workforce.

Each member holds an individual account which is formed by pension contributions and accrued property rents earned; this fund allows financing the old-age pension, disability or survivorship pensions. Disability and survivorship pension schemes are both covered by a specialized insurance, which is funded with the contributions of the members.

At present, it operates under a multi-fund scheme (five funds, since year 2002), managed by each AFP. These types of Funds are different from one another in terms of their portfolio share which is invested in variable-income instruments, since this implies different levels of risk and return. The relevance of the pension funds in Chile it can be appreciated by the percentage of population they cover and the volume of assets they hold. Contributors to the pension fund represented 65% of the working population by December 2010, while, in terms of assets, they represented 66% of the GDP in 2010, that is, about 140 billion dollars.

A.2. Benefits

The benefits included in this scheme may be considered in terms of the types of pensions granted, and the related guarantees granted by the State.

Related with the different kinds of pensions, they are old-age, disability, and survivorship, as per the following definitions:

i) Old-age Pensions

Old-age pensions are rights held by scheme members entitling them to receive a pension after reaching the legal age required, i.e., 65 and 60 years of age for men and women, respectively.

ii) Disability Pensions

Non-pensioner members of this scheme are entitled to an either total or partial disability pension when, not having reached the age required to receive old-age pension, they suffer a permanent impairment of their working capacity resulting from illness or weakening of their either physical or intellectual strength.

iii) Survivorship Pensions

The right to receive this benefit is held by the members of the deceased member's family group which meet the applicable legal requirements: surviving spouse, unmarried offspring, parent of offspring from non-matrimonial relationship, and member's parents.

In relation to the mode that they can assume the types of pensions they stand out: programmed withdrawal, immediate life annuity, temporary income with a deferred life annuity, and immediate life annuity with programmed withdrawal, which are described below.

i) Programmed Withdrawals

In this option, pensions are paid by the AFP against the member's Individual Capitalization Account. The pension amount is determined and updated annually in terms of the individual account balance, the funds' profitability, the life expectancy of the member or his/ her beneficiaries, and the prevailing rate applicable to computing programmed withdrawals. The above means that the pension amount varies each year and decreases over time.

Under the programmed withdrawal option, the member keeps ownership of his/ her funds and s/he may change AFPs and pension options. If the member dies, the remaining balance shall be applied to payment of survivorship pensions to the member's beneficiaries and should there be no such beneficiaries, the remaining funds shall be paid as inheritance.

ii) Immediate Life Annuity

This pension option is contracted by a member with a Life Insurance Company, by virtue of which such Company binds itself to pay a monthly income. Whose value is fixed in adjustable units, to the member during his/ her whole life and, in the event of his/ her death, to his/ her pension beneficiaries.

Under this option, the AFP transfers the member's pension funds to the Insurance Company in order to fund the contracted pension. Therefore, when selecting a life annuity pension option, the member stops holding ownership of his/ her funds. Once this life annuity has been contracted by a member, it is irrevocable; therefore, s/he may change neither Insurance Companies nor pension options.

iii) Temporary Income with Deferred Life Annuity

When choosing this temporary income, a member enters a contract with a Life Insurance Company for the payment of an adjustable fixed monthly income, as from a date subsequent to his/ her retirement date. During the period between the date on which this option is requested and the date on which the life annuity starts to be collected, the member receives a monthly pension, funded with funds that are withheld especially for this purpose in the individual capitalization account with his/ her AFP. In this way, the member retains ownership and only undertakes the financial risk inherent to the portion of his/ her fund that stays with the AFP and during a limited period of his/her life, without assuming any longevity risk. This risk, just like the financial risk of this period, is assumed by the contracted Insurance Company.

ii) Immediate Life Annuity with Programmed Withdrawal

This is a specific combination of the Programmed Withdrawal and the Immediate Life

Annuity Options.

Apart from old-age, disability, and survivorship pensions, this scheme grants other benefits, which are guaranteed by the State, such as the State-guaranteed minimum pension, and other benefits, which are briefly described below.

i) State-guaranteed Minimum Pension

If, at the time of retiring or once retired, a member does not reach the prevailing minimum pension with his/ her own resources, the State commits itself to fund the remaining portion.

ii) Other State Guarantees

Besides the Minimum Pension, the State guarantees any additional contributions needed to complement the balance required to fund disability and survivorship pensions, and the payment, among others, of life annuity pensions contracted by members with Life Insurance Companies, in the event these should go bankrupt.

B. PENSION FUNDS IN THE CHILEAN NATIONAL ACCOUNTS

B.1. Record in the Pension Fund Account

Pension Funds were first included in the National Accounts of Chile in 1982, that is, one year after the scheme was effectively implemented. It is worth noting that there were no specific international recommendations in force at the time. The first records were related just to Current Accounts. Pension fund financial accounts were first compiled for the 1986-1990 period, when measurement of financial accounts started and, since 1991, they have been prepared on an integrated basis.

