$$\Lambda_x = \sum_{t=1}^{\infty} \frac{1}{(1+i)^t} \mathbb{1}_{]t;\infty[}(T_x)$$

ressources-actuarielles.net

Retirement systems in francophone sub-Saharan Africa : Current situation and perspectives

Version 1.10

04/05/2015

Florent GBONGUÉ

PhD Student / LSAF

florent.gbongue@gmail.com

Frédéric PLANCHET

Associé chez Prim'Act

frederic@planchet.net

Abderrahim OULIDI

Directeur de l'école d'actuariat à l'IUR

abderrahim.oulidi@uir.ac.ma

Preamble

The systems of retirement that one meets in the countries of French-speaking sub-Saharan Africa address mainly to the salaried employees of the formal sector (the agents of the state, the employees of the private sector and certain body of profession).

If the retirement is a means efficient of struggle against poverty in the countries to weak incomes (CIPRES), However the served benefits are weak and don't hold often account of the evolution of the life cost.

This weak level of the pensions explains itself mainly by the strong existing connection between the viability of the retirement systems and the health of the economy and the dynamics of the risks.

However the African continent knows some difficulties in occurrence the lack of dynamism of the economy, the conflicts, struggles intestines and the political instability, that increase poverty in Africa (cf. Bailey [2012]).

This unfavorable context can be one of the reasons of the present deficit of the systems of retirement of the CIPRES Zone.

Preamble

The systems of retirement of the CIPRES Zone are confronted, all as in the developed countries, to challenges caused by the dynamics of the risks. We have :

- the **demographic challenges**: According to forecasts by the ISSA, the number of people aged at least 60 years on the African continent , is expected to reach 200 million in 2050.
- the **economic challenges**: Despite relatively high growth rates, Africa possesses the economy the less developed (2,4% of the world GDP in 2012). It is also the continent displaying the strongest rate of unemployment, especially among young people (20% in 2011, according to the ILO).
- the **political challenges**: The continent is confronted to endemic unrests caused by politics and the failure of democracy.
- the **extension of the social cover to the informal sector** : According to the world bank, 90% of the active population (evolving in the informal sector), are not covered by a system of social security.

SOMMAIRE

Retirement systems in francophone sub-saharan africa : current situation and perspectives

1. The context of the retirement in the CIPRES Zone

The analysis of the economic and social situation of the CIPRES Zone, shows a fragile economy faces a growing population. The unemployment of the population is growing, while the aging population is increasing. In addition, women are fertile what is reassuring as for the replacement of the population.

Indeed, the average growth rate is 2% due to political instability in Central Africa and to the economic recession in Equatorial Guinea. As for inflation, it is around 2%.

The employment and unemployment indicators, in the CIPRES Zone, are alarming. The employed population on average is 4.14% of the total population, while unemployment is around 11.1%.

The elderly (65 and over) represent approximately 3.1% of the total population. The dependency ratio is 87%, while life expectancies of men and women are 55 and 57 years respectively. The fertility rate is 5.35 children per woman. The employment-population ratio is 72%.

1. The context of the retirement in the CIPRES Zone

The system of retirement in the countries of the CIPRES is inspired by the Bismarckian model, that is a system by annuities to definite benefits. it can be declined in an obligatory pension system (Pillar I) assured by the public authority (the state) and an optional retirement system (Pillar II and III) managed by private enterprises in occurrence the insurance companies.

The obligatory retirement system in CIPRES Zone is a PAYG defined benefit plan for formal sector employees (5% to 10% of the workforce). Its management is confided to the societies of State (pension schemes).

The optional retirement system is a voluntary retirement system, financed by capitalization. In practice, two types of capitalization exist in CIPRES Zone, in occurrence the individual capitalization (supplementary retirement) and the collective capitalization (complementary retirement). it assures the function of the pillars II and III. its management is confided to the private insurance companies.

SOMMAIRE

Retirement systems in francophone sub-saharan africa : current situation and perspectives

2. Overview of pension systems in the CIPRES Zone

We will present here the model of retirement observed in some countries of the CIPRES Zone.

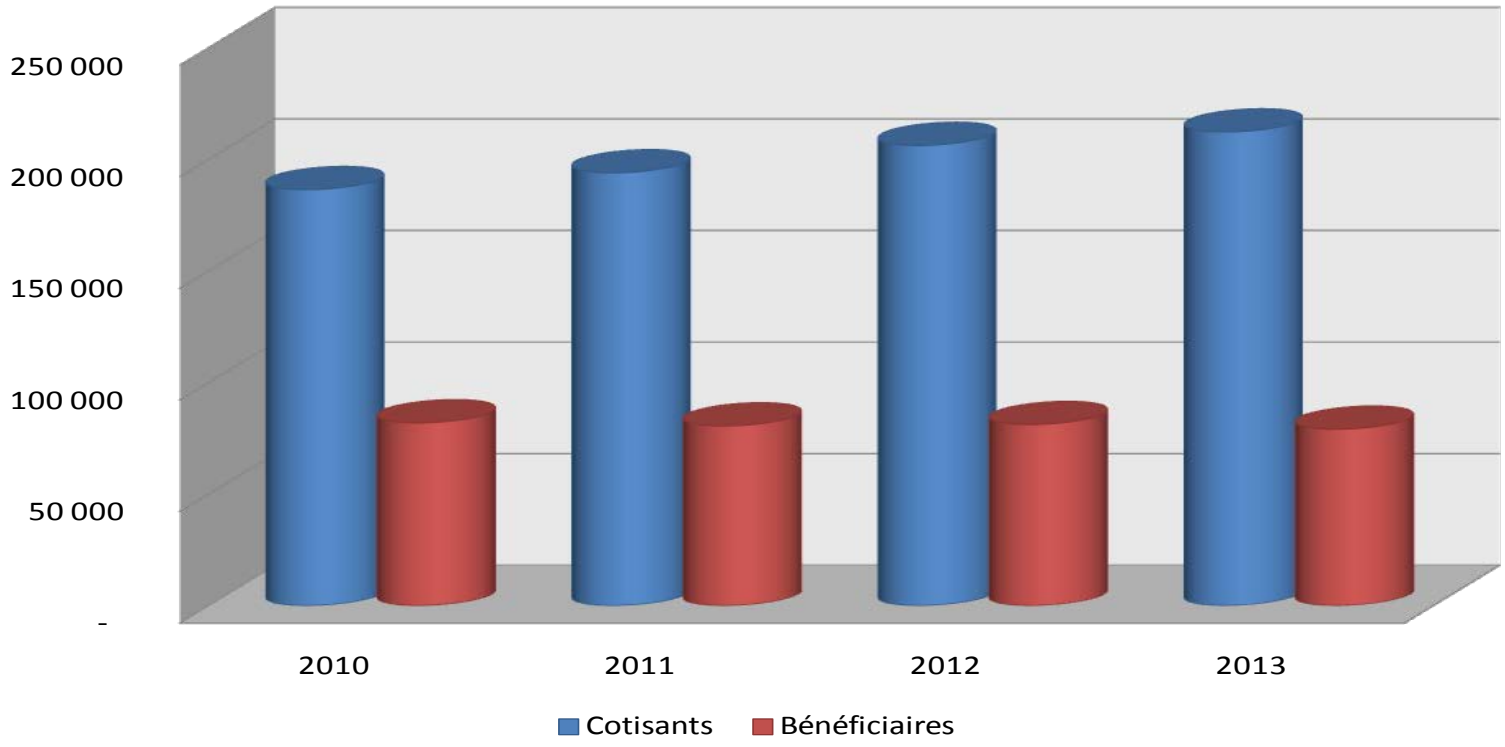
Second power economic of West Africa, the Ivory Coast covers a global surface of 322 462 km², for a population estimated to 22,8 millions inhabitants in 2014, of which 57% are rural, and 26% are of foreign origin (cf. FAYE [2010]).

