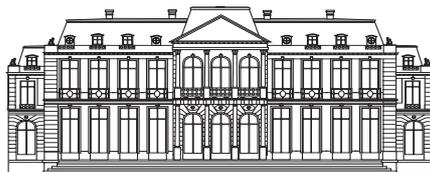


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BOLIVIA:  
CAPITALIZATION, PENSION REFORM AND THEIR IMPACT ON CAPITAL MARKETS

BY

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## I. FOREWORD

1. This paper was prepared for presentation during the thirteenth Plenary Session of the OECD to be held in Paris in September, 1999. I want to thank the organizers for the opportunity.

## II. INTRODUCTION

### II.1 GENERAL INFORMATION

2. Bolivia is a democratic country located in the middle of South America. The Bolivian territory sums 1,1 million square kilometers and it has a population (1997)<sup>1</sup> of 7,8 million inhabitants, of which 61% are located in the urban areas and 39% in the rural areas. The population is young with 54% under the age of 21 and only 4% over the age of 65. Life expectancy at birth is 58 years for men and 61 years for women. Life expectancy at the age of 20 is 43 for men and 50 for women.

3. Bolivia's income per capita only reaches US\$ 1078 and 70% of its population is poor as measured by the needs not satisfied method. Moreover, 13,78 % of the population aged 15 or older is illiterate.

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<sup>1</sup> Source: Instituto Nacional de Estadística, INE

## II.2 THE ECONOMY BETWEEN 1985 AND 1993

4. Bolivia's recent economic history can be divided in two periods: i) prior to 1985; and ii) post 1985. Bolivia regained democratic ruling in 1982. However, the first democratic government was weak and faced extreme difficulties in the economic front, including:

- Annualized inflation rate of 25,000% as of August 1985.
- Negative real GDP growth of 1,68% in 1985.
- Negative Net International Reserves.

5. These dismal results were, mainly, the consequence of

- A large fiscal deficit of more than 20% of GDP financed with Central Bank financing.
- Protected and deficient local industry with almost no private foreign investment.
- Fixed and overvalued exchange rate.
- Badly needed infrastructure with no public sector capacity to provide it
- Service and important productive sectors controlled by the public sector, with need for large amounts of new investment.
- Low institutional capacity in the public sector.
- Subsidized interest rates and a bankrupt financial system.
- Huge external debt and moratoria of debt payments which inhibited the country from additional borrowing.

6. Bolivia was one of the first countries in Latin America to adopt a far-reaching economic program and at restoring price stability and structurally reform the economy to achieve sustainable growth. The 1985-1993 reform programs undertaken by successive governments included:

- Liberalization of prices
- Unification and liberalization of capital flows
- Simplification of the tax regime and improvements of the tax administration
- Trade liberalization and customs reform
- Financial sector strengthening, improvement of bank supervision and regulation, closure of state banks.
- Closure of deficitary productive sector public institutions
- Liberalization of labor markets
- Debt buy back with commercial lenders and renegotiation of bilateral debt under Paris Club terms.

7. The program succeeded in restoring macroeconomic stability and gradually stimulated economic growth. The inflation rate had declined to about 8% at the end of 1994. Real GDP grew by about 4% in the period 1990 – 1994, leading to increases in GDP per capita after more than one decade of negative results in this front. Price stability was reached through strong fiscal performance as the Non-Financial Public Sector Deficit declined to only 4.5% of GDP in 1993. Moreover, such deficit was financed by additional external borrowing, mainly from multilateral donors. With respect to the foreign debt, it had decreased to 71% of GDP as of the end of 1994 and most debt service had been negotiated so as to decrease its burden on net international reserves. Nonetheless, and despite legislation introduced to promote foreign investment, private investment only reached 7.08% of GDP in 1993 (see Annex 1). Private investment concentrated primarily in construction, manufacturing and services.