In Chile, Pension Funds are classified as financial institutions and are regarded as "conceptual agents" representing the assets of households held in pension funds and the financial holdings in which such assets are invested.

The early records of the 1983-1986 period, for internal use only, were an income and expenditure account, whose resource was the property income earned by the financial assets in which pension funds were invested and as employment or use and for the same amount, a property income paid to households, which capitalized by increasing households' contributions to Pension Funds. Since the pension scheme was an individual capitalization one, no records were entered on account of social contributions and benefits items, and it was assumed that both represented increases and decreases of households' financial assets held in pension funds. In this setting, pension fund savings equal zero.

In 1990, due to the importance pension funds had acquired in Chile, a specific sub industry and a financial instrument were created for their disclosure in the records. In turn, pension fund managers started to be considered as financial auxiliaries. The calculation method developed for these accounts uses an integrated approach, that is, they are complied in one same process from current accounts to financial accounts, based on former information from financial statements. As a result, Net Savings and Borrowings equal zero.

As from 1996, institutional accounts are prepared and published on an integrated basis, in observance of the recommendations of the 1993 SNA (System of National Accounts) with regard to recording of social security transactions for pension funds: Social Contributions (D61) and Social Benefits (D62) in the Secondary Distribution of Income account and the Adjustment for the Change in Net Equity of Households in Pension Funds (D8), in the Income Utilization account.

In the 1993 SNA, the most specific reference is found in paragraph 4.98 and in Annex IV, according to which the pension scheme in Chile is comparable to a private social security scheme, based on special funds, which are managed by autonomous pension fund managers.

In the pension fund scheme in force in Chile, since the fund is managed by companies, which are financially separated there from, the fund does not generate output in itself. Thus, the computed accounts and transactions are:

i) Allocation of Primary Income Account (II.1.2)

<u>Resources</u>

D41 and D42. Property income earned from financial investments, including interest and dividends, plus income allocated from collective investment fund schemes.

<u>Employment</u>

D44. Property income allocated to holders of insurance policies and pension funds, representing property income earned and capitalized in the individual accounts of contributors to the pension fund.

The following equality is valid:

$$D41+D42=D44$$

ii) Secondary Distribution of Income Account (II.2)

<u>Resources</u>

D61. Social contributions. These include the direct contribution to the fund over the period, and the property income earned and capitalized D44, which may be classified as a supplementary contribution.

<u>Employment</u>

D62. Social benefits. These include fund withdrawals, either if the withdrawn funds are transferred to a life annuity insurance, or if they are included in an AFP programmed withdrawal.

iii) Income Utilization Account (II.4)

<u>Resources</u>

D8 = (D61-D62) Adjustment for the Change in Net Equity of Households in Pension Funds.

As it arises from the above, the savings of Pension Funds equal zero, due to their “conceptual agents” nature, which links households with issuers of liabilities representing the financial assets in which funds are invested.

iv) Financial Account (III.2)

Liabilities

The main instruments are the Pension Fund Shares =IF 7.2, which is computed as explained below:

	Contributions by members (net of fees) = D61
Less	Withdrawals of pensions and others = D62
Plus	Capitalized property income = D44

Additionally, pension fund liabilities include voluntary deposits by members and the AFP's cash reserves, whose purpose is to ensure minimum profitability.

Assets

Fund assets equal fund liabilities, and are disclosed according to the financial instruments in which they are invested. There are specific regulations about the share of each instrument composing the investment structure of each fund, varying among funds. The distribution of local and foreign investments is also regulated.

B.2. Record in the Household Account

Considering that the Pension Fund Scheme is a capitalization scheme and is charged to the employee or scheme member, contributions to said funds are not regarded as expenditure; compensations recorded in households are gross of these contributions, so they are a part of the Households' Savings.

Returns earned from investments representing the fund and capitalized, are recorded as imputed income, which is also a part of the Household's Savings. Savings generated by these transactions is destined to increase the households' share in pension funds (Cash Flows account: Households' Assets: Instrument 7.2).

Record of Social Contributions and Benefits, as use and resource, respectively, in the Secondary Distribution of Income account, allows for representing the effect of these transactions in the households' disposable income. However, in order not to affect savings arising from these transactions, -which are not current transactions per se-, an item called "Adjustment for the Change in Net Equity of Households in Pension Funds" (D8) is recorded in the Income Utilization account.

Finally, the management fee paid by households to AFPs is recorded under Household Consumption.

C. METHOD APPLIED TO RECORDING OF PENSION FUNDS

Generally, pension fund integrated accounts are complied based on the financial statements; this means that the balances of the different accounts that are the breakdown items of the following account are thereby balanced.

This method involves the analysis and classification of each item of the financial statements as per the national accounts, which implies allocation of accounting items to determine flows or transactions of national accounts as established by the international SNA recommendations.