After a long political crisis, the country started its development thanks to the national plan of development (PND). The growth rates of the GDP are respectively of 8,9%, 9,8% in 2013 and 2014, for an inflation fluctuating around 2%.

The system of retirement in Ivory Coast is assured by two independent institutions, in occurrence “la Caisse Générale de retraite des Agents de l’État (CGRAE)” and ”la Caisse Nationale de Prévoyance Sociale (CNPS)”, covering respectively the salaried employees of the sectors public and private. These pension schemes are obligatory and financed by PAYG.

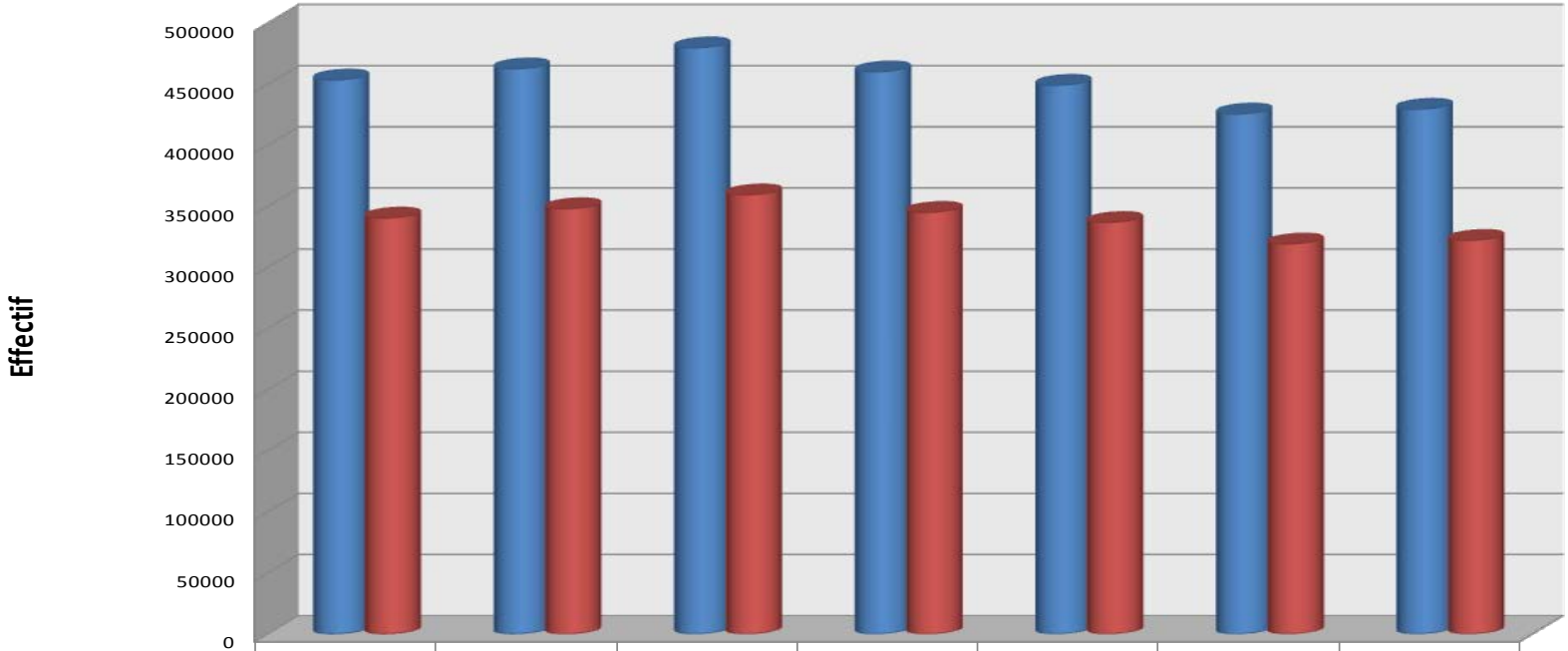
The affiliated members of the CGRAE progressed of 14% on the period 2010-2013, while the recipients regressed of 3% on the same period from where an improvement of ratio of dependence passing from 2,3 in 2010 to 2,7 in 2013, as shown on the graph below :

2. Overview of pension systems in the CIPRES Zone



In the case of the CNPS , we note a fall of 5,37% of the active contributors on the period 2000-2006. The graph below illustrates the evolution of the insured population of the CNPS over the same period :

2. Overview of pension systems in the CIPRES Zone



	2000	2001	2002	2003	2004	2005	2006
Membres afiliés	453411	462472	479711	460067	449076	425554	429510
Cotisants actifs	340410	348057	359368	345050	336807	319166	322133

Country of West Africa, the Republic of Senegal covers a surface of 196.190 km², for a population estimated to 13,73 millions inhabitants in 2012 (cf. World Bank [2012]).

2. Overview of pension systems in the CIPRES Zone

Its development strategy is based on the Senegal Emergent Plan (PSE) 2035. The recorded growth rates are respectively of 3,7%, 4,3% and 5,1% in 2012, 2013 and 2014. As for the inflation, it fluctuates in below of the communal norm (≤ 3 %).

The retirement in Senegal is managed by two pension institutions that are “le Fonds National de Retraite (FNR)” and "l’Institution de Prévoyance Retraite du Sénégal (IPRES)”, covering respectively the salaried employees of the sectors public and private. In addition to the general scheme (RG), the IPRES offer a complementary system for executives (IPRES - RCC).

These pension schemes are obligatory and financed by PAYG. They cover only formal sector employees .

The report of management of the IPRES for the period 2009 - 2010 shows an improvement of the general scheme of contributors (RG) of 6.6 % and the complementary system of the executives (RCC) of 4,1%, while the beneficiaries progressed of 1,4% for the RG and 7,7% for the RCC.

2. Overview of pension systems in the CIPRES Zone

We present in the table below, a summary of pension systems encountered in some countries of the CIPRES Zone :

Country	Public sector	Private sector
Cameroun	Le régime des Fonctionnaires et assimilés (RFA)	La Caisse Nationale de Prévoyance Sociale du Cameroun (CNPS)
Burkina Faso	La Caisse Autonome de Retraite des Fonctionnaires (CARFO)	La Caisse Nationale de Sécurité Sociale (CNSS)
Niger	Le Fond National de Retraite (FNR)	La Caisse Nationale de Sécurité Sociale (CNSS)

SOMMAIRE

Retirement systems in francophone sub-saharan africa : current situation and perspectives

3. Technical management of the pension system in CIPRES Zone

Let's recall that the reasons of the deficit of the retirement systems in CIPRES Zone are of internal and external order to the régime.

In the "external" case, we note the unfavorable economic and social context. In addition, In the "internal" case, we note the bad governance in some cases, the increase of the number of the pensioners, the decrease of the number of contributors (caused by economic problems that the States cross and of the successive programs of structural adjustment) from where a deterioration of the ratio of dependence (adjustment indicator of a PAYG system) and implicitly of the administrative problems that entail a weak incitement to participate in the pension plan.

The deficit could be reduced if the technical management of the pension system was assured. Strong is to note that most pension schemes of the CIPRES Zone don't have a qualified actuary" in intern for periodic actuarial studies. In practice, they call on outside firms every three years minimum.

3. Technical management of the pension system in CIPRES Zone

Here we focus on funding policy , technical expenses and the investment strategy of pension schemes in the CIPRES Zone.