### II.3 THE CHALLENGES IN 1994

8. **Despite the success, in 1994 Bolivia continued to face the following challenges:**

- **Most important productive and services continued in the hands of Government (hydrocarbons, telecommunications, railroads, electricity, airline, milk production, some hotels, etc.)**
- **The service areas required large amounts of new investment**
- **Most public investment was directed towards productive and infrastructure sectors (24% and 46% respectively, see Annex 2) in lieu of the social sectors**
- **Most private investment was financed out of pocket or through development credits channeled through the Central Bank.**
- **The little long term internal savings (from pension contributions) were used to pay pension retirement obligations in a pay as you go system that was already cash flow deficitary**
- **Capital market development was non-existent with most transactions taking place in short term deposits**
- **A weak pay as you go pension system, especially in financial and management terms**
- **An underdeveloped insurance industry.**

9. **Faced with these challenges the government decided to implement a capitalization program, a pension reform and promote capital market among other reforms.**

### **III. THE CAPITALIZATION PROGRAM**

#### **III.1 THE DESIGN OF THE REFORM**

**10. Capitalization is a form of privatization by which a strategic investor takes over 50% of the public company and its administrative control. This is attained by promising to invest 100% of its cash capital contribution (equivalent to the investor's best estimate of 50% of the market value of the newly capitalized company) in the target company to finance new investments. Therefore, the Government does not receive any amount for the previous public company. In the case of Bolivia, the 50% of the shares of the new company belonging to the public sector were transferred to a fiduciary fund managed by private pension administrators for the benefit of adult Bolivian citizens. Detailed features of the capitalization process include:**

- **New laws and regulations for each sector in which the new capitalized company will operate. The laws and regulations establish particular organizational structures according to each sector.**
- **Exclusivity periods were provided to all new capitalized companies.**
- **The strategic investors were selected through international competitive bidding procedures. Selection was based on the highest bid, once the all the competing players agreed to a given set of expansion targets or other quantitative goals. In most cases, the selected companies were internationally known.**
- **In all capitalization related sectors, the new laws introduced supervisory bodies known as superintendencies. Superintendents are appointed for periods beyond the period of the President and are financially autonomous so as to insure their independence from political decision making**
- **Contracts were signed with all strategic investors, defining specific investment targets for market expansion which match the partner's cash contributions to the capitalized company.**
- **The contracts also require the strategic partners not buy additional shares in the capitalized companies and not to transfer ownership of such companies for a given number of years (typically from 5 to 7 years)**
- **Most companies were cleaned of social obligations prior to capitalization. This was done in order to avoid eventual problems with the very sensitive unions existing in the former public companies.**
- **Post capitalization, the adult Bolivian citizens turned owners of the 50% of the shares of the capitalized companies. These shares are administered by the AFP under fiduciary responsibilities in a fund denominated Collective Capitalization Fund or FCC.**

- **Given the important potential size of the FCC (US\$1.5 billion) and the need of international management experience in order to diversify the portfolio , the Government decided that the AFP managing the FCC had to be backed by well known and large financial experts. Only two licenses were awarded. The bidding procedure established that the mother companies of the AFP had to have at least US\$10 billion in managed assets. Moreover, it required at least US\$ 2 billion as a financial guarantee for the management of the FCC.**
- **The AFPs may diversify the portfolio of the FCC as they see fit.**
- **The fiduciary agreement with the AFPs establish that the benefits of the FCC may be used in the following way:**
  - a) **30% of the fund and its returns to give to all citizens 55 and older a defined benefit for life after they turn 65 years old.**
  - b) **70% of the fund and its returns constitute a closed end fund with the shares of such fund (denominated popular shares) to be distributed to the Bolivian beneficiaries aged 55 and younger. Such popular shares may be sold in the secondary market but may not be redeemed in the AFP prior to a defined date (probably when the beneficiary becomes 65).**

### III.2 THE TARGET COMPANIES

11. **The firms chosen to undergo a capitalization process were ENTEL (long distance telecommunications), YPFB (hydrocarbons), ENDE (electricity generation and transmission), LAB (airline) and ENFE (railroads).**

#### Empresa Nacional de Telecomunicaciones (ENTEL).

12. Prior to capitalization, Bolivia had one of the worst telecommunications systems in Latin America, with poor penetration levels and mismanagement of long distance and local companies. Under this scenario, the strategy to capitalize ENTEL involved the accomplishment of certain goals, contractually agreed, by the new company: i) expansion of local service, including that in local areas. The goal mandates the new company to provide at least one public telephone to about 1500 rural communities with more than 1000 inhabitants each, as well as to install public telephones in urban areas. In order to allow the new company to earn reasonable returns, the contract gave ENTEL exclusive rights to provide long distance and international basic voice service in Bolivia for six years. Entel was also provided a cellular license and a GPS license.