Since the financial information is prepared mainly to satisfy requirements of the internal administration of institutions and supervisory requirements of governmental agencies, its objectives do not cover the needs of the national accounts directly. Therefore, these data are subjected to a selection, adaptation and filtering process, through a detailed work on each accounting item, for the purpose of constructing the integrated economic accounts. Specifically, in order to generate the flow accounts, it is necessary to make certain basic adjustments to the accounting information used, which are related to the accounting treatment derived from valuations of transactions, which are different from those required for the national accounts:

- Monetary adjustment affecting some financial assets.
- Adjustments agreed on adjustable financial instruments, related to the agreed indexation contained in a major portion of the financial transactions in Chile.
- Gains or losses arising from holding of financial instruments, derived from valuation at market prices and/or from exchange rate changes.

Specifically, current account transactions are determined based on the activity of the fund net equity, in order to identify contributions and benefits associated thereto, as well as to estimate property income earned, which are included in an account called "revaluations or devaluations". Additionally, this account contains capital gains and losses derived from the purchase and sale of financial instruments, as well as from their holding. These transactions also generate liabilities flows.

On the other hand, financial flows of assets are obtained from the differences arising from balance sheets of two consecutive years, as adjusted by applicable conciliations and equivalent to those applied to the calculation process of net equity.

D. MAIN EFFECTS OF THE 2008 SNA RECOMMENDATIONS ON PENSION FUND MEASUREMENTS

The 2008 SNA clearly differentiates the different types of pension schemes. In the case of Chile, the private pension scheme belongs with the following category: "Employment-related pension schemes other than social security."

Chapter 17 of the 2008 SNA, paragraphs 17,127 through 17,137, explains the two forms that may be adopted by employment-related pension schemes other than social security. On one hand, the defined-contribution pension scheme. Furthermore, on the other hand, the defined-benefit pension scheme, or plan based on the last salary. In general, both schemes are contributory plans, either by the employers or by the employee.

Paragraph 17,128 of the 2008 SNA states as follows: A defined contribution scheme is one where the benefits payable to an employee on retirement are defined exclusively in terms of the level of the fund built up from the contributions made over the employee's working life and the increases in value that result from the investment of these funds by the manager of the scheme. The entire risk of the scheme to provide an adequate income in retirement is thus borne by the employee.

Paragraph 17,129 adds: *"A defined benefit scheme is one where the benefits payable to an* *employee on retirement are determined by the use of a formula, either alone or as a minimum amount payable.* In this case the risk of the scheme to provide an adequate income in retirement is borne either by the employer or is shared between the employer and employee. In certain cases, the employer's risk may be borne by the multiemployer scheme that operates the defined benefit pension scheme on behalf of the employer.

Based on these descriptions, the private pension scheme in Chile may be classified as a defined-contribution scheme.

The records developed in the national accounts of Chile for the pension fund complies almost fully with the recommendations presented in the 2008 SNA. There are differences in the classification of supplementary contributions, which first appear as a disaggregated item in the 2008 SNA, Chapter 8, Section 5, paragraph 8.86, and they refer to the property income earned by financial investments of the pension fund and allocated to households in item D44. "Property income allocated to holders of insurance policies and pension funds", but which are included, within Chile's accounts, in Social Contributions D61, without differentiation between direct contributions per se and capitalized property income.

Another aspect of the 2008 SNA that presents differences with the methods applied in Chile has to do with the indexation of bonds and their treatment for determining financial flows and involved interests (Chapter 17, paragraphs 17,174 and 17,182).

Agreed indexation on financial transactions has been a habitual practice in Chile since 1975, and it affects a significant part of the financial investments made with pension funds. The most generalized indexation is based on the consumer price index and expressed in the so-called Unit of Account (UF, Unidad de Fomento), which is determined monthly, with a one-month lag. Indexation effects are called "Adjustments".

Since the 1993 SNA contained no explicit references to this issue, which affects financial transactions in Chile, a local solution had to be searched: to consider adjustments earned and paid by financial transactions as price-reconciliation in other changes of assets. According to this solution, which is still being applied in Chile, adjustments are excluded from financial flows and from earned and/or paid interest as well.

Moreover, it is necessary to note that the 2008 SNA allows for indexation applicable only to bonds, and it mentions that this is not applicable to deposits and loans, which concept arises from paragraph 17,255. However, this does happen in Chile and thus there are two situations in which the either partial or total inclusion of the recommendation shall have to be considered.

These are:

- Extending the application scope of the recommendations on indexation of bonds, to include deposits and loans.
- Identifying holding gains and losses.

Pension fund items that would be affected by the inclusion of indexation are:

- D44: Property income allocated to holders of insurance policies and pension funds.
- D61: Social contributions.
- D8: Adjustment for the Change in Net Equity of Households in Pension Funds.
- Liabilities flow: Shares of pension funds.
- Flow of indexed financial instruments.

Given the extension of the indexation process currently prevailing in Chile, which involves all kinds of financial instruments (deposits, loans, bonds, etc.), the incorporation of the above described recommendations within the Chilean national accounts needs to be thoroughly analyzed.

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