The financing of the different branches of the Social security system in CIPRES Zone is assured, in accordance with current legislation, by social contributions and charges incurred for delay of remittance of the contributions; of the incomes of the investments of fund; of the donations and legacies; of the subsidies of the budget of the state or all other resources assigned to the pension schemes by a legislative or authorized text.

The contributions are the most important component of financing (more of 80%). They understand the employer part and the Insured person part, in different proportions. The tables below summarize the pre-reform contribution rates of the branch "old age" observed in the countries of the CIPRES Zone, depending on the insured population (public or private).

3. Technical management of the pension system in CIPRES Zone

Public sector

Formal pension schemes	Country	employer part	Insured part	total
CGRAE	Côte d'Ivoire	12%	6%	18%
FNR	Sénégal	20%	15%	35%
RFA	Cameroun	NA	NA	NA
CARFO	Burkina Faso	12%	8%	20%
FNR	Niger	14%	6%	20%

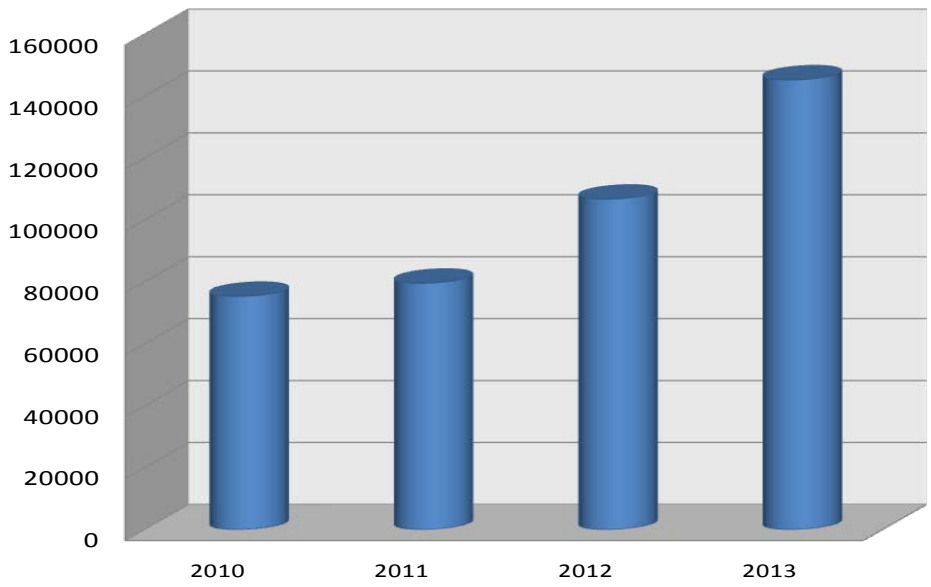
Private sector

Formal pension schemes	Country	employer part	Insured part	total
CNPS	Côte d'Ivoire	4.8%	3.2%	8%
IPRES	Sénégal	8.4%	5.6%	14%
CNPS	Cameroun	4.2%	2.8%	7%
CNSS	Burkina Faso	5.5%	5.5%	11%
CNSS	Niger	2.4%	1.6%	4%

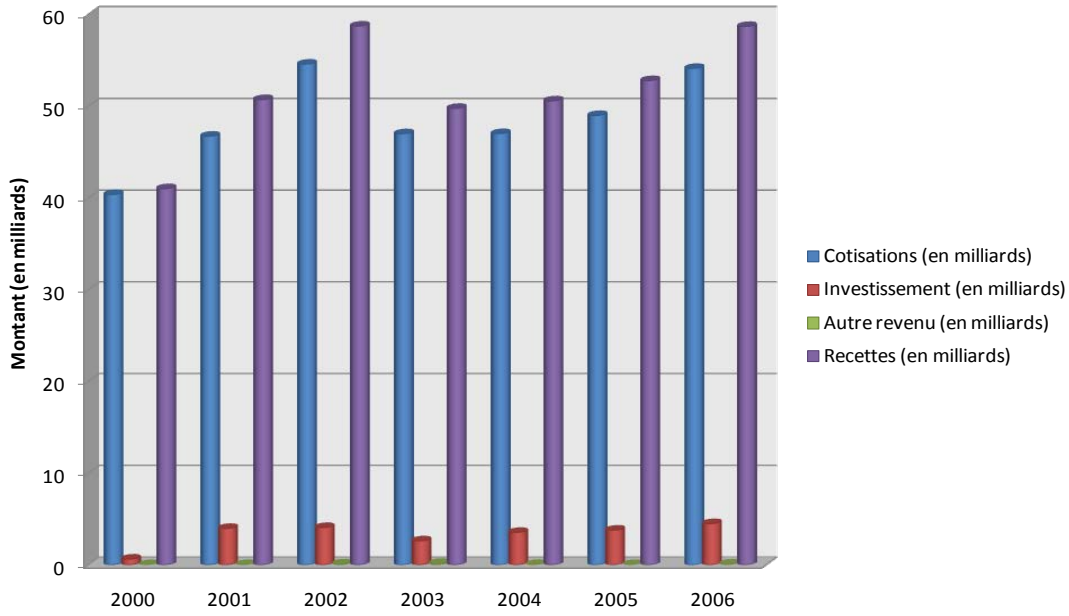
The contributions of CGRAE have an uptrend in recent years, passing from 75.36 billions to 145.28 billions, whether a jump of 93 % on the period 2010-2013 because of the reform of 2012 and the actual payment of contributions by State . This performance is illustrated in the graph below :

3. Technical management of the pension system in CIPRES Zone

The contributions of CGRAE (2010-2013)



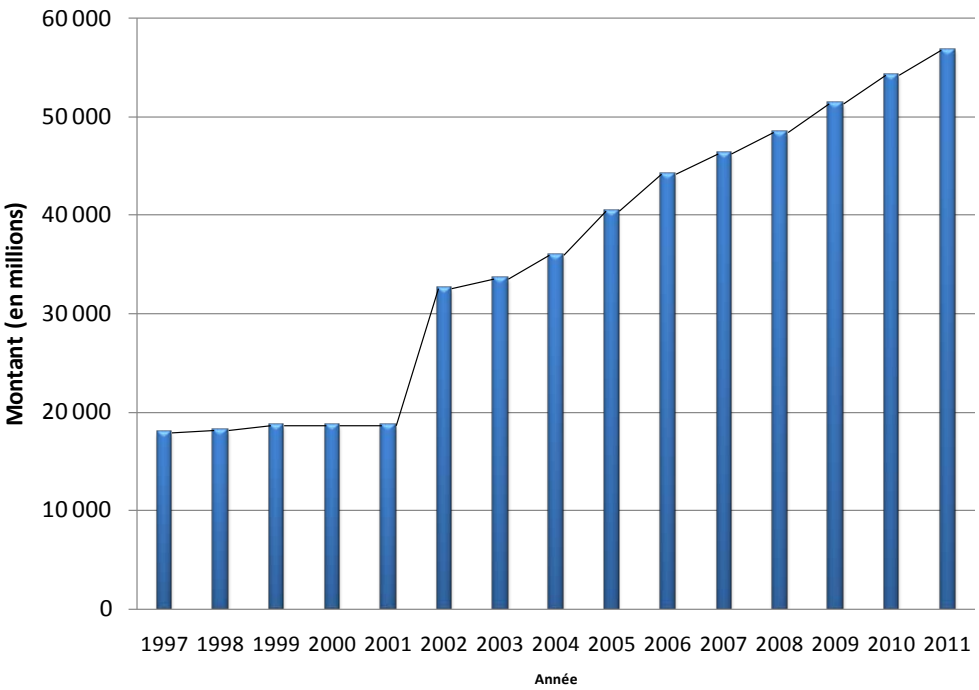
The Revenues of the CNPS on the period 2000-2006, ISSA source.