#### Yacimientos Petrolíferos Fiscales Bolivianos (YPFB).

13. **Prior to capitalization, the oil and gas industry was vital to Bolivia (as it is indeed today), representing about 40% of treasury revenues and 10% of exports. The sector did not have the ability to develop existing fields or make new discoveries due not only to inadequate investing**

capacity, but also to YPFB's inefficient operations and heavy debt burden as well as declining prices of gas exports to bordering Argentina.

14. Thus, the strategic approach to capitalize YPFB was based on: i) attraction of investment capital, technology and managerial skills, ii) increase of shareholder value; iii) gain of a competitive position in the regional market. Consistent with above mentioned approach, the capitalization process opened all reserve areas for exploration, bided areas of proved and probable reserves to international companies, and provided the administration rights of all the gas pipelines to one international company.

#### **Empresa Nacional de Electricidad (ENDE).**

15. Although the national electricity company showed effectiveness in developing generation and transmission in technically reliable conditions, the architecture of the sector was not well suited to guaranty operational efficiency, promote competition, attract new private investments and expand the system.

16. The capitalization of ENDE conceived a separation of ENDE's assets in generation and transmission. ENDE's generating capacity was separated into three generation companies, which have been capitalized, such that the new industrial organization promotes competition and new investments. The capitalized companies have the mandate to invest in new generation capacity in at most 4 years after capitalization. Entrance by new operators is restricted for three years. The transmission company was also capitalized with clear benchmarks for expansion and the entire system is operating in a satisfactory manner.

#### **Railway an Aviation,**

17. The railroad company was running cash flow deficits in the order of US\$30 million per year and did not pay any taxes (such as VAT) prior to capitalization and had more than 4,000 employees. The railroad company suffered from inefficient practices, overstaffing and severe lack of reinvestment.

18. The reform objectives included: (i) non-discriminatory access to railroad services; (ii) tariffs which reflect market conditions free from monopolistic distortions; and (iii) adoption by the railway of the most efficient and appropriate technologies and practices. The railroad company was split into two separate companies for their capitalization. The contract with the strategic partners allow for closure of unprofitable routes and eliminated all tariff subsidies.

19. The Bolivian airline (LAB), despite enjoying monopoly rights to certain destinations, was operating at a deficit (albeit in small amounts of about US\$3 million) and required important amounts of new investment. The Government capitalized LAB and deregulated the sector to promote competition. However, the Government did implement an open skies policy, allowing LAB priviledge of local passengers in international routes.

## **IV. THE PENSIONS REFORM**

### **IV.1 The Pay As You Go System**

20. The major characteristics of the pay as you go system prior to its reform in 1996 were as follows:

#### Administration

21. The system consisted of two pillars one Basic and one Complementary. The basic system was managed by the public sector and the complementary system by 32 semi-public institutions known as Complementary Funds. Administration of all funds was weak and had important political intervention. In the case of the complementary funds, union also influenced decision making which many cases involved making contributions to such unions.

#### Contributions

22. Basic System. The employer, the employee and the state made contributions to this system for a total of 8,5% of salary (4,5% employer; 2,5% employee; 1,5% state)

23. Complementary System. Contributions to the Complementary System were entirely made by the employee. Such contributions were in average 6,3% of salary.

#### Benefits/Entitlement Conditions

24. Basic System. The affiliates to the Basic System received 30% of his or her mean salary over the last 24 months of contributions. Entitlement conditions were: i) to have reached 50 or 55 years (female or male) and, ii) to have no less than 180 monthly contributions to the system.

25. Complementary system. The affiliates to the Complementary System received 40% of his or her mean salary over the last 24 months of contributions. Entitlement conditions were identical as those of the Basic System.

26. Retirement benefits in the old system were only US\$82 per month. The reason for such low benefit is that these benefits were initially determined in local currency and therefore were eroded during the hyperinflation period. After stabilization, the Government set a minimum benefit to which all retirees had to adjust. Moreover, after stabilization retirement benefits were adjusted for inflation by the Government through yearly regulations. On average, such adjustment was 10% less than the indexation of public sector salaries. This implies that the low retirement benefits decreased in real terms almost every year. Only those who retired after the stabilization period and before the pension reform enjoy better retirement benefits.