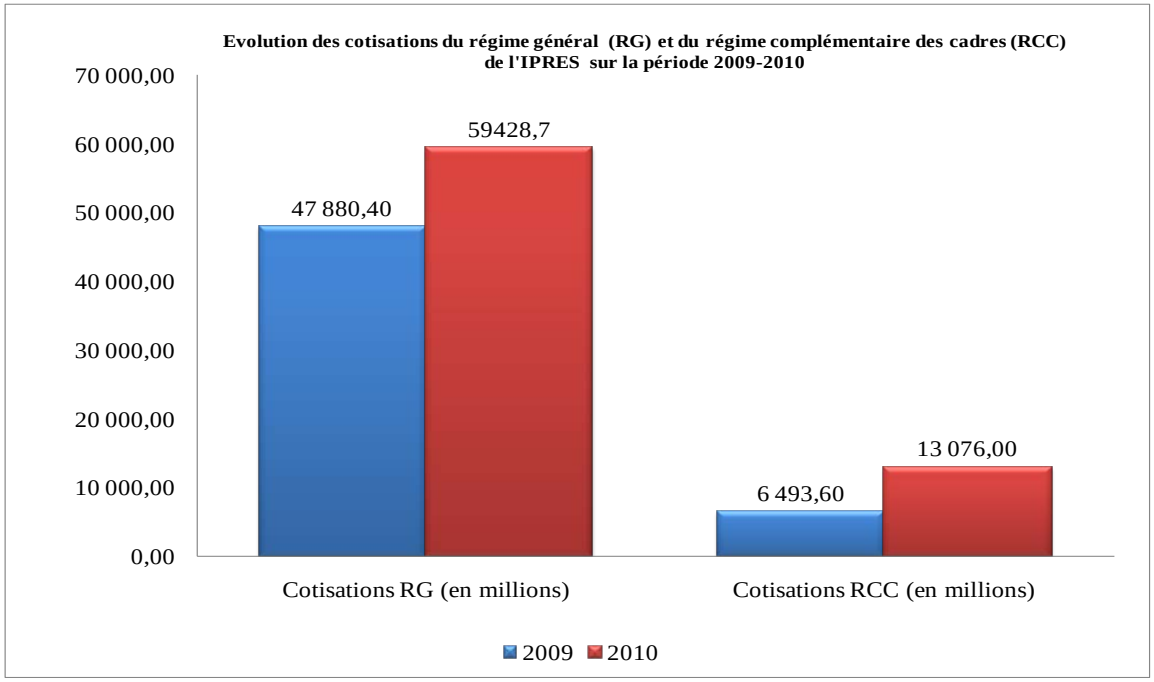
In the CNPS case, we have data from ISSA 2000-2006. The Contributions underwent a slight improvement on this period (5%). In addition, investment income make up a small part of the revenue of the regime. This is a point to improve by the pension schemes of the CIPRES Zone.

3. Technical management of the pension system in CIPRES Zone

The contributions of the FNR (1997-2011)



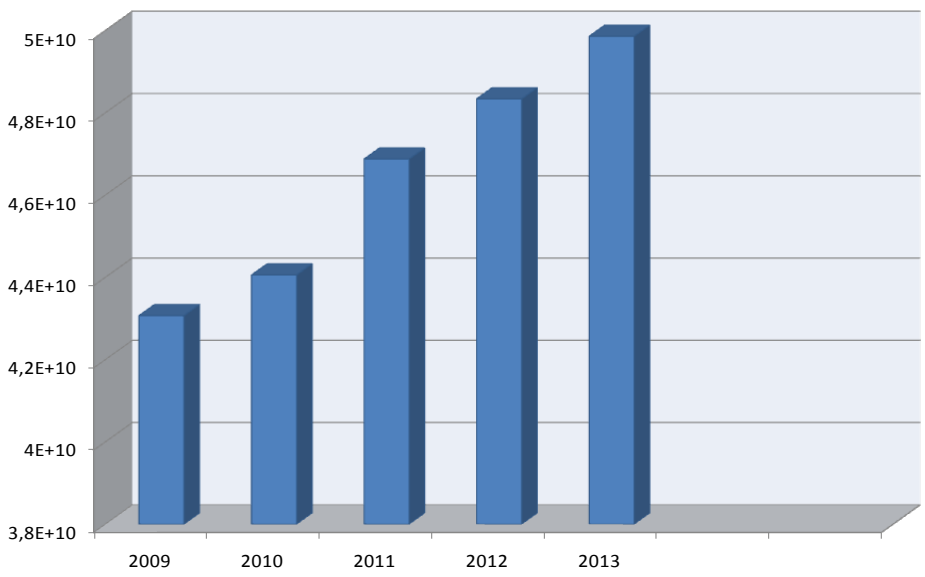
The contributions of the general pension scheme (RG) and the complementary pension scheme of executives (RCC) of the IPRES (2009-2010)



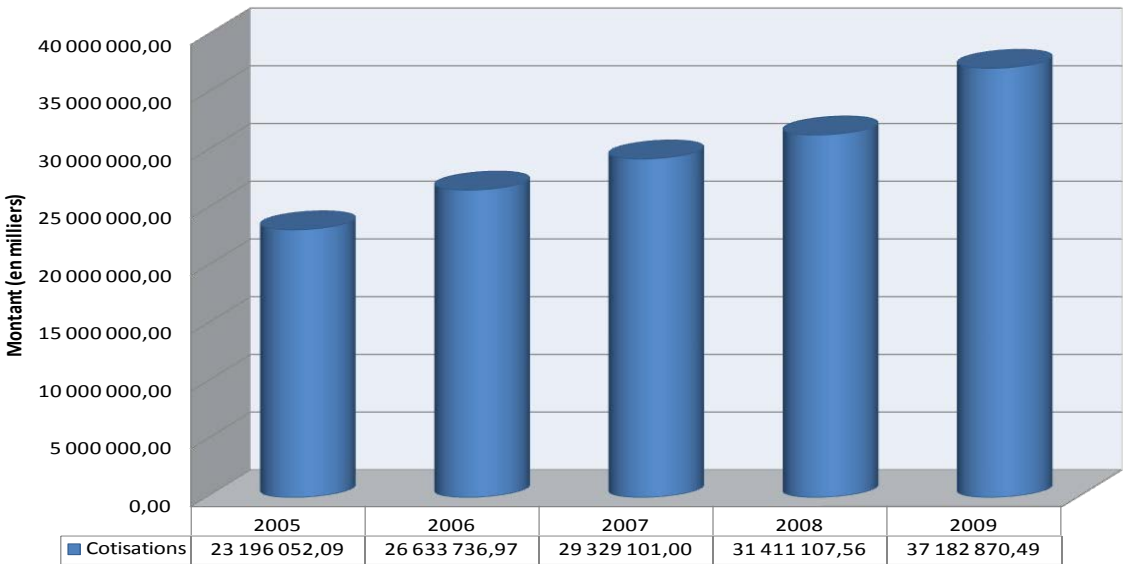
In Senegal, the contributions of the FNR knew a remarkable progression. Estimated to 17,9 billions in 1997, they reached 59,9 billions in 2011, an increase of 218%. As for the contributions of the IPRES, they have knew the same tendency that those of the FNR. Thus, the contributions of the general pension scheme have knew an uptrend of 11,9 billions on the period 2009-2010, while those of the complementary pension scheme of executives, have increased of 6,6 billions.

3. Technical management of the pension system in CIPRES Zone

The contributions of the CNPS Cameroun (2009-2013



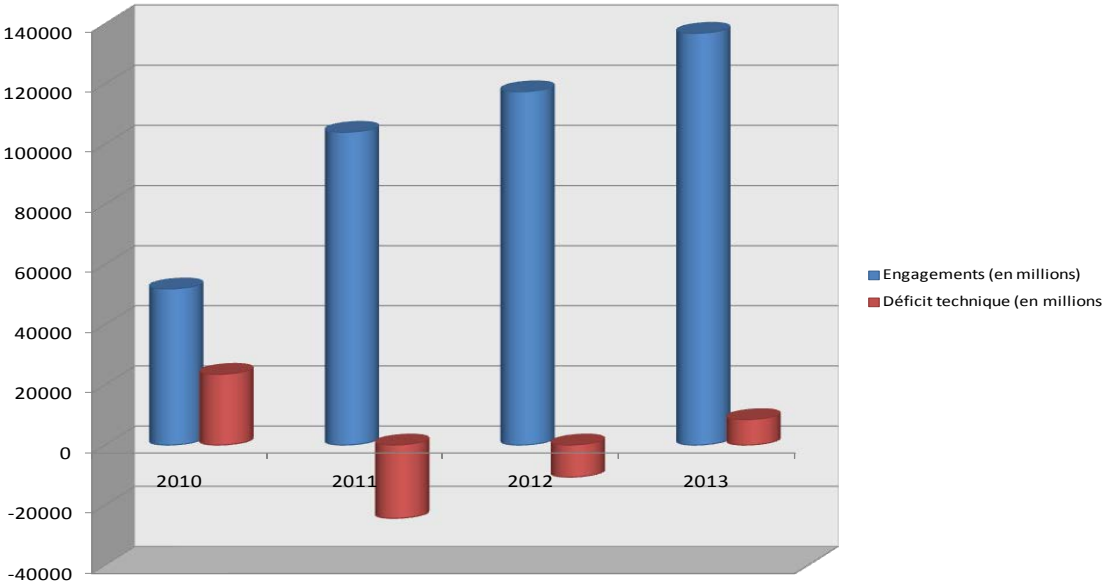
The contributions of the CNSS Burkina (2005-2009)



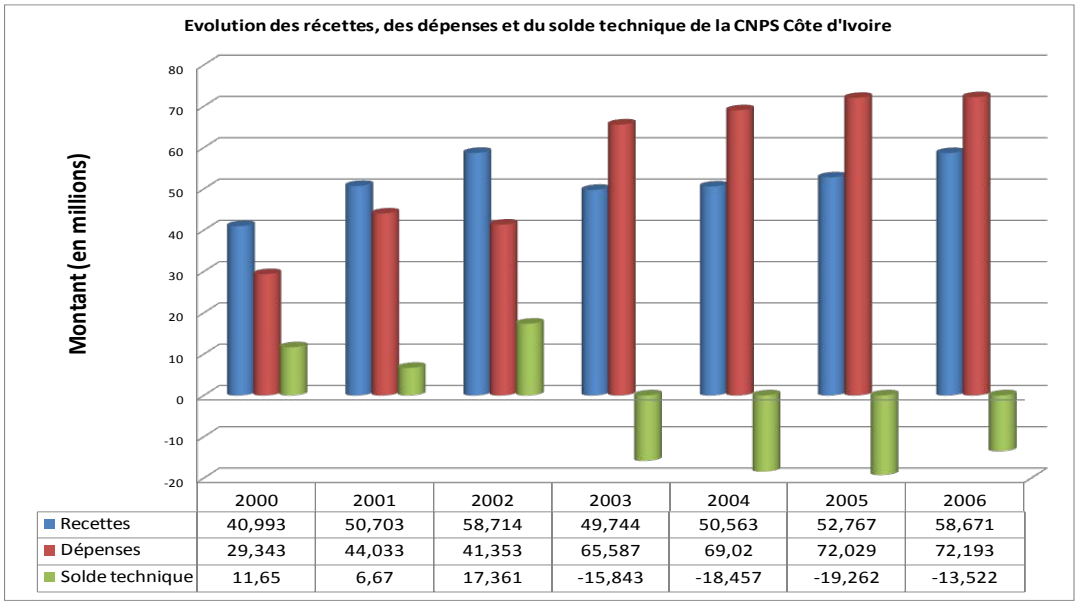
The expenses of the pension system in the CIPRES Zone include the expenses of working and the technical expenses associated to the payment of the benefits.

3. Technical management of the pension system in CIPRES Zone

The expenses and the technical balance of the CGRAE (2010-2013)



The expenses, the contributions and the technical balance of the CNPS (2000-2006)

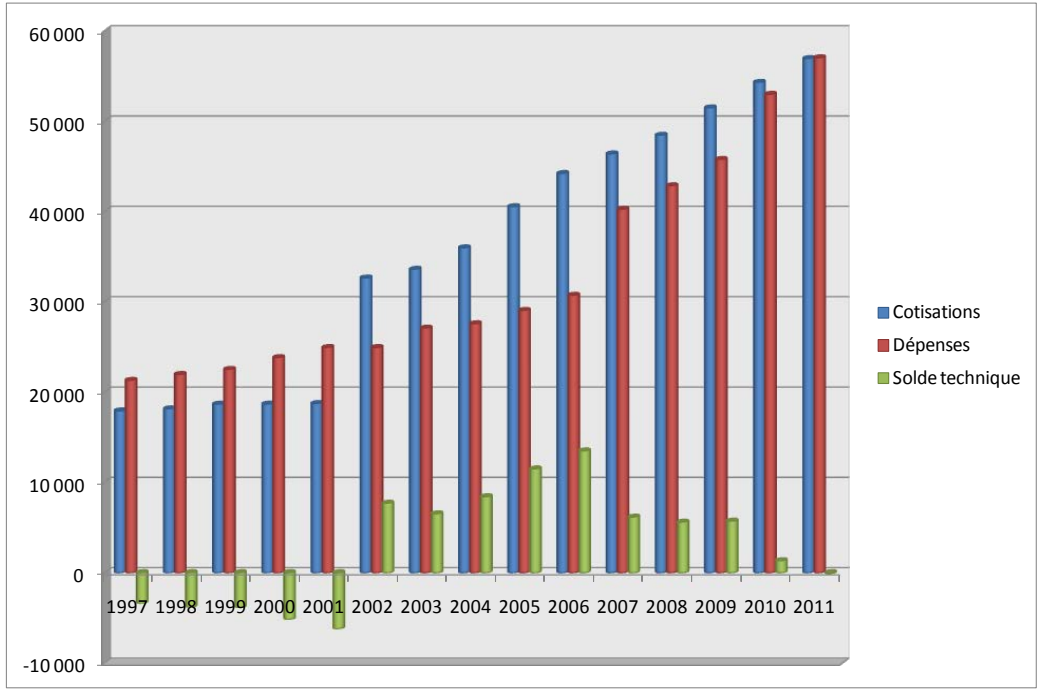


	2000	2001	2002	2003	2004	2005	2006
Recettes	40,993	50,703	58,714	49,744	50,563	52,767	58,671
Dépenses	29,343	44,033	41,353	65,587	69,02	72,029	72,193
Solde technique	11,65	6,67	17,361	-15,843	-18,457	-19,262	-13,522