#### Covered Population and Average Salary

27. The pay as you go system had an active covered population of 315,000 affiliates (about 22% of the urban labor force) and 115,000 pensioners by the end of 1995. Of the total number of contributors about 70% were public employees, showing a high degree of evasion, specially from private sector employees. The disclosed average salary of the contributor was US\$200 per month in 1995 which, when compared to today's average contributing salary, showed also evasion through under-declaring true salaries.

#### Financial Situation of the Old Pension System

**28** The old pension system was financially unsustainable. Regular transfers from the Treasury (see Annex 3) to the administrator of the basic system (FOPEBA) and occasionally to some complementary funds had become necessary and the accumulated deficit of FOPEBA was calculated to reach US\$400 million by the year 2002 when it would have amounted to 5% of GDP. Most complementary funds were also actuarially bankrupt. In present value terms the deficit of the basic system and the complementary funds was estimated at US\$1.8 billion (22.2% of 1998 GDP). This situation was caused by several factors including:

- The ratio between active contributors and passive affiliates was 3 to 1, while solvency required an equilibrium ratio of about 10 to 1 given the contribution rates of the basic pension system.
- The hyperinflation in the mid eighties, combined with inefficient management, seriously eroded pension fund reserves.
- The administrative costs of the basic fund and the complementary funds were very high averaging 17% of total contributions for the system.
- The private sector had a large debt with the system arising from non-payment of retained contributions. Simultaneously evasion was high and there was little incentive to contribute to the system.

#### *IV.2 Pensions Reform Design*

### Pillars of the New pension System

29. BOLIVIA REFORMED ITS PENSION SYSTEM BASED ON TWO PILLARS: THE FIRST PILLAR COVERS THE FULL POPULATION OVER THE AGE 21 AS OF DECEMBER 31, 1995 AND IT IS FINANCED WITH THE BENEFITS DERIVED FROM THE CAPITALIZATION PROCESS. THE FUNCTIONING OF THIS PILLAR WAS DESCRIBED ABOVE (PARAGRAPH 9). THE SECOND PILLAR IS BASED ON AN INDIVIDUAL CAPITALIZATION SYSTEM AND

MANDATORY CONTRIBUTIONS FROM SALARY. THE MAIN CHARACTERISTICS OF THE  
INDIVIDUAL CAPITALIZATION SYSTEM ARE AS FOLLOWS:

Contributions

30. Contributions are withheld by employers and deposited into individual accounts managed by private pension fund administrators (AFP). The withholding rate on salaries is 12.5%. This includes 10% to be deposited in each individual account for long term capitalization, 2% for an insurance premium covering death and disability for common risk and 0.5% for AFP administrative services. In addition, employers pay 2% of salaries to cover workers compensation.

Benefits

31. There is no fixed retirement age. Individual workers are free to retire before reaching the age of 65 if they accumulated savings that are adequate to replace at least 70% of the average salary of the last 5 years for the remainder of the actuarially calculated life expectancy. Retirement is possible at age of 65 regardless of the amount of savings accumulated. There is no Government guarantee of a minimum pension. All pensions arising from the new system are indexed to the US\$.

32. In addition there are death, survivorship and disability pensions financed by the insurance contract. An important feature is that disability pension for common risks are only paid for total disability. These pensions are equivalent to 70% of the referring salary and they also include continued payment of the contribution into the individual's retirement account, so that disability pensions are replaced by old age pensions at the age of 65. Disability from workers compensation includes partial and total disability pensions, also with continued payment of the contribution into the individual's retirement account so that this pension is also replaced by old age pension at the age of 65.

Affiliation

33. All contributors to the old pension system were automatically transferred to the individual capitalization system on May 1, 1997 and the AFP started collecting their contributions. All enterprises, as contribution withholding agents, had to formally affiliate all the workers to an AFP within two years. Included are those individuals that fulfill requirements to retire under the old system as of April 30, 1997 but continue working. This implied that, at the initial date, the new system had around 300,000 affiliates. All new entrants to the working force must affiliate to the new system. In addition, all currently employed persons that should have been affiliated to the old pension system, but were not, are required by law to affiliate to the new system. Finally, independent workers who earn at least the minimum salary can also affiliate to the new system on a voluntary basis. (Annex 4 shows current affiliation by AFP and region)

Management:

34. Because of the small number of potential affiliates and to avoid the high marketing costs experienced in other Latin America countries, the authorities decide to authorize only 2 management companies. Thus, for the first five years the individual capitalization accounts will be managed by two private pension fund administrators (AFPs), which were selected through an

international bidding process for the lowest service fee. Initially these AFP: (i) share the market in the four major cities of the country (La Paz, Cochabamba, Santa Cruz and El Alto) that have 35% of the population; and (ii) each is a regional monopoly in their assigned area of exclusivity.<sup>2</sup>

35. Affiliates in the shared cities were assigned according to their birthday, with even dates going to one AFP and the odd dates to the other. Competition in the shared cities will start on January 1, 2000 when workers will be able to switch between AFP and new workers will be allowed to choose among AFP. In May 2002, the market will open and licenses for new operators will be granted. At the same time competition will also reach the exclusivity areas and expand in the major cities.

36. The AFPs are allowed to charge three different types of fees or commissions for their administration services:

- Fee for administration of the individual accounts of 0.5% of salaries.,
- Fee for portfolio management of 0.228% of portfolio for the first 1 US\$ billion managed (the portfolio includes the individual capitalization fund and the fund derived from the capitalization process) with such percentage decreasing for marginal amounts.
- Fee for payment of benefits. The fee charged for this purpose is zero under the current contract and until the market is open for competition.

#### Investments

37. Like in the Chilean Pension System, the individual accounts of the affiliates own units in a joint portfolio, similar to the case of mutual funds. AFPs have to invest the joint portfolio in accordance with maximum limits set by the regulations and enforced by the Superintendency. However, they are also required to buy for the next 15 years after the reform, up to US\$180 million per year of Treasury Bonds issued to finance the transition between the old to the new system (Annex 5 shows the current portfolio by instrument and AFP)

#### Compensatory Pensions

38. Those affiliates who have contributed to the old pension system will receive compensation from the state for their acquired rights. This compensation will be paid monthly upon retirement. The amount to be paid will be indexed to the US\$.

#### Current Retirees

39. Those who have already retired under the old system will continue to receive their pensions as per that system. Their retirement pension is entirely funded by the Treasury.

#### Financing of the Fiscal Cost

40. As we all know pension reforms do not necessarily create a fiscal cost but make explicit a fiscal cost incurred by actuarially bankrupt pay as you go systems. Nonetheless, a pension reform does advance the need for cash flow financing of on

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<sup>2</sup> For the purpose of determining the area of exclusivity, the country was divided in a northern and a southern region, separated by a dividing line running east-west, and excluding the four major cities. The AFP with the best bid was given first choice and selected the northern area of exclusivity.

going pensions. In the case of Bolivia this need of financing was harsher due to: (i) the Government's decision not to finance the reform from resources derived from the privatization of public companies; and (ii) the decision to transfer all affiliates of the old system to the new system. Given these decisions, the total cost of financing pensions of the old system will reach more than US\$300 million (more than 3.2% of GDP) in 1999. Moreover, in order to finance this cost in 1999, the Government will borrow from the new pension system close to US\$140 million (out of total collections of US\$180 million) at 8% interest. Such type borrowing will continue as long as the Treasury requires it

## V. CAPITAL MARKETS

41. Prior to the reforms, the capital market was extremely shallow with a low volume of trading, concentrated primarily in short term debt instruments. (Annex 6 shows the volumes traded in the period 1993-96). Post capitalization and pension reform, the capital market showed some signs of growth. This growth is backed by the injection of fresh resources from the pension portfolio (currently, 34% of the portfolio managed by the AFPs is invested in securities different from Treasury Bonds, see Annex 5) and the mutual funds in operation (Annex 7 shows the evolution of the mutual funds portfolio).

42. However, the structure of the instruments traded in the capital market has not changed significantly. As of the end of 1998, 98% of the volume traded was still in short term debt instruments with maturity similar to those prior to the reform (Annex 10 shows the structure of instruments traded in the capital markets as of the end of 1998).