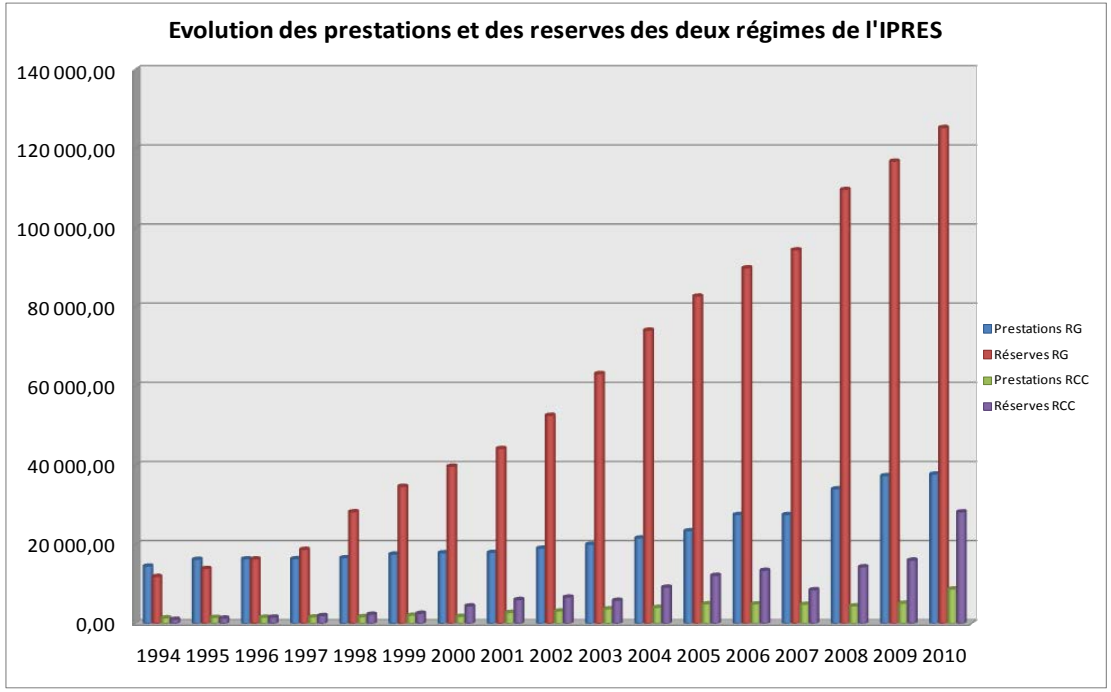
The technical expenses of the CGRAE continues to grow, passing from 51.86 billions in 2010 to 136,85 billions in 2013, an increase of 164% on four years. The reform of 2012 has allowed to the pension scheme to be in surplus in 2013. In addition, the deficit of the CNPS has appeared from 2003.

3. Technical management of the pension system in CIPRES Zone

The expenses, the contributions and the technical balance of the FNR (1997-2011)



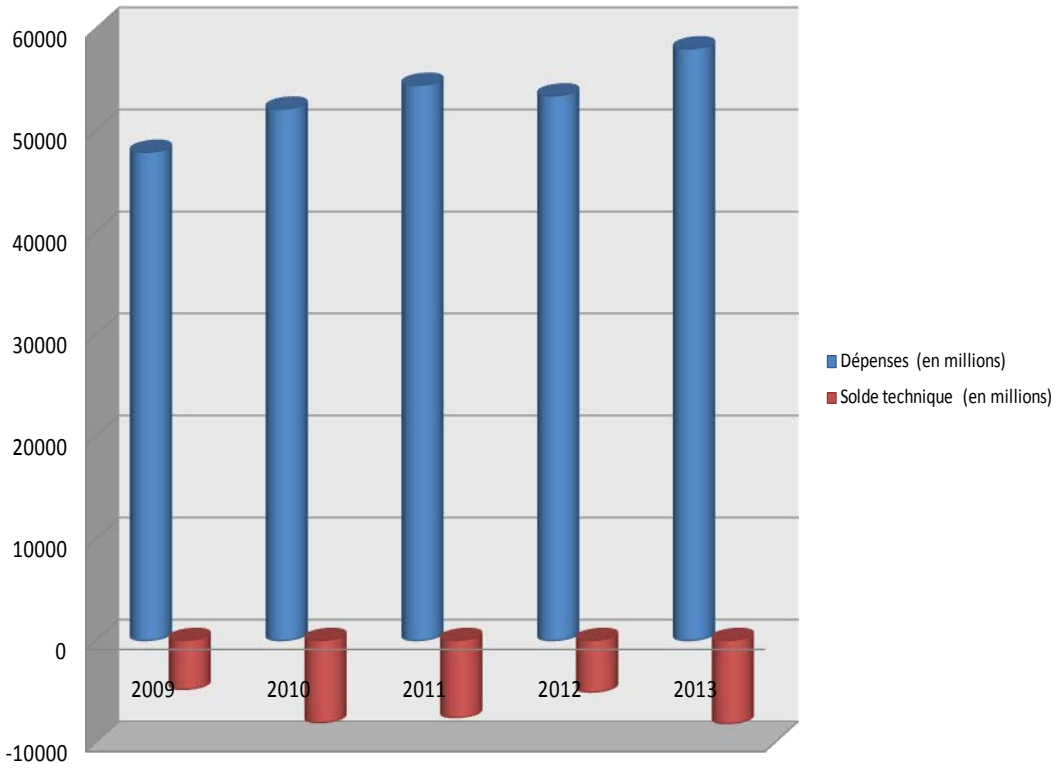
The expenses and the provisions of the RG and the RCC of IPRES (1994-2010)



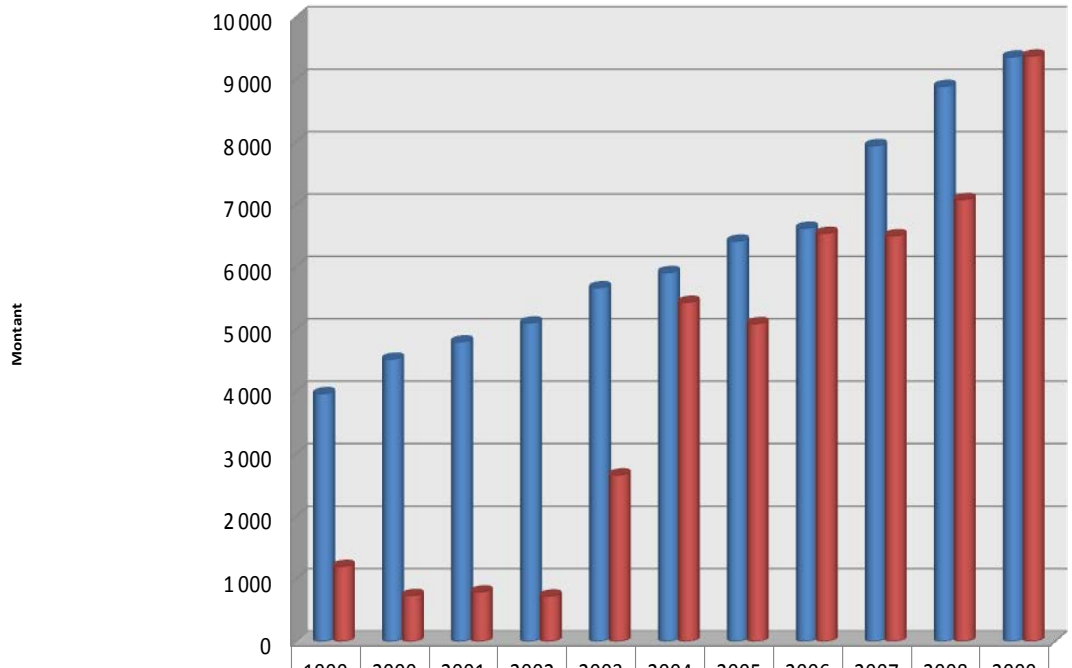
We note an evolution of 168% of the expenses of the FNR passing from 21,29 billions FCFA in 1997 to 57 billions FCFA in 2011. We can also see that the pension scheme was in deficit before the reform of 2002. The latter has improved the technical balance of the scheme during the nine following years. However, the deficit occurred during the exercise 2011, estimated at 90 millions FCFA. The expenses of the general scheme and the complementary scheme of executives of the IPRES underwent an increase of 160% and 516% respectively on the period 1994-2010.

3. Technical management of the pension system in CIPRES Zone

The expenses and the technical balance of the CNPS Cameroun (2009-2013)



The expenses and the technical balance of the CNSS Burkina Faso (1999-2009)



	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Dépenses (en millions)	3 967	4 519	4 797	5 100	5 664	5 908	6 410	6 617	7 939	8 888	9 360
Solde technique (en millions)	1 201	733	791	725	2 665	5 431	5 088	6 534	6 496	7 075	9 375

We note that the pension scheme of the CNPS of Cameroon was in deficit during of the period 2009-2013. In addition, the CNSS Burkina is in surplus on the period (1999-2009).

3. Technical management of the pension system in CIPRES Zone

The guidelines for the investment of funds of social security schemes are presented in the Technical Report No.13 of the ISSA. It recommends the establishment of an investment committee under the supervision of the Board, as well as the participation of external experts (account auditor, actuary).

It encourages the establishment of appropriate mechanisms for control, communication and incentives that contribute to ensure transparency in the functioning of the system, through efficient decisions.

Investment decisions should be guided by two fundamental objectives, namely :

(i) the security : the investments should help the pension scheme to fill its commitments in the most economical manner ;

(ii) the performance : the investments should have a yield as high as possible within the limits of acceptable risk.

3. Technical management of the pension system in CIPRES Zone

In the CIPRES Zone, the pension schemes don't have an efficient investment policy. Several actuarial studies on pension funds from the Ivory Coast, Senegal and Cameroon show that the investment portfolio was mainly made up of state debts that earn no income. This situation is common for pension plans in the public sector who do not have financial autonomy (CGRAE, FNR, Senegal, etc.). The State guarantees the financing of the deficit when it occurs. Generally, investment decisions or use of funds in the countries of the CIPRES are often guided by political imperatives and not by an analysis of profitability as recommended by the ISSA.

Financial markets in Francophone sub-Saharan Africa do not offer investment opportunities in very high yield (more of 10 %). For example , rates of investment returns in CIMA zone were respectively 3.97% , 4.78 % and 4.55 % between 2003-2005. The investment opportunities in CIPRES Zone are financial assets (stocks, bonds) and real assets (real estate and monetary or deposits of banks).

However the pension systems in the private sector of the CIPRES Zone, place their liquidity in government bonds (15%), real estate (12%) and bank deposits (46%). As for to pension plans of the public sector, their portfolios are composed mainly of government bonds (government debt) and term deposits of banks to 3 to 6 months.

3. Technical management of the pension system in CIPRES Zone

For example, in Niger , the actuarial study in 2002, shows that the portfolio of the CNSS is composed of deposits of Treasury (58%) for a amount of 41.27 billions FCFA , the certain and uncertain receivables (22 %) for a amount to 15.52 billions CFA francs and assets that do not yield any interest and deposits in the bank accounts (cf. ILO [2002]) .

Some reflections are in progress since 2007 to improve the profitability of resources collected by the insurance. It appears from the consultations, the need to develop new financial instruments, the creation of a financial market for all the CIMA Zone, the possibility of institutional companies to place their liquidity abroad (*cf.* États généraux de l'assurance vie - Rapport final [2007]). The CNPS of the Ivory Coast Republic has already followed suit by placing their liquidity outside.

SOMMAIRE

Retirement systems in francophone sub-saharan africa : current situation and perspectives

The analysis of reforms

Facing the technical deficits of pension systems observed for several years on some branches on the one hand and demographic challenges facing the African continent will face in the next twenty years the other hand, the governments of some countries in the CIPRES Zone have begun a set of parametric reforms, nonparametric and Legal & institutional aimed at restoring the balance of the scheme.

In the countries of CIPRES Zone, the observed reforms focus on the financing of the pension plan, optimizing the contribution collection policy. They force companies to declare their employees, on pain of being refused a government contract (*cf.* GARANKE [2006]).

In Ivory Coast, the government adopted in 2012 on the basis of recommendations of the actuarial study of 2008, a set of legislative texts which endorses reform "old age" branch. Contribution rates have increased from 8 % to 14 % (55% - 45 %) and 18% to 25 % (66.67% - 33.33 %) for the private and public sectors. The retirement age increased from 55 years to 60 years. Benefits are now indexed to inflation.

The analysis of reforms

In Senegal, the pension system has a low coverage and relatively generous. Although expenditure of these two pension institutions are weak by international standards (about 1.5% of GDP), they are rapidly increasing especially for the FNR, to the point to weaken its financial situation, compromising its financial viability on the long term, like the IPRES which presents a less worrying financial situation. To overcome this problem, the reform of the pension system in Senegal takes place in 2002 with technical assistance from the World Bank.

The reforms of FNR were mainly of parametric order and can be summarized in the following table (cf. ANNYCKE [2008]) :

Parameters	until 2001	Starting in 2002
retirement age	55 ans (nés en 1946 ou avant)	60 ans (nés en 1947 ou après).
Annuity rates	2%	1,8%
employee contribution	15%	12%
employer contribution	20%	23%

The analysis of reforms

Other reforms came into force in 2006, including indexing benefits to inflation (only the IPRES) and the opening of a notional account for current defined benefit plans. In order to strengthen the governance of the system, the government also established an interim supervision Committee charged of the control of the social security Fund and an organism of surveillance of the processes of financing. With these measures, the Social Security Fund deficit was resorbed early in 2008 (*cf.* Banque mondiale [2012]).

However, since 2010, the FNR 's financial situation starts to deteriorate despite the reform in 2002 because of the generosity of the regime (replacement rate around of 99.9 %). This information come from actuarial studies conducted in 2012 on the period 2010-2050 (cf. NDIAYE and DIABATE [2012]).

In Mali, the coverage of social protection for formal sector workers is ensured by two major organizations, namely "la Caisse nationale de retraite du Mali (CNRM)" and "l'Institut national de la prévoyance sociale (INPS)" respectively covering the public and private sectors.

The analysis of reforms

A project on the reform of the public pension system is in progress following the recommendations of actuarial studies in 2004. The project includes the following changes, in occurrence, a change in the contribution rate from 12% to 24% (20% - 4%), the computing of pensions based on average earnings of the last five years, the indexation of pensions to changes in the cost of living and the reduction of the maximum annuity rate from 8% to 4 % (*cf.* CAMARA [2008]).

In Togo, the pension system includes "la Caisse de retraite du Togo (CRT)" and "la Caisse Nationale de Sécurité Sociale (CNSS)", covering respectively private and public sector employees. The pension reform started in 2008 by a parametric reform, leading to an increase of retirement age from 55 years to 60 years.

In 2011, the reforms of CRT have affected the legal, institutional , organizational and financial aspects of the pension plan (cf. AKANNI [2014]).
The CNSS began the restructuring of its computer system, digital archiving of its documents, the modernization of its services and the strengthening of its communication policy.

In addition, a project of revision of the Togolese code of social security is being adopted to meet mainly to the international social norms (*cf.* CIPRES [2014]).