43. It is not surprising that the pension reform and capitalization process had little impact in the capital markets so far. This is due to:

- a. The Government is currently crowding out almost all funds collected by the pension system. The only resources that the AFP have to invest in the capital market are the ones derived from workmen compensation and common risk insurance (about US\$40 million per year). Given the possibilities of death and disability and the fact that management of these insurance must be transferred to insurance companies as of the year 2000, the AFPs have been investing these reserves in short term debt instruments.
- b. The capital markets law was approved by Congress on March 1998. Since then, efforts were undertaken to produce the required regulations to such law. As a result, it is only recently that market has risk rating agencies, marked to market pricing, regulations regarding clearing and settlement and other such instruments that required to encourage capital market development.
- c. The capitalized companies (except for two energy generation companies) are not listed in the Bolivian stock exchange nor in any other stock change. Prior to listing, these companies are waiting to have invested all the resources compromised during capitalization and for better emerging market perspectives.

44. However, the fund derived from the capitalization process and managed by the AFP (FCC), worth some US\$ 1,5 billion, is expected to bring new dynamism to trading in equity instruments once these companies are listed. Moreover, as the requirement of financing by the Treasury decreases, the AFP will start purchasing long term debt instruments. It is expected that the AFP will have in the order of US\$100 million to invest in the capital markets in the year 2000.

**Most of this long term funding will probably be invested in securities derived from the recently approved securitization mechanism.**

## **VI. RESULTS**

**46. Section II.3 mentions some of the challenges faced by Bolivia as of the end of 1994 which, to some extent, were to be overcome through the Pension Reform and the capitalization process. On the basis of the outcome of such reforms, let us evaluate whether the expected results were attained. We must, however, bear in mind that the reforms are only a couple of years old and therefore the full impact cannot yet be evaluated.**

### *VI.1 Capitalization*

46. The administration of important productive and services were transferred from the public to the private sector. The capitalization process took place in the hydrocarbons, telecommunications, railroads, electricity, and airline sectors. Prior to this process, clear rules and regulations were established and, since then, the public sector activity is limited to continued regulation and supervision. There remains some privatization to occur in the hydrocarbon sector, specially related to refineries and oil depositories. Moreover, the Government has almost completed the privatization of hotels, and other productive enterprises.

**47. Service, infrastructure and strategic productive sectors are receiving important investment inflows from the private sector. The capitalized companies are complying with investment commitments and in some cases have exceeded such commitments (see Annex 8). Moreover, there has been important private foreign investment on top of capitalization commitments, specially in hydrocarbons and mining sectors. To some extent this new investment is the result of Bolivia's image in the international scene created through the capitalization process and other reforms.**

48. The structure of investment in Bolivia has changed (see Annex 1). As of the end of 1998, private investment as percentage of GDP (14.2%) was more than twice the amount of public investment (6.3%). This is just the opposite as before the reforms when in 1993 public investment as percentage of GDP (9.8%) was much greater than private investment (7.1%).

49. The composition of public investment has changed dramatically. Investment in the social sectors was only 19.2% of total public investment in 1993 (equivalent to 2.3% of GDP) and such investment was 48.7% of total public investment (3.1% of GDP) in 1998 (see Annex 2 and 9)

50. Most private investment was financed out of pocket or through development credits channeled through the Central Bank in 1993. In contrast, the main percentage of private investments in the past three years were channeled by capitalized companies. Moreover, private investment by Bolivian companies have received only marginal

financing from development credits which are now channeled by a second tier institution independent from the Central Bank.

51. The capital markets were shallow prior to the reform with most trading taking place in short term instruments. This has not changed dramatically. Of all capitalized companies, only two electric generation companies are listed in the stock exchange. There has been some trading of shares (those distributed to former public employees as part of their social benefits) over the counter. The capitalized companies have a low rate of return on equity (4.8% on average in 1998). One of the reasons for such a low rate of return is that the investment process that they are undergoing has not yet produced additional income flow. Thus, before listing the capitalized companies are waiting for better results as well as better times in emerging markets. However, as the shares of the capitalized companies are traded, development of an equity market will take place.