The analysis of reforms

In Cameroon, the reform of the retirement system started from the governmental declaration of December 1999, coming from the reports and recommendations of the SATEC audit of May 1990, financed by the world bank. This project of reform (in progress) will allow to Cameroon to conform to the rules of the ILO.

It focuses mainly on the structuring of the formal pension system, the setting up of a complementary pension plan, the extension of the social security to the informal sector (cf. FOUOMENE [2013]).

In Niger, the management of the pension scheme for public sector employees, previously managed by the FNR, has been entrusted to a new public entity to Social character, autonomous, with a legal personality and a financial autonomy, called " la Caisse Autonome des retraités du Niger (CARENI)".

This change of legal status is a recommendation of the actuarial study of the FNR . It noted major deficiencies in the administrative and financial management of pensions and retirement. Some studies are in progress aiming (the purification of the files, actuarial Survey) to a parametric reform of the "Caisse Nationale de Sécurité Sociale (CNSS)" and the consolidation of the texts, to ensure the long-term balance and improve the quality of services (cf. CIPRES [2014]).

Conclusion

Pension systems in the CIPRES Zone, financed by PAYG, are confronted to difficulties involving their viability. This situation is all the more alarming that Africa is facing in 2050 to a rapid population growth.

Some actuarial studies (cf. Niger, ILO [2005]) have led governments to initiate a series of reforms with the technical support of the World Bank. These reforms usually parametric, allow to the pension scheme, to be in surplus on a limited time. However, pension systems still face structural risks (cf. PLANCHET and GUIBERT [2010]), mainly to the risks "demographic", which will result the deficit in the long -term (it's the case of the FNR of Senegal).

With very high contribution rates in some countries of CIPRES Zone, states must profoundly rethink the reform of Pillar I, by building their pension scheme on rigorous technical basis (*cf.* GBONGUE and PLANCHET [2015]).

In a status quo, it will be to build an ALM model, able to improve the investments yield, permitting to compensate the technical deficit of the pension scheme.

Conclusion

This ALM model will require beforehand the modeling of the yield curve in the CIPRES Zone context, permitting a representation as robust as possible of an asset / liability matching by reasonable flows, notably beyond the last liquid maturity (*cf.* PLANCHET [2015]).

Conversely, it will be to design a new system for the first pillar, financed by PAYG, taking account of the longevity of annuitants. We think notably to the pension schemes to notional accounts or "Notional Defined Contribution (NDC)" (*cf.* HOLZMANN et *al* [2013]).

Whatever the nature of the basic system, it must be accompanied inevitably by a complementary retirement system, financed by capitalization, assured by state pension companies.

Because of the importance of the informal sector in the economies of the countries in the CIPRES Zone, the great challenge will be to design a pension model, covering respectively the first and second Pillars of the employees of this sector.

Bibliography

- Annycke, P. (2008) : Sénégal - L'analyse des prestations et des indicateurs de résultats de la protection sociale. Bureau international du Travail, Département de la Sécurité Sociale – Genève: BIT, 2008 xvii, 159 p.

- Annycke, P. (2008) : Sénégal - L'analyse des prestations et des indicateurs de résultats de la protection sociale Bureau international du Travail. Département de la Sécurité Sociale – Genève: BIT, 2008 xvii, 159 p.

- Antoine, P. (2007) : Travailler à l'âge de la retraite ? Comparaison de la situation dans sept capitales ouest-africaines. Document de travail, DIAL, 25p.

- Antoine, P. (2007) : Les relations intergénérationnelles en Afrique, Approche plurielle. CEPED, collection Rencontres, Paris, 255 p.

- Bailey, C. (2004) : Extension de la couverture de la sécurité sociale en Afrique. Bureau international du Travail, Département de la Sécurité sociale. - Genève: BIT.

- Bozio, A., Piketty, T. (2008) : Pour un nouveau système de retraite - Des comptes individuels de cotisations financés par répartition. Centre pour la Recherche Économique et ses Applications (C E P R EMAP), 101 p.

- Cipres (2011) : L'intégration en marche dans la Zone Cipres. Le courrier de la CIPRES n°11.

- Diop A.Y., (2003) : Gouvernance des régimes de sécurité sociale : tendances au Sénégal. Revue Internationale de Sécurité Sociale, Vol 56, n° 3-4, p. 21-28.

- Faye, C. (2010) : Revue de la protection sociale dans quelques pays d'Afrique de l'ouest.

- Fouomene, E. (2013) : Les protections traditionnelles et le développement du système de sécurité social au Cameroun. Thèse de doctorat : Université. Genève, 2013, no. D. 865.

- Garanke, S. (2006) : Le recouvrement des cotisations de sécurité sociale en Afrique francophone. Association internationale de la sécurité sociale, 15p.

- Gillion, C., Turner, J., Bailey, C., Latulippe, D. (2000) : Africa in Social Security Pensions: Development and reform. Bureau international du Travail, Genève, p 515-531.

- Holzmann, R., Palmer, E., Robalino, D. (2013): Nonfinancial defined contribution pension schemes in a changing pension world. VOLUME 2, Banque Mondiale, 535 p.

Bibliography

- Ilo (2005) : NIGER - Rapport au gouvernement : Évaluation actuarielle de la Caisse nationale de sécurité sociale au 31 décembre 2002 / Bureau international du Travail, Département de la Sécurité sociale. - Genève: BIT, 2005 xi. 129 p. .

- Ilo (2011) : CAMEROUN - rapport à la Caisse nationale de Prévoyance sociale : évaluation actuarielle du régime de sécurité sociale géré par la Caisse nationale de Prévoyance sociale du Cameroun au 31 décembre 2008 / Bureau international du Travail, Département de la Sécurité sociale. - Genève: BIT, 2011 xi. 122 p

- Ilo (2012a) : BURKINA FASO - revue des dépenses et de la performance de la protection sociale / Améliorer la protection sociale et promouvoir l'emploi, un projet BIT/UE. Bureau international du Travail. - Genève: BIT, 2012 xviii, 120 p.

- Ilo (2012b) : MAROC - rapport au gouvernement : Révision d'une série de rapports concernant la réalisation d'une étude sur la réforme des retraites / Bureau international du Travail, Département de la sécurité sociale. - Genève: BIT, 2012 xviii, 92 p.

- Kakwani, N., Subbarao, K. (2005): Ageing and poverty in Africa and the role of social pensions. International Poverty Center, UNDP, Working Paper n°8, 41 p.

- La lettre de l'observatoire des retraites (2013) : État des lieux continent par continent.

- Niandou, Y.I. (1993) : Analyse comparée du régime général des pensions de retraite au Niger et au Sénégal. Mémoire, ENA Sénégal.

- Palacios, R. (2004) : La politique des pensions en Afrique, Institut de la Banque Mondiale.Groupe développement humain, Réforme des pensions.

- Stewart, F., Yermo J., (2009): Pensions in Africa. OECD Working Papers on Insurance and Private Pensions, No. 30, OECD publishing, © OECD. Doi: 10.1787/227444006716.

- Uemoa (2004) : L'emploi, le chômage et les conditions d'activité dans les principales agglomérations de sept États membres de l'UEMOA. UEMOA, DIAL, Afristat, 72 p.

- Velkoff, A., Kowal, P. R, (2007): Population Aging in Sub-Saharan Africa - Demographic Dimensions 2006. Washington, National Institute on Aging, U.S. Census Bureau, 39 p. (http://info.worldbank.org/etools/docs/library/77113/june2004/ppt/palacios.pdf)

Thank You a lot

Questions ?