## VI.2 PENSION REFORM

52. The old pension system was bankrupt and had the potential of creating a fiscal deficit close to 5% of GDP by the year 2002. The Pension Reform did take place and an individual capitalization system was created. As opposed to other reforms in Latin America, the reform provided an exclusivity to only 2 AFPs for a period of 5 years. The AFPs do not compete with each other and manage two funds: (i) the pensions fund; and (ii) the fiduciary fund with the shares of the capitalized companies belonging to the Bolivian population. Although the pension reform only has two years of implementation, some results are:

- **The covered population increased from 300,000 in 1995 to 400,000 as of the end of 1998.**
- **The administrative cost charged by the AFP is 0.5% of salary. However, this fee may not be compared to administrative fees charged by AFPs elsewhere due to: (i) affiliates in Bolivia pay for workman's compensation (2% of salary) as a separate contribution while this insurance premium is bundled with the administrative fee in Chile and other countries; and (ii) the AFP also charges a fee for portfolio management.**
- **The flow of contributions increased from US\$ 105 million in 1995 (prior to the reform) to US\$ 180 million in 1998. An increase of 71% per year beyond the rate of increase in wages showing a decrease in evasion to the system.**
- **The rate of return obtained by the AFP for the pension fund was 8.7% in real terms in 1998.**

53. The long term savings derived from contributions were used to pay current retirees in the old pension system. It is always expected that a individual capitalization system would provide long

term funding for financing of private sector investment through the capital market. To a large extent this has not yet occurred in the Bolivian Pension Reform. The public sector has been crowding out the private sector. The Treasury has been borrowing all of the resources derived from contributions to the pension system (the only resources left to the AFP to invest through the capital markets are those derived from premium for workman's compensation and common risk insurance). As such, the only difference between the new and the old system, as far as payments to current retirees is concerned, is that the new system lends the funding formally through long term treasury bonds issued at 8% in dollars and with a maturity of 15 years. In the old system there was no formal recognition of such borrowing.

54. The reasons for this turn of events are the decisions made by the Government regarding the pension reform and the capitalization process: First, all contributors to the old pension system were mandatorily transferred to the new system and therefore contribute to their individual capitalization account and, therefore, the Treasury must cover all the benefits of the already retired affiliates and pensioners. Second, the Government decided not to receive any benefits from the capitalization process, and therefore, does not have access to such funding to cover the cost of the old pension reform. Therefore, all payments to current retirees (about US\$350 million in 1999) come from the Treasury which is financing about 60% of such amount from the new pension system. Evidently, it is hoped that such an extent of crowding out will decrease, and that, in the near term, the long term resources managed by the AFP will go to the capital markets and finance private investment.

## VI. CONCLUDING REMARKS

55. Let us attempt to draw some conclusions from the Bolivian experience:

- a. A capitalization scheme may work as a mechanism for attracting international investment to productive and sectors in need of such investment. However such capitalization mechanism cannot be carried out in a vacuum, some important pre conditions must be met among which are:
  - **The macroeconomic framework must be in place. It is unlikely that investors will participate in a country with an unstable environment.**
  - **Clear sector rules and regulations must be established. These rules and regulations must be known to all participants in the capitalization process, prior to such process taking place.**
  - **Independent regulatory and supervisory authorities (Superintendencies in Bolivia) are important and bring credibility to the system.**
  - **In some cases, specially when markets are small and require large amounts of investment, exclusivity periods may be required in some sectors. In these cases strong supervision is a must in order to avoid monopoly abuses, specially through excess expenditures through related companies which may lower rates of return and dividends to the other 50% of the shares.**
  - **The fiduciary managers of the other 50% of the shares must have: (a) strong international experience in capital markets; and (b) be able to hire individuals with sector and management experience to bring to the Boards of Directors of the capitalized companies.**
  - **The Fiduciary managers must have adequate incentives such that the outcomes in the capitalized companies have implications in their own fiduciary fees.**

- b. Adequate sector regulations may be able to bring investments beyond those committed in the capitalization process. In this regard, a capitalization process is a good marketing tool which puts a country in the international scene.
- c. A full capitalization process does not bring cash to the Government. Therefore if carried together with a individual capitalization pension reform, the Government must be able to cope with cash payments to retired affiliates of the old system out of other revenues.
- d. A pension reform that forces all individuals to contribute to the new system implies that the Government must have adequate sources of financing to cover pensions of those already retired.
- e. A Pension Reform and a capitalization scheme do not necessarily imply immediate increases in volume trading in the capital markets. This is specially the case when full capitalization implies that the Government receives no income from the public companies and when there is crowding out through mandatory financing from the new pension system to cover previous retirees. Moreover, an adequate capital markets requires adequate legislation, regulation, supervision and the development of market instruments so as to ensure adequate investment of pension resources.